



## **Documents of the Administrative Radio Conference (CAR-59)**

**(Geneva, 1959)**

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(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراه الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلاً

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ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 801-E  
7 December 1959COMMITTEE 5

## SUMMARY RECORD

of the 21st Meeting of Committee 5

2 December 1959, at 3 p.m. - Room A

The Chairman asked the Committee to consider Documents Nos. 676, 685, 702 and DT 858.

It was so decided.

The Chairman then offered the floor to Mr. Juan A. Autelli, so that he might present Document No. 676.

Mr. Autelli (Argentina), Chairman of Working Group 5B, briefly presented the document, which was based on the findings of Sub-Group 5B3 (Chairman: Mr. Bès). It had been unanimously adopted by Working Group 5B.

The following amendments were to be made:

Page 5, paragrapha 2.8: the date 1 July 1959 should be changed to 1 July 1961.

Page 5, paragraph 2.8: at the end, instead of "2a, 2b or 2c dates", read: "2a or 2b and 2c dates".

Page 13, Annex 2, Column: Ships, 8 000 kc/s:  
instead of 8 211.8 read: 8 210.8  
instead of 8 218.2 read: 8 217.2  
instead of 8 224.6 read: 8 223.6  
instead of 8 231.0 read: 8 230.0  
instead of 8 237.4 read: 8 236.4  
instead of 8 243.8 read: 8 242.8  
instead of 8 250.2 read: 8 249.2

The allotments shown between brackets had to be duly coordinated.

The Chairman called for general comments and suggested that the document be considered item by item.

Chapter I was noted.

Chapter II was adopted.

Chapter III, paragraph 1, was noted. Chapter III, paragraph 2:





After some discussion on paragraph 2.8 (speakers: the Delegates of Denmark, Sweden, Israel, Norway, Colombia, the United States and Greece), it was decided to do away with the first sentence in paragraph 2.8 and to read as follows:

"2.8 The Committee believes that the Channel compression should be put into effect on 1 July 1961."

Chapter III, paragraph 3, was noted.

Chapter III, paragraph-4, was adopted with the following amendment:

Paragraph 4.4, second sentence, read:

"Otherwise, Administrations would have until 1 July 1961 to rearrange them in such a fashion that they would bear the same relationship to the channels in the new plan as they had in relation to the channels in the E.A.R.C. Plan, provided they meet the conditions set forth in paragraph 4.5 below."

Chapter III, paragraphs 5 and 6: unanimously adopted.

Chapter IV: unanimously adopted.

Annex 1: unanimously adopted.

Annex 2: unanimously adopted, subject to the changes indicated by Mr. Autelli.

Annex 3: The Delegate of the Union of Soviet Socialist Republics said that his country had embarked on a process of coordination, as mentioned in paragraph 3. Neither Spain nor Iran had yet been able to agree to the action thus taken. Hence he would suggest that his country be authorized to use those frequencies provided that no interference was caused to Spanish or Iranian allotments.

The Delegates of Spain and Iran confirmed that their administrations had not yet been able to reply to the request made by the Union of Soviet Socialist Republics and asked that the period mentioned in paragraph 3 of Annex 3 should be prolonged.

The Chairman suggested that the period in question be prolonged to the date on which the document was considered in plenary assembly.

It was so decided.

Pages 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24 of Annex 3 were adopted..

Page 25, too, was adopted.

The Delegate of the United Kingdom of Great Britain and Northern Ireland said that his country was considering, with the People's Republic of Poland, whether it would be possible for the latter country to use another channel.

Pages 26 and 27 were adopted.

Page 28: On request by the Delegate of Sweden, and ~~with~~ the agreement of the Union of Soviet Socialist Republics, it was decided to replace "Southern Asia" in Column 2 and Column 4 by "(Southern Asia - Caspian Sea - Aral Sea)".

Thus amended, page 28 was adopted.

Pages 29, 30 and 31 were adopted.

The Delegate of the Belgian Congo said that his country would prefer the frequency 8 780 kc/s rather than 8 786.4 kc/s because of possible interference with 8 792.8 kc/s in Angola.

It was decided that the matter should be brought up in plenary assembly, if necessary.

Page 32: adopted, with the following changes: Column 4, item 2, after "second frequency for the U.S.S.R. (North-West)" add: "(Arctic Ocean)".

Page 33: adopted with the following changes: Column 2, strike out the square brackets round "U.S.S.R. (North-West) 2" Column 3, opposite "U.S.S.R. (North-West) 2", read 3 kW instead of 5 kW.

The Delegate of Japan said his country would coordinate with all the appropriate countries, but that Chile had not answered.

Page 34: adopted, the brackets round the frequency 8 799.2 kc/s for the Ukrainian Soviet Socialist Republic being struck out.

Page 35 was adopted.

The Delegate of Greece asked that Germany be put in brackets for the frequency 8 811.9 kc/s; Greece had not given its agreement.

The Delegate of the Federal Republic of Germany said the assignment had been made in accordance with Chapter III, item 2.4.

The Delegate of Greece said he might revert to the matter later, in plenary assembly.

Page 36 was adopted, with the following change: Column 2, after "U.S.S.R. (Northern Asia)", add "(East of 60°E)".

The Delegate of China, thereupon:

"Since the name of China did not appear under Column 6, Annex 2 of Document No. DT 731, which indicates the countries most affected by the modifications, we could accept the new plan only on the assumption that the special working group which prepared the list had done a good job and all the new additions are compatible with those allotments already existing. But if in the future this should be found not the case, we would reserve the right to withdraw the acceptance when it is deemed necessary."

Pages 37, 38 and 39 were adopted.

The Delegates of Iran and of the People's Republic of Poland said they were considering the assignment of 13 161.5 kc/s.

Page 40 was adopted.

Page 41 was adopted, the brackets round the frequency 13 182.5 kc/s (Japan) 4, being deleted.

Page 42 was adopted.

Page 43 was adopted, the brackets round the frequency 13 196.5 kc/s U.S.S.R. (Far East) 4, being removed.

Page 44 was adopted.

Page 45 was adopted, the brackets round the frequency 17 321.5 kc/s Ukraine 2 and U.S.S.R. (Europe) 3, being removed.

Pages 46, 47, 48 and 49 were adopted.

Page 50 was adopted, the brackets round the frequency 22 667.5 kc/s (Japan) being removed, and for the frequency 22 681.5 kc/s (U.S.S.R.-Europe) and U.S.S.R. (North-West) 1.

Page 51 was adopted.

The Delegate of India asked the Chairman of Working Group 5B3 whether Germany should not be shown between brackets for the frequency 22 702.5 kc/s. The Chairman of Working Group 5B3 said the assignment was in accordance with the E.A.R.C. plan, whereupon the Delegate of India accepted the assignment.

Page 52 was adopted.

The Delegate of India reserved the right to revert to the assignment of 22 716.5 kc/s to Germany.

Page 53 was adopted.

The Delegate of the Belgian Congo asked that the power 0.25 kW shown opposite his country read 3 kW.

The request was refused, on the grounds that it ran counter to the plan.

Whereupon the Delegate of the Belgian Congo declared that, be that as it might, his country would operate 3 kW stations.

Page 54 was adopted.

The Delegate of Italy reserved the right to revert to the frequency 8 799.2 kc/s at the following meeting.

He asked that on page 40, Column 2, a footnote 2) be added to "U.S.S.R. (Southern Asia)", with the following note in Column 4: "2) U.S.S.R. stations shall cause no interference to Italian coast station radiotelephone communications with Italian vessels in the Mediterranean, the Indian Ocean and the Pacific".

It was so decided.

The Delegates of Israel, Greece, Korea, Malaya, India, Iran and Cuba reserved the right to revert to certain points in plenary assembly.

It was decided to refer pages 1 to 9 of Document No. 676 to Group 5A and to issue the annexes on blue paper.

Document No. 685:

Mr. Juan Autelli (Argentina), Chairman of Working Group 5B, briefly presented the document and said that the following changes were to be made therein:

Page 5: paragraph 2a, delete the second sentence.

Page 6: No. 26, replace "Region 3 - to be the subject of a resolution", by:

"Region 3: 120 microvolts per metre between 40°N and 50°S  
70 microvolts per metre outside this zone."

No. 28, replace "Region 3 - to be decided upon" by:

"Region 3: 100 microvolts per metre between 40°N and 50°S  
75 microvolts per metre outside this zone."

He would take that opportunity of expressing his gratitude to the delegations which had taken part in the work of his Working Group, and especially to the chairmen of the sub-groups thereof: Mr. Sathar (5B1), Mr. Arthur L. Lebel (5B2), Mr. Bès (5B3), Mr. Gejer (5B4), Mr. Shinkawa (5B5), and Mr. P. N. Parker (5B6). One and all, they had done a remarkable job.

The Committee undertook a close scrutiny of the document. It took note of the first three pages.

Annex 1: the Committee took note of paragraph 1.

Paragraph 2: The Delegate of the United Kingdom of Great Britain and Northern Ireland requested (and it was so decided) that the proposals in Document No. 24 should be added to Nos. 26, 27 and 28 of the Agreement.

Hence paragraph 2) was amended to read:

"2). It was agreed to include Nos. 26, 27 and 28 of the E.A.R.C. Agreement, the proposals appearing in Document No. 24, and E.A.R.C. Recommendation 8, in Article 9 of the new Radio Regulations. To this end, the texts in question will have to be referred to Committee 8. The above provisions....".

Thus amended, paragraph 2) was adopted.

Paragraph 3 was adopted.

Paragraph 4 was adopted and referred to Working Group 5A.

Paragraphs 5 and 6 were left to one side pending the findings of the working party for Region 1, under Mr. Willems.

Paragraph 7: the Delegate of Iran said that negotiations were under way.

The Delegate of Korea said that he had reached no agreement and reserved the right to revert to the matter at a later meeting.

Annex 2 was unanimously adopted.

The Chairman said that the Committee had finished with Document No. 685; his thanks to all who had helped to draft it.

They would now turn to Document No. DT 858, containing the new revised version of No. 87, produced by Working Group 5A.

The Delegate of Italy thought that the wording ran counter to the new Article 11, where it was laid down that 2b and 2d dates gave no right to protection. Now No. 87 afforded protection to all assignments.

The Delegate of Spain supported him.

The Delegate of the United Kingdom of Great Britain and Northern Ireland thought there was no contradiction. No. 87 referred to the general rules for assignment, while Article 11 gave protection to the frequencies notified.

He was backed up by the Delegates of the Federal Republic of Germany, the Netherlands, the United States, New Zealand, South Africa, Brazil and the Union of Soviet Socialist Republics.

The Delegate of Spain proposed that the following be added to the beginning of No. 87:

"In view of the detailed arrangements set forth in these Regulations....."

The proposal was put to the vote and rejected by 21 votes to 12, with 7 abstentions.

The No. 87 appearing in Document No. DT 858 was adopted unchanged and would be referred to the plenary assembly.

Document No. 702:

Paragraphs a, b and c, of the considerations were adopted.

Paragraph a under "recognizing" was adopted.

The Delegate of the Federal People's Republic of Yugoslavia proposed a change in "b" of the consideranda but the proposal ran into objections and he let it drop.

The Delegate of the Union of Soviet Socialist Republics thought that the International Radio Consultative Committee could give its technical views on the technical characteristics of equipment, but not on the additional equipment to be installed. He wanted the Chairman of Group 5A to provide some explanations and might revert to the matter in plenary meeting.

With that reservation, paragraph "b" of the consideranda was adopted.

Paragraphs 1 and 2, under "invites the Administrations" were adopted.

Document No. 702 was adopted.

The meeting rose at 6.35 p.m.

Rapporteur:  
J. Barrailler

Chairman:  
M. Joachim

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 802-E  
7 December, 1959

## PLENARY MEETING

### A G E N D A

#### Sixteenth Plenary Meeting

Tuesday, 8 December, 1959 at 2.30 p.m.

1. Report of the Ad Hoc Group - Future policy relating to the radio frequency spectrum 4 - 27.5 Mc/s - Discussion continued. (Document No. 774)
  2. Draft Resolution - Telecommunication and the Peaceful Uses of Outer Space Vehicles. (Document No. 778).
  3. Statement by the Federal Republic of Germany. (Document No. 794).
  4. Note by the Chairman - Article 6 of the new Convention. (Document No. 795).
  5. Approval of the Minutes of the Eleventh Plenary Meeting. (Document No. 757).
  6. Draft letter to the Chairman of the Plenipotentiary Conference. (Document No. 781).
  7. Miscellaneous.
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**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 803-E  
7 December 1959**

**SERIES 18**

**PLENARY MEETING**

The Editorial Committee, having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source | Document No.   | Reference      | Pages | Remarks |
|--------|----------------|----------------|-------|---------|
| Com. 6 | 326            | Art. 1         | 18—01 |         |
| Com. 7 | 709 and DT 851 | Art. 20        | 18—13 |         |
| Com. 4 | 665            | Recommendation | 18—20 |         |
| Com. 5 | 730            | Recommendation | 18—22 |         |
|        | DT 868         | Resolution     | 18—23 |         |
|        | DT 860         | „              | 18—29 |         |
|        | DT 867         | „              | 18—31 |         |
|        | 729            | „              | 18—33 |         |
|        | DT 852         | „              | 18—34 |         |





## Former reference

|             |
|-------------|
| Chap.: I    |
| Art.: 1     |
| Nos.: 1-73i |

## Source

Committee : 6  
Doc. No. : 326

## New reference

|          |
|----------|
| Chap.: , |
| Art.:    |
| Nos.:    |

## CHAPTER I

## ARTICLE 1

Title MOD

## Terms and Definitions

Title NOC

## Preamble

1 MOD

For the purposes of these Regulations the following terms shall have the meanings defined below. These terms and definitions do not, however, necessarily apply for other purposes.

## Section I. General Terms

2 NOC

*Telecommunication* : Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.

3 NOC

*General Network of Telecommunication Channels* : The whole of the existing telecommunication channels open to public correspondence, with the exception of the telecommunication channels of the mobile service.

16d ADD

*Simplex Operation* : Operating method in which transmission is made possible alternately in each direction, for example, by means of manual control.<sup>1</sup>

16e ADD

*Duplex Operation* : Operating method in which transmission is possible simultaneously in both directions.<sup>1</sup>

16f ADD

*Semi-duplex Operation* : Operating method which is simplex at one end of the circuit and duplex at the other.<sup>1</sup>

16d.1 ADD

<sup>1</sup> In general, duplex and semi-duplex operation require two frequencies in radiocommunication; simplex may use either one or two.

5 MOD

*Radio Waves (or Hertzian Waves)*: Electromagnetic waves of frequencies lower than 3 000 Gc/s, propagated in space without artificial guide.

6 MOD

*Radio*: A general term applied to the use of radio waves.

4 MOD

*Radiocommunication*: Telecommunication by means of radio waves.

7 MOD

*Telegraphy*: A system of telecommunication which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form. The foregoing definition appears in the Convention, but for the purposes of these Regulations, telegraphy is defined as "A system of telecommunication for the transmission of written matter by the use of a signal code" and shall have this meaning unless otherwise specified.

73g ADD

*Frequency-Shift Telegraphy*: Telegraphy by frequency modulation in which the telegraph signal shifts the frequency of the carrier between predetermined values. There is phase continuity during the shift from one frequency to the other.

73i ADD

*Four-Frequency Duplex Telegraphy*: Frequency-shift telegraphy in which each of the four possible signal combinations corresponding to two telegraph channels is represented by a separate frequency.

17 MOD

*Telegram*: Written matter intended to be transmitted by telegraphy for delivery to an addressee; this term also includes radio-telegram unless otherwise specified. In this definition the term Telegraphy has the meaning defined in the Convention.

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|-----|-----|---|
| 18  | NOC | <i>Radiotelegram</i> : Telegram originating in or intended for a mobile station transmitted, on all or part of its route, over the radio-communication channels of a mobile service.              |
| 7a  | ADD | <i>Telemetry</i> : The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.   |
| 16c | ADD | <i>Radiotelemetry</i> : Telemetry by means of radio waves.  |
| 8   | NOC | <i>Telephony</i> : A system of telecommunication set up for the transmission of speech or, in some cases, other sounds.   |
| 18a | ADD | <i>Radiotelephone Call</i> : A telephone call, originating in or intended for a mobile station, transmitted on all or part of its route over the radiocommunication channels of a mobile service. |
| 9   | NOC | <i>Television</i> : A system of telecommunication for the transmission of transient images of fixed or moving objects.  |
| 10  | MOD | <i>Facsimile</i> : A system of telecommunication for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form.                         |

## Section II. Radio Systems, Services and Stations

|    |     |   |
|----|-----|---|
| 35 | MOD | <i>Station</i> : One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service. Each station shall be classified by the service which it operates permanently or temporarily. |
| 19 | NOC | <i>Fixed Service</i> : A service of radiocommunication between specified fixed points.  |
| 37 | NOC | <i>Fixed Station</i> : A station in the fixed service.  |

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| 20  | NOC   | <i>Aeronautical Fixed Service</i> : A fixed service intended for the transmission of information relating to air navigation, preparation for and safety of flight.   |
| 38  | NOC   | <i>Aeronautical Fixed Station</i> : A station in the aeronautical fixed service.   |
| 18k | ADD   | <i>Tropospheric Scatter</i> : The propagation of radio waves by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.   |
| 18L | ADD   | <i>Ionospheric Scatter</i> : The propagation of radio waves by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.  |
| 21  | MOD   | <i>Broadcasting Service</i> : A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmissions. |
| 39  | NOC   | <i>Broadcasting Station</i> : A station in the broadcasting service.   |
| 23  | NOC   | <i>Mobile Service</i> : A service of radiocommunication between mobile and land stations, or between mobile stations.  |
| 40  | (MOD) | <i>Land Station</i> : A station in the mobile service not intended to be used while in motion.   |
| 44  | (MOD) | <i>Mobile Station</i> : A station in the mobile service intended to be used while in motion or during halts at unspecified points.   |
| 25  | MOD   | <i>Aeronautical Mobile Service</i> : A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may also participate.  |
| 42  | MOD   | <i>Aeronautical Station</i> : A land station in the aeronautical mobile service. In certain instances an aeronautical station may be placed on board a ship.   |
| 46  | MOD   | <i>Aircraft Station</i> : A mobile station in the aeronautical mobile service on board an aircraft.  |

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| 26  | NOC | <i>Land Mobile Service</i> : A mobile service between base stations and land mobile stations, or between land mobile stations.   |
| 43  | NOC | <i>Base Station</i> : A land station in the land mobile service carrying on a service with land mobile stations.   |
| 47  | NOC | <i>Land Mobile Station</i> : A mobile station in the land mobile service capable of surface movement within the geographical limits of a country or continent.   |
| 24  | MOD | <i>Maritime Mobile Service</i> : A mobile service between coast stations and ship stations, or between ship stations, in which survival craft stations may also participate.   |
| 24a | ADD | <i>Port Operations Service</i> : A maritime mobile service in or near a port, between coast stations and ship stations, or between ship stations, in which messages are restricted to those related to the movement of ships and their safety. |
| 41  | MOD | <i>Coast Station</i> : A land station in the maritime mobile service.  |
| 45  | MOD | <i>Ship Station</i> : A mobile station in the maritime mobile service located on board a vessel, other than a survival craft, which is not permanently moored.   |
| 69L | ADD | <i>Ship's Emergency Transmitter</i> : A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes.  |
| 45a | ADD | <i>Survival Craft Station</i> : A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.                                      |
| 11  | MOD | <i>Radiodetermination</i> : The determination of position, or the obtaining of information relating to position, by means of the propagation properties of radio waves.  |
| 27  | MOD | <i>Radiodetermination Service</i> : A service involving the use of radiodetermination.   |

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| 48  | MOD | <i>Radiodetermination Station</i> : A station in the radiodetermination service.   |
| 12  | MOD | <i>Radionavigation</i> : Radiodetermination used for the purposes of navigation, including obstruction warning.  |
| 28  | MOD | <i>Radionavigation Service</i> : A radiodetermination service involving the use of radionavigation.  |
| 50  | MOD | <i>Radionavigation Land Station</i> : A station in the radionavigation service not intended to be used while in motion.  |
| 51  | NOC | <i>Radionavigation Mobile Station</i> : A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.                  |
| 30  | NOC | <i>Aeronautical Radionavigation Service</i> : A radionavigation service intended for the benefit of aircraft.  |
| 29  | NOC | <i>Maritime Radionavigation Service</i> : A radionavigation service intended for the benefit of ships.   |
| 12a | ADD | <i>Radiolocation</i> : Radiodetermination used for purposes other than those of radionavigation.   |
| 28a | ADD | <i>Radiolocation Service</i> : A radiodetermination service involving the use of radiolocation.  |
| 51a | ADD | <i>Radiolocation Land Station</i> : A station in the radiolocation service not intended to be used while in motion.  |
| 51b | ADD | <i>Radiolocation Mobile Station</i> : A station in the radiolocation service intended to be used while in motion or during halts at unspecified points.                      |
| 13  | MOD | <i>Radar</i> : A radiodetermination system based on the comparison of reference signals with radio signals reflected, or re-transmitted, from the position to be determined. |
| 14  | MOD | <i>Primary Radar</i> : A radiodetermination system based on the comparison of reference signals with radio signals reflected from the position to be determined.             |

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| 15  | MOD | <i>Secondary Radar</i> : A radiodetermination system based on the comparison of reference signals with radio signals re-transmitted from the position to be determined.  |
| 70  | MOD | <i>Instrument Landing System (ILS)</i> : A radionavigation system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing. |
| 70a | ADD | <i>Instrument Landing System Localizer</i> : A system of horizontal guidance embodied in the instrument landing system which indicates the horizontal deviation of the aircraft from its optimum path of descent along the axis of the runway.         |
| 70b | ADD | <i>Instrument Landing System Glide Path</i> : A system of vertical guidance embodied in the instrument landing system which indicates the vertical deviation of the aircraft from its optimum path of descent.   |
| 70c | ADD | <i>Marker Beacon</i> : A transmitter in the aeronautical radio-navigation service which radiates vertically a distinctive pattern for providing position information to aircraft.  |
| 70d | ADD | <i>Radio Altimeter</i> : A radionavigation equipment, on board an aircraft, which makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the ground.   |
| 16  | MOD | <i>Radio Direction Finding</i> : Radiodetermination using the reception of radio waves for the purpose of determining the direction of a station or object.  |
| 52  | MOD | <i>Radio Direction-Finding Station</i> : A radiodetermination station using radio direction-finding.   |
| 53  | MOD | <i>Radiobeacon Station</i> : A station in the radionavigation service the emissions of which are intended to enable a mobile station to determine its bearing or direction in relation to the radiobeacon station.                                     |
| 33b | ADD | <i>Safety Service</i> : A radiocommunication service used permanently or temporarily for the safeguarding of human life and property.  |

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| 20b | ADD   | <i>Space Service</i> : A radiocommunication service between space stations.  |
| 20a | ADD   | <i>Earth-Space Service</i> : A radiocommunication service between earth stations and space stations.   |
| 39b | ADD   | <i>Space Station</i> : A station in the earth-space service or the space service located on an object which is beyond, or intended to go beyond, the major portion of the earth's atmosphere and which is not intended for flight between points on the earth's surface. |
| 39a | ADD   | <i>Earth Station</i> : A station in the earth-space service located either on the earth's surface or on an object which is limited to flight between points on the earth's surface.  |
| 6a  | ADD   | <i>Radio Astronomy</i> : Astronomy based on the reception of radio waves of cosmic origin.   |
| 32a | ADD   | <i>Radio Astronomy Service</i> : A service involving the use of radio astronomy.   |
| 32  | MOD   | <i>Meteorological Aids Service</i> : A radiocommunication service used for meteorological, including hydrological, observations and exploration.   |
| 73  | (MOD) | <i>Radiosonde</i> : An automatic radio transmitter in the meteorological aids service usually carried on an aircraft, free balloon, kite or parachute, and which transmits meteorological data.  |
| 31  | NOC   | <i>Amateur Service</i> : A service of self-training, intercommunication and technical investigations carried on by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.                |
| 56  | NOC   | <i>Amateur Station</i> : A station in the amateur service.   |
| 33  | MOD   | <i>Standard Frequency Service</i> : A radiocommunication service for scientific, technical and other purposes, providing the transmission  |



of specified frequencies of stated high precision, intended for general reception.

54 NOC

*Standard Frequency Station* : A station in the standard frequency service.

33c ADD

*Time Signal Service* : A radiocommunication service for the transmission of time signals of stated high precision, intended for general reception.

55 (MOD)

*Experimental Station* : A station utilizing radio waves in experiments with a view to the development of science or technique. This definition does not include amateur stations.

34 MOD

*Special Service* : A radiocommunication service, not otherwise defined in this Article, carried on exclusively for specific needs of general utility, and not open to public correspondence.

### Section III. Technical Characteristics

57 MOD

*Assigned Frequency* : The centre of the frequency band assigned to a station.

57b ADD

*Characteristic Frequency* : A frequency which can be easily identified and measured in a given emission.

57c ADD

*Reference Frequency* : A frequency having a fixed and specified position with respect to the assigned frequency. The displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the centre of the frequency band occupied by the emission.

59 MOD

*Frequency Tolerance* : The maximum permissible departure by the centre frequency of the frequency band occupied by an emission from the assigned frequency or, by the characteristic frequency of an emission from the reference frequency. The frequency tolerance is expressed in parts in  $10^6$  or in cycles per second.

57a ADD

*Assigned Frequency Band* : The frequency band the centre of which coincides with the frequency assigned to the station and the

width of which equals the necessary bandwidth plus twice the absolute value of the frequency tolerance.

- 58 MOD *Occupied Bandwidth*: The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 % of the total mean power radiated by a given emission. In some cases, for example multi-channel frequency-division systems, the percentage of 0.5 % may lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful.
- 58a ADD *Necessary Bandwidth*: For a given class of emission, the minimum value of the occupied bandwidth sufficient to ensure the transmission of information at the rate and with the quality required for the system employed, under specified conditions. Emissions useful for the good functioning of the receiving equipment as, for example, the emission corresponding to the carrier of reduced carrier systems, shall be included in the necessary bandwidth.
- 58d ADD *Spurious Emission*: Emission on a frequency or frequencies which are outside the necessary band, and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions and intermodulation products, but exclude emissions in the immediate vicinity of the necessary band, which are a result of the modulation process for the transmission of information.
- 69 MOD *Harmful Interference*: Any emission, radiation or induction which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with these Regulations.

60 MOD

*Power* : Whenever the power of a radio transmitter etc. is referred to, it shall be expressed in one of the following forms :

- peak envelope power (Pp) ;
- mean power (Pn) ;
- carrier power (Pc).

For different classes of emissions, the relationships between peak envelope power, mean power and carrier power, under the conditions of normal operation and no modulation, are contained in Recommendations of the C.C.I.R., which may be used as a guide.

61 MOD

*Peak Envelope Power of a Radio Transmitter* : The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the highest crest of the modulation envelope, taken under conditions of normal operation.

63 MOD

*Mean Power of a Radio Transmitter* : The power supplied to the antenna transmission line by a transmitter during normal operation, averaged over a time sufficiently long compared with the period of the lowest frequency encountered in the modulation. A time of 1/10 second during which the mean power is greatest will be selected normally.

63a ADD

*Carrier Power of a Radio Transmitter* : The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle under conditions of no modulation. This definition does not apply to pulse modulated emissions.

64d ADD

*Effective Radiated Power* : The power supplied to the antenna multiplied by the relative gain of the antenna in a given direction.

65 MOD

*Gain of an Antenna* : The ratio of the power required at the input of a reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field at

the same distance. When not specified otherwise, the figure expressing the gain of an antenna refers to the gain in the direction of the radiation main lobe. In services using scattering modes of propagation the full gain of an antenna may not be realizable in practice and the apparent gain may vary with time.

65c    ADD

*Isotropic or Absolute Gain of an Antenna:* The gain ( $G_{is}$ ) of an antenna in a given direction when the reference antenna is an isotropic antenna isolated in space.

65b    ADD

*Relative Gain of an Antenna:* The gain ( $G_d$ ) of an antenna in a given direction when the reference antenna is a half-wave loss free dipole isolated in space and the equatorial plane of which contains the given direction.

65a    ADD

*Gain Referred to a Short Vertical Antenna:* The Gain ( $G_v$ ) of an antenna in a given direction when the reference antenna is a perfect vertical antenna, much shorter than one quarter of the wavelength, placed on the surface of a perfectly conducting plane earth.

67    MOD

*Antenna Directivity Diagram:* A curve representing, in polar or Cartesian co-ordinates, a quantity proportional to the gain of an antenna in the various directions in a particular plane or cone.

68b    ADD

*Quarter Power Angular Width of Radiation Main Lobe:* In the horizontal plane, the smallest angle containing the direction of maximum radiation of the antenna and defined by the two directions in which the radiated power has one fourth of the maximum value (i.e., the angular width at the  $-6$  db points).

| Former reference                         | Source                                       | New reference            |
|--|--|--------------------------|
| Chap.: VIII<br>Art.: 20<br>Nos.: 447-484 | Committee: 7<br>Doc. Nos.: 709 and<br>DT 851 | Chap.:<br>Art.:<br>Nos.: |

## CHAPTER VIII

## ARTICLE 20

Title NOC

## Service Documents

446 NOC

§ 1. The following documents shall be published by the Secretary General.

447 MOD

(I) *List 1. The International Frequency List.*

This List shall contain :

447(a) ADD

a) particulars of frequency assignments recorded in the Master International Frequency Register. These particulars shall include the data enumerated in Appendix 6 ;

448

b) the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed by these Regulations for common use by certain services, including frequencies specified in Appendices 10, 12 and 12b ;

448a ADD

c) the allotments in the Allotment Plans included in Appendices 12.0 and 16a.

448b ADD

An indication of the use of the frequencies and allotments in Nos. 448 and 448a shall be included in the entries concerned.

448c ADD

Frequency assignments in the International Frequency List shall be arranged in numerical ascending order of the frequencies assigned.

448d ADD

The International Frequency List above 28 Mc/s shall be in four separate parts as follows :

448e ADD

a) frequency assignments in bands between 28 and 50 Mc/s, excluding broadcasting stations ;

- 448f ADD b) frequency assignments \* in Region 1 in the bands between 50 and 40 000 Mc/s, and frequency assignments \* to broadcasting stations in Region 1 in the bands between 28 and 50 Mc/s ;
- 448g ADD c) frequency assignments in Region 2 in the bands between 50 and 40 000 Mc/s ;
- 448h ADD d) frequency assignments in Region 3 in the bands between 50 and 40 000 Mc/s, and frequency assignments to broadcasting stations in Region 3 in the bands between 28 and 50 Mc/s.
- 449 MOD (II) *List II. List of Fixed Stations Operating International Circuits.*  
This list shall contain the fixed stations operating international circuits, the frequencies of which appear in List I.
- 450 MOD (III) *List III. List of Broadcasting Stations Operating in Bands below 26 100 kc/s.*  
The List shall be divided into two volumes :
- 450a ADD a) *List III A. List of Broadcasting Stations Operating in Bands below 5 950 kc/s.*  
This list shall contain those broadcasting stations the frequency assignments of which are shown in List I.
- 450b ADD b) *List III B. List of Broadcasting Stations Operating in Bands between 5 950 kc/s and 26 100 kc/s.*  
This List shall contain those broadcasting stations the frequency assignments of which are shown in the Annual High Frequency Broadcasting Frequency List, published each year in accordance with the provisions of Section V of Article 11a.

448f.1 ADD

\* In the case of television broadcasting stations in Region 1, separate entries shall be inserted for the carrier frequencies of the vision and sound channels.

451 MOD

(IV) *List IV. List of Coast Stations.*

There are annexed to this List a Table and a Chart showing the zones and hours of service of ships of the second category (see Appendix 13) and a Table of inland telegraph rates, limitrophic rates, etc.

451a ADD

(V) *List V. List of Ship Stations.*

This List shall contain particulars of :

- a) ship stations fitted with radiotelegraph installations ;
- b) ship stations fitted with radiotelegraph and radiotelephone installations ;
- c) ship stations fitted with radiotelephone installations only, when communicating with stations of the maritime mobile service other than those of their own nationality or when on a ship making international voyages.

This List shall contain a Table and a Chart showing the zones and hours of service of ships of the second category (see Appendix 13).

452 SUP

453 MOD

(VI) *List VI. List of Radiodetermination and Special Service Stations.*

This List shall contain direction-finding stations and radiobeacon stations of the maritime radionavigation service, including radiobeacons of the aeronautical radionavigation service reliable for maritime navigation, Ocean-station vessels, direction-finder calibration stations as well as stations transmitting time signals, regular meteorological bulletins, notices to navigators, medical advice, standard frequencies, epidemiological bulletins and ursigrams. In this List, each class of station shall occupy a special section.

454 SUP

455 SUP

456 SUP  
457 SUP  
458 SUP  
459 SUP

460 MOD

(VII) *List VII. Alphabetical List of Call Signs Assigned from the International Series to Stations Included in Lists I to VI.*

This List shall be published in two volumes :

460a ADD

a) *List VII A. Alphabetical List of Call Signs of Stations used by the Maritime Mobile Service (Coast, Ship, Radiodetermination and Special Service Stations).*

This List shall be preceded by the Table of Allocation of Call signs given in Article 19 and a Table of signals characterizing the emissions of radio beacons used in the maritime mobile service.

460b ADD

b) *List VII B. Alphabetical List of Call Signs of Stations other than Amateur Stations, Experimental Stations and Stations with Maritime Mobile Service.*

This List shall be preceded by the Table of Allocation of Call Signs given in Article 19 and by a Table indicating the form of call signs assigned by each administration to its amateur and experimental stations.

460c ADD

(VIII) *List VIII. List of International Monitoring Stations.*

This List shall contain, in tabulated form, particulars of monitoring stations participating in international monitoring.

461 SUP

462 MOD

(IX) *Map of coast stations which are open to public correspondence or which participate in the port operations service.*

463 SUP

464 SUP



465 MOD

(X) *Chart in colours showing frequency allocations as specified in Article 5.*

466 MOD

(XI) *Radiocommunication Statistics.*

467 MOD

§ 2. (1) The Secretary General shall publish the amendments to be made in the documents listed in Nos. 447 to 466 inclusive. Once a month, administration shall inform him, in the form shown for the Lists themselves in Appendix 6, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 7. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II and III, he shall use the data provided by the I.F.R.B., obtained from the information received in application of the provisions of Articles 11 and 11a. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI.

468 MOD

(2) For permanent changes affecting the operation of Radio-determination stations (List VI) No. 1018.

469 \* SUP

470 MOD

§ 4. (1) New editions of the International Frequency List shall be published at intervals to be determined by the Secretary General, but not exceeding two years. This List shall be kept up to date by quarterly recapitulative supplements published in the same form as the List itself. New or modified entries made in the Master International Frequency Register after the publication of the latest recapitulative supplement and which appear in a new recapitulative supplement or in a new edition of the List, shall be indicated therein in an appropriate manner.

470a ADD

(2) The recapitulative supplements shall be divided into two sections as follows :

470b ADD

— Section A shall contain new entries and modifications of entries already listed in the International Frequency List.

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\* See No. 453

- 470c ADD — Section B shall contain entries in the International Frequency List which have been deleted in their entirety.
- 470d ADD § 4a. The List of Fixed Stations operating international circuits (List II) shall be re-published at intervals to be determined by the Secretary General. The List shall be kept up to date by the publication of recapitulative supplements at intervals of three months.
- 471 MOD § 5. (1) The List of Broadcasting Stations operating in bands below 5 950 kc/s (List III A) shall be republished at intervals to be determined by the Secretary General. Recapitulative supplements shall be published every six months.
- 471a ADD (2) The List of Broadcasting Stations operating in the bands between 5 950 kc/s and 26 100 kc/s (List III B) shall be re-published each year without supplements.
- 472 MOD § 6. The List of Coast Stations (List IV) shall be re-published every three years and kept up to date by recapitulative supplements issued every six months.
- 472a ADD § 6a. The List of Ship Stations (List V) shall be re-published every year without supplements.
- 472b ADD § 6b. The List of Radiodetermination and Special Service Stations (List VI) shall be re-published at intervals to be determined by the Secretary General. Recapitulative supplements shall be published every six months.
- 473 SUP
- 474 MOD § 8. (1) The Alphabetical List of Call Signs of Stations Used by the Maritime Mobile Service (List VII A) shall be re-published every two years and kept up to date by recapitulative supplements every three months.
- 474a ADD (2) The Alphabetical List of Call Signs of Stations other than Amateur Stations, Experimental Stations and stations in the Maritime Mobile Service (List VII B) shall be re-published at intervals determined by the Secretary General, and kept up to date by recapitulative supplements issued every three months.

- 474b ADD § 8a. The List of International Monitoring Stations (List VIII) shall be published at intervals to be determined by the Secretary General. It shall be kept up to date by the publication of recapitulative supplements at intervals to be determined by the Secretary General.
- 475 MOD § 9. The Radiocommunication Statistics shall be re-published at intervals to be determined by the Secretary General.
- 476 MOD § 10. (1) The forms in which the Lists I to VI, List VIII inclusive, and the Radiocommunication Statistics are to be prepared are given in Appendix 6. Information concerning the use of these documents shall be given in the prefaces thereto. Each entry shall include the appropriate symbol, as shown in Appendix 7, to designate the category of station concerned. Additional symbols, where necessary, may be selected by the Secretary General, any such new symbols being notified by the Secretary General to administrations.
- 477 MOD (2) In the service documents, the names of coast, radio direction-finding and radiobeacon stations are followed by the words:
- 478 NOC — RADIO for coast stations ;
- 479 NOC — GONIO for maritime radio direction-finding stations ;
- 480 NOC — PHARE for maritime radiobeacon stations ;
- 481 SUP
- 482 SUP
- 483 NOC — AEROPHARE for aeronautical radiobeacon stations.
- 484 MOD § 11. For the purpose of the service documents, a country shall be understood to mean the territory within the limits of which the station is located ; a territory which does not have full responsibility for its international relations shall also be considered as a country for this purpose.

Source : Committee 4  
Doc. No. : 665

RECOMMENDATION No. ...

The Administrative Radio Conference, Geneva, 1959,

*recommends that*

in the preparation of plans for broadcasting stations in the bands 68-73 Mc/s and 76-87.5 Mc/s at the Special Regional Conference referred to in No. 180b of the Radio Regulations, Geneva, 1959, the following factors shall be taken into consideration :

- a) the minimum median field strengths to be protected for the broadcasting and for the fixed and mobile services should be the field strengths required for satisfactory service at the limit of service area in rural areas. For frequency modulated sound broadcasting, the figures given in C.C.I.R. (Los Angeles, 1959) Recommendation No. 263 should be taken as a guide. For television, the same values of minimum field strength as for frequency modulated sound broadcasting should be used. For the fixed and mobile services a tentative figure of 5/uV/ metre should be taken ;
- b) the protection ratios required for frequency modulated sound broadcasting are given in C.C.I.R. (Los Angeles, 1959) Recommendation No. 263, and for television in C.C.I.R. (Los Angeles, 1959) Report No. 125. For the fixed and mobile services the protection ratio should be at least 6 db ;
- c) when determining the required protection ratios, due account shall be taken of the occupied bandwidth and the receiver selectivity when there is a difference between the frequencies of the

desired and interfering signals, and the additional protection resulting from the use of cross-polarization ;

- d)* all services should be protected for not less than 90 % of the time ;
- e)* in evaluating the possible degree of interference due regard should be given to the conditions of propagation. The tropospheric wave propagation curves of C.C.I.R. (Los Angeles, 1959) Recommendation No. 312 should be used where they apply.

Source : Committee 5  
Doc. No. : 730

RECOMMENDATION No. ...

**Regarding the Practical Needs of Countries in Need of Special Assistance**

The Administrative Radio Conference, Geneva, 1959,

*recommends that*

1. administrations of countries in need of special assistance should establish their own facilities for processing and adjusting quartz crystals, and obtain crystal-stabilized variable frequency oscillators to be employed as a temporary means of frequency control of their transmitters pending availability of crystals adjusted to precise operating frequencies. When assistance in this matter is requested, it should be provided through the appropriate Technical Assistance Organs of the United Nations ;

2. all administrations should make special efforts to co-operate with the administrations of countries in need of special assistance by furnishing monitoring information and such technical assistance as may aid these countries in obtaining proper frequency assignments for their operations ;

*invites the International Frequency Registration Board*

to provide administrations of countries in need of special assistance with the necessary information and technical data, including the detailed explanations of the Radio Regulations, which will permit these countries to choose and obtain proper frequency assignments for their operations.

Source : Committee 5  
Doc. No. : DT 868

RESOLUTION No. ...

**Relating to Certain Entries in the Master Radio Frequency  
Record \* in the Bands below 27 500 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*considering that*

- a) in various parts of the Table of Frequency Allocations, Atlantic City, 1947, certain services had priority and will be primary services according to the Table of Frequency Allocations, Geneva, 1959 ;
- b) the concepts of primary and secondary services have only now been introduced (see Article 5 of the Radio Regulations, Geneva, 1959) ;
- c) the Extraordinary Administrative Radio Conference, Geneva, 1951, adopted an International Frequency List which included entries not in conformity with the Table of Frequency Allocations, Atlantic City, 1947 ;
- d) provisions have to be made in connection with these entries on the establishment of the Master International Frequency Register ;

*and taking into account*

the Report by the International Frequency Registration Board to this Conference,

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\* Master Radio Frequency Record: The interim master register of frequency assignments established and maintained pursuant to the provisions of the Agreement adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951 (E.A.R.C. Agreement).

*resolves*

that those entries in the Master Radio Frequency Record referred to in the Annexes to this Resolution which will be transferred to the Master International Frequency Register shall receive the consideration and treatment specified in these Annexes ;

*and decides*

1. to urge administrations to take the required action ; and
2. to invite the next Administrative Radio Conference to reconsider the situation.



## ANNEX 1

**Bands below 3 950 kc/s (4 000 kc/s Region 2) Except the Bands  
Allocated Exclusively to the Aeronautical Mobile Service above 2 850 kc/s**

| Frequency bands                             | Entry in the Master Radio Frequency Record       | Description of entry   | Date in Column 2a or 2b | To be considered as a <i>permitted service</i> , as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, until:<br>(6) | Treatment thereafter:<br>(6)  |
|---|--|--|-------------------------|---|---|
| 14 - 2 850 kc/s<br>(2 000 kc/s in Region 2) | Initial and Subsequent (until 31 December, 1959) | Non-priority, Atlantic City, 1947  | 2a                      | Next Administrative Radio Conference<br>(1)   | According to the decisions of the next Administrative Radio Conference<br>(1) |
|   | Initial  | Non-conformity with Table of Frequency Allocations, Atlantic City, 1947  | 2a                      | 31 December, 1961<br>(2)  | As not conforming with Table of Frequency Allocations, Geneva, 1959<br>(3)    |
|   | Initial  | Classes of emission not in conformity with Table of Frequency Allocations, Atlantic City, 1947   | 2a                      | 31 December, 1961<br>(2)  | As not conforming with Table of Frequency Allocations, Geneva, 1959<br>(3)    |
|   | Initial and Subsequent                           | Conformity with Table of Frequency Allocations, Atlantic City 1947, but Non-conformity with Table of Frequency Allocations, Geneva, 1959 | 2a                      | Next Administrative Radio Conference<br>(4)   | According to the decisions of the next Administrative Radio Conference<br>(4) |

| Frequency bands  | Entry in the Master Radio Frequency Record | Description of entry   | Date in Column 2a or 2b                        | To be considered as a permitted service, as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, until:<br>(6) | Treatment thereafter :<br>(6)  |
|--|--|--|--|---|--|
| 2 850 kc/s<br>(2 000 kc/s<br>Region 2) -<br>3 950 kc/s<br>(4 000 kc/s<br>Region 2),<br>except for the<br>bands allocated<br>exclusively to<br>the aeronauti-<br>cal mobile<br>mobile | Initial<br>and<br>Subsequent               | Non-priority;<br>Atlantic City, 1947<br>(5)  | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | Next Administrative<br>Radio Conference<br>(1)  | According to the deci-<br>sions of the next<br>Administrative Radio<br>Conference<br>(1) |
|  | Initial                                    | Non-conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947   | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | 31 December, 1961<br>(2)  | As not conforming<br>with Table of Frequen-<br>cy Allocations, Geneva,<br>1959<br>(3)    |
|  | Initial                                    | Class of emission not<br>in conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947   | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | 31 December, 1961<br>(2)  | As not conforming<br>with Table of Fre-<br>quency Allocations,<br>Geneva, 1959<br>(3)    |
|  | Initial<br>and<br>Subsequent               | Conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947, but Non-<br>conformity with Table<br>of Frequency Alloca-<br>tions, Geneva, 1959 | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | Next Administrative<br>Radio Conference<br>(4)  | According to the deci-<br>sions of the next<br>Administrative Radio<br>Conference<br>(4) |

## Footnotes to Annex 1

- (1) *a)* Until the situation has been reconsidered by the next Administrative Radio Conference, the class of service of these assignments shall be considered as being a permitted service, as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, and existing or future assignments for the primary or priority service in the same frequency band according to the Table of Frequency Allocations and other relevant provisions of the Radio Regulations of either Atlantic City, 1947, or Geneva, 1959, shall be considered, as far as their relationship with the former assignments is concerned, as being for a main service as referred to in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959.  
*b)* In respect of the relationship with each other of the assignments referred to in *a)* above, these provisions replace the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959, whereby certain services in the particular bands are primary or priority services and other services are secondary or non-priority services in the same bands.
- (2) These assignments should be brought into conformity with the provisions of the Radio Regulations, Geneva, 1959, as soon as possible, either by their transfer to appropriate bands or by discontinuance of the operations of the services concerned. Until the date this has been done or until 31st December, 1961, whichever date is the earlier, the assignments or classes of emission concerned shall be considered as being for a permitted service as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, in derogation of the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959. The International Frequency Registration Board should draw the attention of the administrations concerned to these entries as soon as possible.
- (3) On 1st January, 1962, provided that the entries are not in conformity with the Table of Frequency Allocations, Geneva, 1959, the dates appearing in Column 2a of the Master International Frequency Register shall be transferred to Column 2b and a symbol shall be entered in Column 13 to indicate non-conformity with that Table.
- (4) These assignments should be brought into conformity with the provisions of the Radio Regulations, Geneva, 1959, as soon as possible after the entry into force of these Regulations, either by their transfer to appropriate bands or by discontinuance of the operations of the services concerned. Until this has been done, these assignments shall be considered as being for a permitted service as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, in derogation of the relevant provisions of these Regulations until the next Administrative Radio Conference has reconsidered the situation. The International Frequency Registration Board should draw the attention of the administrations concerned to these entries as soon as possible.
- (5) The subsequent entries for Region 1 are those which are in conformity with Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947.
- (6) The foregoing provisions shall be taken into account by the International Frequency Registration Board when conducting the examinations prescribed in the Resolution relating to the establishment of the Master International Frequency Register and in Article 11 of the Radio Regulations, Geneva, 1959.

## ANNEX 2

## Shared Bands Between 3 950 kc/s (4 000 kc/s Region 2) and 27 500 kc/s

| Entry<br>in the Master Radio<br>Frequency Record | Description of Entry   | To be considered as a permitted service, as defined in No. [7 (B) of Document No. 242] of the Radio Regulations, Geneva, 1959, until: | Treatment thereafter:   |
|--|--|---|---|
| Initial<br>and<br>Subsequent                     | Non-priority Atlantic City, 1947, but in conformity with the Table of Frequency Allocations, Atlantic City, 1947 | Next Administrative Radio Conference<br>(1)   | According to the decisions of the next Administrative Radio Conference<br>(1) |

## Footnote to Annex 2

(1) *a)* Until the situation has been reconsidered by the next Administrative Radio Conference, the class of service of these assignments shall be considered as being a permitted service as defined in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959, and existing or future assignments for the primary or priority service in the same frequency band according to the Table of Frequency Allocations and other relevant provisions of the Radio Regulations of either Atlantic City, 1947, or Geneva, 1959, shall be considered, as far as their relationship with the former assignments is concerned, as being for a main service as referred to in No. [7(B) of Document No. 242] of the Radio Regulations, Geneva, 1959.

*b)* In respect of the relationship with each other of the assignments referred to in *a)* above, these provisions replace the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959, whereby certain services in the particular bands are primary or priority services and other services are secondary or non-priority services in the same bands.

*c)* The foregoing provisions shall be taken into account by the International Frequency Registration Board when conducting the examinations prescribed in Article 11 of the Radio Regulations, Geneva, 1959.

Source : Committee 5  
Doc. No. : DT 860

RESOLUTION No. ...

**Relating to the Application, from 1st March, 1960, to 31st December, 1960,  
of the Procedure specified in Article 11a of the Radio Regulations,  
Geneva, 1959, for the Bands allocated exclusively to the Broadcasting  
Service between 5 950 and 26 100 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*resolves that*

1. the procedure specified in Article 11a of the Radio Regulations, Geneva, 1959, shall be applied from 1st March, 1960 ;
2. for this purpose, the first schedules, to become effective on 4th September, 1960, for the September/October period 1960, should be received from administrations by the International Frequency Registration Board by 1st March, 1960. The closure dates for the receipt of the subsequent schedules will be set by the Board under No. 2 of Article 11a ;
3. the schedules referred to in paragraph 2 shall be prepared and submitted to the Board in conformity with the provisions of Section I of Article 11a ;
4. the procedure for notifying and recording frequency assignments, provided for in Articles 32 and 33 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951, shall cease to be applied from 1st March, 1960, to frequency assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s ;

5. from 1st March 1960, the procedure specified in Nos. 339pq to 339ps of the Radio Regulations, Geneva, 1959, shall be applied. Frequency assignments recorded in the Master Radio Frequency Record according to these provisions shall bear in Column 2c a date determined according to the relevant provisions of No. 339zb of the Radio Regulations, Geneva, 1959. No date shall be entered in Column 2a or Column 2b ;

6. in applying the provisions of Article 11a in accordance with the terms of this Resolution, "Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947", should be read instead of "No. 328a of these Regulations", and "Master Radio Frequency Record" should be read instead of "Master International Frequency Register" ;

7. the first edition of the High Frequency Broadcasting Frequency List referred to in No. 16 of Article 11a shall be published as of September, 1961.

Source : Committee 5  
Doc. No. : DT 867

RESOLUTION No. ...

**Relating to Inter-ship Frequencies in the Bands  
between 1 605 kc/s and 3 600 kc/s in Region 1**

The Administrative Radio Conference, Geneva, 1959.

*considering that*

- a) the Master International Frequency Register will contain among the initial entries the frequency assignments adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, made to specific countries for inter-ship communications in the bands between 1 605 kc/s and 3 600 kc/s in Region 1 ;
- b) provisions should be made for the notification and recording of the use of these frequencies for inter-ship communications by administrations of other countries in Region 1 ;

*resolves that*

1. the use of the frequencies referred to in a) above by other administrations should be co-ordinated with the administrations concerned, and subsequently notified to the International Frequency Registration Board ;
2. upon such notification the Board shall record these new assignments in the Master International Frequency Register, without any date in Columns 2a or 2b, but with an appropriate note in the Remarks Column followed by the date of receipt of the notice by the Board ;

*invites administrations*

to review the recorded areas of operation of the frequencies assignments concerned, with a view to improving sharing possibilities ; and

*requests the International Frequency Registration Board*

to make, where necessary, such suggestions to the administrations concerned as it may be able to offer with a view to achieving the purpose referred to in the immediately preceding paragraphs.



Source : Committee 5

Doc. No. : 729

## RESOLUTION No. ...

**Concerning Frequency Terminology**

The Administrative Radio Conference, Geneva, 1959,

*considering that*

- a)* it is necessary that, in the documents of the Union, frequency terminology be used accurately ;
- b)* in the past, some of these terms have been used ambiguously ;

*decides that*

wherever used in the documents of the Union the terms listed below shall be expressed in the appropriate working language of the Union as indicated in the following table

| Frequency<br>distribution to: | French                     | English                     | Spanish                     |
|-------------------------------|----------------------------|-----------------------------|-----------------------------|
| Services                      | Attribution<br>(attribuer) | Allocation<br>(to allocate) | Atribución<br>(atribuir)    |
| Areas or<br>countries         | Allotissement<br>(allotir) | Allotment<br>(to allot)     | Adjudicación<br>(adjudicar) |
| Stations                      | Assignation<br>(assigner)  | Assignment<br>(to assign)   | Asignación<br>(asignar)     |

Source : Committee 5  
Doc. No. : DT 852

RESOLUTION No. ...

**Relating to the Establishment of the Master  
International Frequency Register**

The Administrative Radio Conference, Geneva, 1959,

*decides*

**1. General**

1.1 The Master International Frequency Register shall be compiled and maintained by the International Frequency Registration Board, preferably by means of a mechanical system.

1.2 The effective date of the Master International Frequency Register shall be the first of January, 1961.

**2. Initial entries**

2.1 The Master International Frequency Register shall include :

- a) the information contained in the Master Radio Frequency Record \* as on the thirty-first of December, 1960, subject to the provisions of paragraph 3 below ;
- b) the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed in the Radio Regulations, Geneva, 1959, for common use by certain services, including frequencies specified in Appendices 10 and 12a of these Regulations, and in Annex 7 \*\* to the E.A.R.C. Agreement, Geneva, 1951 ;

\* Master Radio Frequency Record: The interim master register of frequency assignments established and maintained pursuant to the provisions of the Agreement adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951 (E.A.R.C. Agreement).

\*\* On 1st July 1961, these frequencies shall be replaced by those in Appendix 12 to the Radio Regulations, Geneva, 1959.

- c) the allotments in the Plans included in Appendix 16a to the Radio Regulations, Geneva, 1959, and in Annex 5 \*\* to the E.A.R.C. Agreement, Geneva, 1959.

2.2 An indication of the purpose of the frequencies and allotments under paragraphs 2.1 b) and 2.1 c) shall be included in the entries concerned, which shall not bear any date in Column 2 of the Master International Frequency Register.

### 3. *Methods of transfer*

3.1 Those entries in the Master Radio Frequency Record which will not be complete according to Nos. 269 or 270 of the E.A.R.C. Agreement, Geneva, 1951, or according to Annex 6 to this Resolution, as appropriate, on the date specified above shall not be transferred to the Master International Frequency Register. However, except for the bands above 28 000 kc/s, the Board shall send before the thirtieth of June, 1960, to each administration concerned, a list of incomplete frequency assignments in order that the missing data may be notified as soon as possible, and by the thirty-first of December, 1960, at the latest.

3.2 In those cases provided for in Annex 1 where an entry shall be transferred after an examination or re-examination, and where the finding of the Board is favourable, the Board shall amend the entry in order that this entry will appear in the Master International Frequency Register in the same way as if the Board had made a favourable finding at the time of notification. If, on the contrary, the finding is unfavourable, the assignment shall be entered in the Master International Frequency Register as if the Board had in the first place made an unfavourable finding at the time of notification.

3.3 Frequency assignments not in conformity with No. 328a of the Radio Regulations, Geneva, 1959, shall be indicated, where appropriate, by an appropriate symbol in the Remarks Column.

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\* On 1st July 1961, these allotments shall be replaced by those in Appendix 12.0 to the Radio Regulations, Geneva, 1959.

Moreover, any Remark in the Master Radio Frequency Record which is consistent with the provisions of Article 11 of the Radio Regulations, Geneva, 1959, shall be entered in the Master International Frequency Register.

4. *Additional basic characteristics*

4.1 Inasmuch as the Radio Regulations, Geneva, 1959, stipulate certain basic characteristics heretofore not required, administrations should furnish to the Board these additional characteristics in respect of their initial entries in the Master International Frequency Register as and when possible.

4.2 However, these additional characteristics shall be supplied when an initial entry is involved in any review conducted by the Board under Article 11 of the Radio Regulations, Geneva, 1959.

**ANNEX 1 — Method of Transfer from the Master Radio Frequency Record**  
(see paragraph 3)

| Frequency band<br>kc/s | Regions or<br>Services | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |      | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording in new<br>Master International<br>Frequency Register * |     |      |    | Remarks |
|------------------------|------------------------|---|----|------|--------------------------------|---------------------------------------|--------------------------------------|--|-----|------|----|---------|
|                        |                        | Column  |    |      |                                |                                       |                                      | Column   |     |      |    |         |
|                        |                        | 2a  | 2b | 2c   |                                |                                       |                                      | 2a   | 2b  | 2c   | 2d |         |
| 14- 2 850              | Regions 1<br>and 3     | Δ   |    | Δ    | Yes                            | No                                    |                                      | Δ  |     | Δ    |    |         |
|                        |                        |   | Δ  | Δ    | Yes                            | Yes                                   | Art. 11                              | (1)  | (1) | Δ    |    | (2)     |
|                        |                        | 03  |    |      | No                             |                                       |                                      |  |     |      |    |         |
|                        |                        | 04  |    |      | No                             |                                       |                                      |  |     |      |    |         |
|                        |                        |   |    | Δ*   | Yes                            | No                                    |                                      |  |     | Δ**  |    |         |
| 14- 2 000              | Region 2               | Δ   |    | Δ    | Yes                            | No                                    |                                      | Δ  |     | Δ    |    |         |
|                        |                        |   | Δ  | Δ    | Yes                            | Yes                                   | Art. 11                              | (1)  | (1) | Δ    |    | (2)     |
|                        |                        | 03  |    |      | No                             |                                       |                                      |  |     |      |    |         |
|                        |                        | 04  |    |      | No                             |                                       |                                      |  |     |      |    |         |
|                        |                        |   |    | Δ*   | Yes                            | No                                    |                                      |  |     | Δ**  |    |         |
|                        |                        |   |    | Δ*** | Yes                            | No                                    |                                      |  |     | Δ*** |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.  
No. 339rd of the Radio Regulations, Geneva 1959.

\*\* Ship-to-ship frequencies.

\*\*\* For the band 535-1 605 kc/s, in Region 2, see

| Frequency band<br>kc/s                       | Regions or<br>Services | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording<br>in new Master International<br>Frequency Register * |     |    |    | Remarks |
|--|------------------------|---|----|----|--------------------------------|---------------------------------------|--------------------------------------|--|-----|----|----|---------|
|  |                        | Column  |    |    |                                |                                       |                                      | Column   |     |    |    |         |
|  |                        | 2a  | 2b | 2c |                                |                                       |                                      | 2a   | 2b  | 2c | 2d |         |
| 3 155- 3 400<br>3 500- 3 900                 | Region 1               |   | 03 | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    | (2)     |
|  |                        |   | 03 |    | No                             |                                       |                                      |  |     |    |    |         |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 11                              | (1)  | (1) | Δ  |    |         |
| 2 000- 2 850<br>3 155- 3 400<br>3 500- 4 000 | Region 2               | 03  |    | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    |         |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 11                              | (1)  | (1) | Δ  |    | (2)     |
|  |                        | 03  |    |    | No                             |                                       |                                      |  |     | Δ  |    |         |
|  |                        |   | 04 |    | No                             |                                       |                                      |  |     |    |    |         |
| 3 155- 3 400<br>3 500- 3 950                 | Region 3               | 03  |    | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    |         |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 11                              | (1)  | (1) | Δ  |    | (2)     |
|  |                        | 03  |    |    | No                             |                                       |                                      |  |     |    |    |         |
|  |                        |   | 04 |    | No                             |                                       |                                      |  |     |    |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.

| Frequency band<br>kc/s   | Regions or<br>Services   | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any)  | Dates recording<br>in new Master International<br>Frequency Register * |      |       |    | Remarks |
|--|--|---|----|----|--------------------------------|---------------------------------------|---------------------------------------|--|------|-------|----|---------|
|  |  | Column  |    |    |                                |                                       |                                       | Column   |      |       |    |         |
|  |  | 2a  | 2b | 2c |                                |                                       |                                       | 2a   | 2b   | 2c    | 2d |         |
| 2 850-3 155<br>3 400-3 500<br>3 900-3 950<br>Region 1  | Aeronautical<br>mobile<br>(R and OR)                             |   |    |    |                                |                                       |                                       |  |      |       |    |         |
| 4 650-4 750<br>5 450-5 480<br>Region 2   |  | 03  |    | Δ  | Yes                            | No                                    |                                       | 03   |      | Δ     |    |         |
| 5 480-5 730<br>6 525-6 765<br>8 815-9 040  |  |   | 03 | Δ  | Yes                            | No                                    |                                       |  | 03   | Δ     |    |         |
| 10 005-10 100<br>11 175-11 400<br>13 200-13 360<br>15 010-15 100<br>17 900-18 030            |  |   | Δ  | Δ  | Yes                            | Yes                                   | (3)                                   |  | Δ(3) | Δ(4)  |    |         |
|  |  |   |    |    |                                |                                       |                                       |  |      |       |    |         |
|  |  |   |    |    |                                |                                       |                                       |  |      |       |    |         |
| 4 238-4 368<br>6 357-6 525<br>8 476-8 745<br>12 714-13 130<br>16 952-17 290<br>22 400-22 650 | Maritime<br>mobile<br>(Radio-<br>telegraph<br>coast<br>stations) | 03  |    | Δ  | Yes                            | No                                    |                                       | 03   |      | Δ     |    |         |
|  |  |   | Δ  | Δ  | Yes                            | Yes                                   | E.A.R.C.<br>Art. 33 234<br>& 235 (ii) | (1)  | (1)  | Δ (4) |    | (2)     |
|  |  | 03  |    |    | No                             |                                       |                                       |  |      |       |    |         |
|  |  |   | 04 |    | No                             |                                       |                                       |  |      |       |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.

| Frequency band<br>kc/s   | Regions or<br>Services  | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer<br>examination | Nature of<br>examination<br>(if any) | Dates recording<br>in new Master International<br>Frequency Register * |     |       |       | Remarks |
|--|---|---|----|----|--------------------------------|--------------------------------------|--------------------------------------|--|-----|-------|-------|---------|
|  |   | Column  |    |    |                                |                                      |                                      | Column   |     |       |       |         |
|  |   | 2a  | 2b | 2c |                                |                                      |                                      | 2a   | 2b  | 2c    | 2d    |         |
| 4 368- 4 438<br>8 745- 8 815<br>13 130-13 200<br>17 290-17 360<br>22 650-22 720  | Maritime<br>mobile (Radio-<br>telephone<br>coast<br>stations) | 03  |    | Δ  | Yes                            | No                                   |                                      | 03   |     | Δ     |       |         |
|  |   |   | 04 | Δ  | Yes                            | No                                   |                                      |  | 04  | Δ     |       |         |
|  |   |   | Δ  | Δ  | Yes                            | Yes                                  | (5)                                  |  | Δ   | Δ (4) |       |         |
|  |   |   |    | Δ  |                                |                                      |                                      |  |     |       |       |         |
| 4 063- 4 133<br>8 195- 8 265<br>12 330-12 400<br>16 460-16 530<br>22 000-22 070  | Maritime<br>mobile (Radio-<br>telephone<br>ship<br>stations)  |   | Δ  | Δ  | Yes                            | Yes                                  | (6)                                  | (1)  | (1) | Δ     |       |         |
|  |   |   |    |    |                                |                                      |                                      |  |     |       |       |         |
|  |   |   |    |    |                                |                                      |                                      |  |     |       |       |         |
|  |   |   |    |    |                                |                                      |                                      |  |     |       |       |         |
| 5 950- 6 200<br>7 100- 7 300<br>Regions 1 & 3<br>9 500- 9 775<br>11 700-11 975<br>15 100-15 450<br>17 700-17 900<br>21 450-21 750<br>25 600-26 100 | Broadcasting  |   |    |    |                                |                                      |                                      |  |     |       |       |         |
|  |   |   |    | Δ  | Yes                            | No                                   |                                      |  |     | Δ (7) | Δ (7) |         |
|  |   |   |    |    |                                |                                      |                                      |  |     |       |       |         |
|  |   |   |    |    |                                |                                      |                                      |  |     |       |       |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.



| Frequency band<br>kc/s                | Regions or<br>Services  | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording in new<br>Master International<br>Frequency Register * |    |          |       | Remarks |
|---------------------------------------|---|---|----|----|--------------------------------|---------------------------------------|--------------------------------------|--|----|----------|-------|---------|
|                                       |   | Column  |    |    |                                |                                       |                                      | Column   |    |          |       |         |
|                                       |   | 2a  | 2b | 2c |                                |                                       |                                      | 2a   | 2b | 2c       | 2d    |         |
| 3 950 (4 000<br>Region 2) -<br>27 500 | Various,<br>excluding<br>the bands<br>allocated<br>exclusively<br>to aero-<br>nautical<br>mobile,<br>maritime<br>mobile,<br>broadcasting<br>and amateur |   |    |    |                                |                                       |                                      |  |    |          |       |         |
|                                       |   |   |    | Δ  | Yes                            | No                                    |                                      |  |    | (7)<br>Δ | Δ (7) |         |
|                                       |   |   |    |    |                                |                                       |                                      |  |    |          |       |         |
| 27 500-28 000                         | Various   |   |    | Δ  | Yes                            | Yes                                   | Art. 11                              |  |    | Δ        | Δ (8) |         |
| Above 28 000                          | Various   |   |    | Δ  | Yes (8)                        | No (8)                                |                                      |  |    | Δ        | Δ (8) |         |

## FOOTNOTES TO ANNEX 1

- |  |                                    |
|--|------------------------------------|
| (1) According to the result of the examination   | (5) See Annex 3 to this Resolution |
| (2) Application of Section V of Article 11 of the Radio Regulations, Geneva, 1959, from 1st January, 1961  | (6) See Annex 4 to this Resolution |
| (3) See Annex 2 to this Resolution   | (7) See Annex 5 to this Resolution |
| (4) In case of assignments which bear symbols ZZ or ZZZ, see paragraph 2.2.2 of Annex 5 to this Resolution | (8) See Annex 6 to this Resolution |

## ANNEX 2

**Bands Allocated Exclusively to the Aeronautical Mobile Service  
Between 2850 kc/s and 18 030 kc/s**

Frequency assignments entered in the Master Radio Frequency Record with a date in Column 2b which is after 3rd December, 1951, shall be examined by the Board following the relevant parts of the procedure described in Nos. 339pa to 339pp inclusive of the Radio Regulations, Geneva, 1959; they shall be recorded in the Master International Frequency Register following the procedure described in Nos. 339ta to 339uf inclusive of those Radio Regulations.

## ANNEX 3

**Bands Allocated Exclusively to the Maritime Mobile Service  
Between 4 000 kc/s and 23 000 kc/s for Radiotelephone Coast Stations**

1. All assignments not in conformity with the Plan adopted by the E.A.R.C. (Annex 5 to the E.A.R.C. Agreement, Geneva, 1951), notified to the Board between 3rd December, 1951, and the 1st January, 1961, shall be submitted to a complete technical examination by the Board in accordance with Nos. 233, 234, 235(ii) and 236 of Section III of Article 33 of the E.A.R.C. Agreement, Geneva, 1951, with respect to the allotments appearing in Sections I and II of the Plan in Annex 5 to that Agreement (that is to say, with respect to the frequency assignments brought into use or liable to be brought into use in the future in accordance with the allotments in the Plan), as well as with respect to frequency assignments in conformity with Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947, which were previously recorded in the Master Radio Frequency Record on frequencies specified in Annex 7 to the E.A.R.C. Agreement, Geneva, 1951, either as a consequence of a favourable finding or after an unfavourable finding, the assignment having not, in this latter case, caused harmful interference. The same shall be done for the changes of basic characteristics of assignments in conformity with the Plan.

2. On 1st July, 1961, when Appendices 12 and 12.0 to the Radio Regulations, Geneva, 1959, shall enter into force, assignments in conformity with the Allotment Plan adopted by the E.A.R.C. shall be considered as transferred to the channel frequencies of the Plan in Appendix 12.0 to the Radio Regulations, Geneva, 1959. All assignments not in conformity with the Plan adopted by the E.A.R.C., Geneva, 1951, which were notified to the Board between 3rd December, 1951, and 1st July, 1961, shall be considered as transferred to the channel frequencies of the Plan in Appendix 12.0 to the Radio Regulations, Geneva, 1959, if they had been notified on the central channel frequencies of the Plan adopted by the E.A.R.C., Geneva, 1951. If they have not been so notified, the administrations concerned shall notify to the Board as soon as possible before 1st July, 1961, the adjustments considered necessary in order that these

assignments retain the same relative positions in relation to the channels in the Plan in Appendix 12-0 as they had in relation to the channels in the Plan adopted by the E.A.R.C., Geneva, 1951.

3. Frequency assignments transferred on 1st July, 1961, according to paragraph 2 above shall retain in Columns 2a or 2b the dates which appear in these columns on 30th June, 1961.

## ANNEX 4

**Bands Allocated Exclusively to the Maritime Mobile Service  
Between 4 000 kc/s and 23 000 kc/s for Radiotelephone Ship Stations**

1. Assignments of frequencies for reception by radiotelephone coast stations, notified to the Board between 3rd December, 1951, and 1st January, 1961, shall be examined by the Board following the procedure described in Nos. 339p7 to 339p11 inclusive of the Radio Regulations, Geneva, 1959; they shall be entered in the Master International Frequency Register following the procedure described in Nos. 339t6 to 339t12 of those Regulations.
2. On 1st July, 1961, when Appendix 12 to the Radio Regulations, Geneva, 1959, shall enter into force, assignments shall be considered as transferred to the frequencies in Appendix 12 to the Radio Regulations, Geneva, 1959, if they had been notified on frequencies specified in Annex 7 to the E.A.R.C. Agreement, Geneva, 1951. If they have not been so notified, the administrations concerned shall notify to the Board as soon as possible before 1st July, 1961, the adjustments considered necessary in order that these assignments retain the same relative positions in relation to the channels in Appendix 12 to the Radio Regulations, Geneva, 1959, as they had in relation to the channels in Annex 7 to the Final Acts of the E.A.R.C. Agreement, Geneva, 1951.
3. Frequency assignments transferred on 1st July, 1961, according to paragraph 2 above shall retain in Columns 2a or 2b the dates which appear in those columns on 30th June, 1961.

## ANNEX 5

**Bands Between 3 950 kc/s (4 000 kc/s in Region 2) and 27 500 kc/s  
other than those Allocated Exclusively to the  
Aeronautical Mobile Service, Maritime Mobile Service or Amateur Service**

1. *Transfer of frequency assignments notified pursuant to the provisions of No. 272 of the E.A.R.C. Agreement, Geneva, 1951*

- 1.1 A symbol shall be inserted in Column 2d.
- 1.2 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.

2. *Transfer of frequency assignments notified from 1st April, 1952, other than those referred to in paragraph 1*

- 2.1 In the case where the finding reached by the Board under Article 33 of the E.A.R.C. Agreement, Geneva, 1951, was favourable :
  - 2.1.1 the date of receipt by the Board of the first notice shall be entered in Column 2d ;
  - 2.1.2 the date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register ;
  - 2.1.3 if appropriate, the date following symbol XX in Column 13 shall be inserted in the Remarks Column of the Master International Frequency Register, as well as any other relevant date entered in Column 13 of the Master Radio Frequency Record.
- 2.2 In the case where the finding reached by the Board under Article 33 of the E.A.R.C. Agreement, Geneva, 1951, was unfavourable, i.e. in the case where the assignment concerned bears symbol ZZ or ZZZ in Column 13 of the Master Radio Frequency Record :

- 2.2.1 the date of receipt by the Board of the first notice (i.e. the date which follows immediately symbol **ZZ** or **ZZZ**) shall be entered in Column 2d ;
- 2.2.2 the date to be entered in Column 2c of the Master International Frequency Register shall be, either the date of putting into use notified by the administration concerned, or the date of the tenth day prior to the date following symbol **ZZ** or **ZZZ**, whichever is the later ;
- 2.2.3 the date of receipt by the Board of the resubmitted notice (i.e. in general the date of the tenth day following the date entered in Column 2c of the Master Radio Frequency Record) shall be entered in the Remarks Column of the Master International Frequency Register.

## ANNEX 6

**Frequency Bands Above 27 500 kc/s***1. Bands between 27 500 kc/s and 28 000 kc/s*

- 1.1 *Transfer of frequency assignments, the notification of which was received by the Board before 1st April, 1952*
  - 1.1.1 A symbol shall be inserted in Column 2d of the Master International Frequency Register.
  - 1.1.2 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.
  - 1.1.3 With a view to the application of the provisions of paragraph 1.2 below, administrations, if so requested in specific cases, should supply the Board with those basic characteristics listed in Appendix 1 to the Radio Regulations, Geneva, 1959, which might be missing in the assignments concerned.
- 1.2 *Transfer of frequency assignments, the notification of which was received by the Board between 1st April, 1952, and the date of entry into force of the Radio Regulations, Geneva, 1959.*
  - 1.2.1 These assignments shall be examined by the Board following the procedure described in Article 11 of the Radio Regulations, Geneva, 1959. Administrations, if so requested, in specific cases, should supply the Board with those basic characteristics listed in Appendix 1 to the Radio Regulations, Geneva, 1959, which might be missing in the assignments concerned.
  - 1.2.2 The date of receipt of the first notice by the Board shall be entered in Column 2d of the Master International Frequency Register.



- 1.2.3 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.

2. *Transfer of frequency assignments in the bands above 28 000 kc/s*

- 2.1 From the end of this Conference, administrations shall review the frequency assignments entered on their behalf in the Master Radio Frequency Record above 28 000 kc/s, with a view to reducing substantially the number of such assignments to be transferred to the Master International Frequency Register as initial entries. For this purpose, administrations should be guided by the principles contained in No. 318a of the Radio Regulations, Geneva, 1959, and in Appendix 1 to those Regulations (Column 5a, paragraph 2d). Only those entries should be retained where they relate to stations which fulfil one or more of the conditions listed in No. 314 of the Radio Regulations, Geneva, 1959.
- 2.2 As a result of such review, administrations shall notify to the Board prior to 1st July, 1960, in the form described in Appendix 1 to the Radio Regulations, Geneva, 1959, all entries in the Master Radio Frequency Record which they desire to be transferred to the Master International Frequency Register. Assignments so notified shall not be included in the I.F.R.B. weekly circulars referred to in No. 322 of the Radio Regulations, Geneva, 1959.
- 2.2a When notifying, after the end of this Conference, new frequency assignments, i.e. assignments which will not be subject to review under paragraph 2.1 above, administrations shall prepare their notices in the form described in Appendix 1 to the Radio Regulations, Geneva, 1959, and shall apply, in appropriate cases, the principles contained in No. 318a of the Radio Regulations, Geneva, 1959, and in Appendix 1 (Column 5a, paragraph 2d) to those Regulations.
- 2.2b Notices submitted under either paragraphs 2.2 or 2.2a above should bear a suitable reference to the appropriate paragraph.

- 2.3 From 1st July, 1960, the Board shall transfer to the Master International Frequency Register, as initial entries, complete assignments in the Master Radio Frequency Record, as notified by administrations in conformity with paragraphs 2.2 and 2.2a above.
- 2.4 Frequency assignments, the notification of which was received by the Board before 1st April, 1952, shall bear a symbol in Column 2d of the Master International Frequency Register.
- 2.5 Assignments, the notification of which was received by the Board between 1st April, 1952, and the date of entry into force of the Radio Regulations, Geneva, 1959, shall bear in Column 2d of the Master International Frequency Register the date of receipt of the notice by the Board.
- 2.6 All transferred assignments shall bear in Column 2c of the Master International Frequency Register the date entered in Column 2c of the Master Radio Frequency Record. Where, under the principles in No. 318a of the Radio Regulations, Geneva, 1959, and in Appendix 1 (Column 5a, paragraph 2d) to those Regulations, a single assignment is notified under paragraph 2.2 above in replacement of several assignments entered in the Master Radio Frequency Record, the date to be entered in Column 2c of the Master International Frequency Register shall be the earliest date entered in Column 2c of the Master Radio Frequency Record for the assignments concerned.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 804-E  
8 December, 1959COMMITTEE 7COMMON "SHIP-TO-SHORE" AND "INTERSHIP" FREQUENCIES  
FOR M.M. RADIOTELEPHONY USE IN THE BAND 2 000 - 2 850 KC/S

The requirements of Committee 7 for common ship-to-shore and intership frequencies have been considered by a Special Study Group of Committee 5 and their report is given in paragraph 2 of Document No. 772. Assuming that this report will be accepted by Committee 5, and taking into account the conditions attached to the proposed allocation, the consequential amendments required in Article 34 are included in the following proposed revised texts :-

817a ADD § 8c In Region 1 ship stations and coast stations may use 2 049 kc/s as a supplementary calling frequency when 2 182 kc/s is being used for distress purposes.

823 ADD § 11a (1) All stations on ships making international voyages should be able to use

- i) the international ship-shore frequency 2 049 kc/s assigned for use in Region 1 only, if required by their service, in addition to the frequency 2 182 kc/s;
- ii) the international intership frequency 2.056 kc/s assigned for use in Region 1 only, if required by their service. This frequency may be used as an additional ship-shore frequency.

These frequencies shall not be used for working between stations of the same nationality.



823b ADD (2) All stations on ships making international voyages should be able to use the international intership frequency 2 638 kc/s assigned for use in Region 2 and 3 only, if required by their service.

Further consequential amendment No. 825c to read :

"825c ADD §12a (1) Additionally, when a ship station .... etc."

The substance of these paragraphs has been agreed in Sub-Committee 7B and adopted by Committee 7. In view of the limited time available in which to have these texts included in the Regulations an advance copy of this Document has been sent to Committee 8 in order that they may take preliminary steps pending the approval of Committee 7.

A.J. Ehnle

Chairman.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 805-E

8 December, 1959

COMMITTEE 5

## SUMMARY RECORD

### Twenty-Second Meeting

Friday, 4 December 1959, at 3 p.m. - Room A

Agenda : Document No. 869

The Chairman called everybody to order and had the agenda adopted.

Document No. 731 : Summary Record of the Sixteenth Meeting :

The following changes were made :

Page 1, replace the statement attributed to the Delegate of India  
by :

"The Delegate of India recalled that his Delegation had all along been strongly in favour of a plan for high frequency broadcasting. However, in view of the fact that the majority of delegations did not consider it feasible to draw up such a plan at that Conference, he was prepared to consider the procedure outlined in Document No. 588."

Page 2, statement attributed to Mexico, read :

"The Delegate of Mexico said that while, to a superficial eye, Document No. 588 might well appear better than Document No. DT 745, in fact, contradictions had been introduced therein, as had been pertinently observed by the Delegate of the United Kingdom of Great Britain and Northern Ireland. He would not categorically reject the proposed procedure, although, if the document were to be adopted with the inconsistencies repeatedly pointed out, he would make the requisite reservations with a view to raising the matter at some suitable time; he had misgivings about it. His Administration would join wholeheartedly in implementing the procedure (if it were adopted), as it had done with the I.F.R.B.'s plans, even when it had been unable to agree to them. All Administrations should shew goodwill in applying the procedure correctly. They should cooperate, too, so that the draft plans might eventually lead to a planned use of frequencies, i.e., to final plans."



Page 3, replace the statement attributed to the Delegate of India by :

"The Delegate of India stated that some of the delegations who supported the frequency arrangement procedure opposed the expansion of the high-frequency broadcasting bands on the grounds that the spectrum space available was sufficient to accommodate all the needs of that service. Consequently he considered that it was not at all necessary to give any priority to 2c dates in the solution of conflicts in frequency usage that might arise."

The Delegate of Turkey said that not all of what he had said had been reproduced.

The Delegate of Italy, reverting to Document No. 676, said that at the previous meeting he had asked that on page 40 of Annex 3 a footnote 2) be added opposite the Union of Soviet Socialist Republics, and that on page 39, Column 4, the text of the footnote 2), as adopted, be added. He also wanted the note 5 in Column 4 on page 39 (8 799.2 kc/s) to read :

"5) Second frequency for the Ukraine. The Ukraine shall not use this frequency except from 0200 - 0800 hours GMT and from 1000 - 2000 hours GMT."

The Delegates of Greece, Israel, and Sweden raised points in connection with Document No. 676. The Chairman reminded them that such matters could be raised in plenary meeting.

Document No. 725 and associated Documents Nos. DT 863, 866 and 776 revised :

Mr. George Searle (New Zealand), Chairman, Working Group 5A, proffered a few words of introduction. Document No. DT 776 revised contained the new Article 11. It had been adopted by a considerable majority in Working Group 5A, but the Union of Soviet Socialist Republics had reserved the right to revert to the matter in committee.

Document No. DT 866 was in connection with the Spanish proposal for European broadcasting. The Working Group had decided to submit the document to Committee 5 before its inclusion - if it was to be included - in Article 11.

Hence the Committee decided to consider Document No. DT 866.

The Delegate of the United Kingdom of Great Britain and Northern Ireland said that the document did not accurately reflect Document No. 545. Furthermore, as far as dates were concerned, it introduced a procedure which ran counter to that adopted in Article 11. Hence his Delegation was against adoption of Document No. DT 866, and would propose that it be rejected.

The Delegate of Spain proved that Document No. DT 866 was similar to Document No. DT 545. The addition of an asterisk to Copenhagen Plan frequencies was not designed to destroy that Plan but to legalize an agreement which had been partial only.

The Delegate of the Netherlands tried to shew that the addition proposed in Article 11 would make the latter incoherent. Application of such a procedure would create a state of chaos in Europe and would fatally undermine the Copenhagen Plan. Accordingly, he would side with the United Kingdom of Great Britain and Northern Ireland.

The Delegate of Turkey felt that Document No. DT 866 was an exact reflection of Document No. 545, adopted by the Committee. Hence it should be included in Document No. DT 776 revised.

The Delegate of Spain agreed.

The Chairman asked for the Committee's views on the proposal made by the United Kingdom of Great Britain and Northern Ireland.

The Delegate of Spain raised a point of order. Such a procedure tended to re-open a decision taken at an earlier meeting.

The Chairman felt that the Delegate of the United Kingdom of Great Britain and Northern Ireland had explained why he was against Document No. DT 866. Would the Committee kindly vote?

The United Kingdom of Great Britain and Northern Ireland proposal for rejection of Document No. DT 866 was adopted by 27 votes to 14, with 9 abstentions.

The Delegate of Paraguay said he had asked for the floor before the vote, but it had been refused him. A vote which ran counter to a previous decision by the Committee could not be valid.

The Delegate of Turkey said that the Committee had previously decided to embody Document No. 545 in Article 11. That ought to be done.

The Delegate of Mexico had abstained. The matter should be reconsidered, either in committee, or in plenary meeting.

The Delegate of the Federal Republic of Germany referred to the statement made by him at the nineteenth meeting of the Committee about transfer of the Copenhagen Plan frequencies into the new Record with 2a dates. His Administration would make a reservation about any obligations arising out of those dates.

The Delegate of the United States said that his Delegation, along with that of the United States Territories, had taken no part in the vote, since the problem was a regional one.

The Delegate of Brazil had taken no part in the vote because the problem was a regional one of no concern to Brazil.

The Delegate of Spain protested at the way in which the debate had been conducted. A vote had been taken before the list of speakers had been exhausted.

What procedure did the Chairman intend to adopt for inclusion of Document No. 545 in Article 11 ?

The Delegate of Colombia supported what the previous speaker had said.

The Chairman said that the list of speakers had been exhausted when the vote was taken. As regards Document No. 545, such delegations as might desire to do so could ask for changes in Article 11 when that article was considered item by item.

The Delegate of Paraguay repeated that he had asked for the floor before the vote. It had been refused him.

The Delegate of Canada had taken no part in the vote.

Neither had the Delegate of the Belgian Congo.

The Delegate of Austria repeated that his country had made reservations about the Copenhagen Convention.

The Delegate of Turkey said that now Document No. DT 866 had been rejected, the matter should be left open, so that fresh proposals might be made.

The Delegate of Monaco, while sympathizing with the difficulties encountered by Spain, thought it would be unwise to do away with a plan so difficult to evolve.

The Delegate of Portugal agreed with Spain. What he had said at the nineteenth meeting still held good.

The Delegate of Israel supported the Turkish proposal. Adoption of Document No. DT 866 would have given fresh life to the Copenhagen Plan.

The Chairman called for comments on Document No. DT 867.

The Delegate of the Union of Soviet Socialist Republics said that his country had been unable to obtain ship-to-ship frequencies in the band 1 605 - 3 600 kc/s at the Extraordinary Administrative Radio Conference. Hence it reserved the right to use such frequencies as it might see fit to use, overlooking the assignments set forth in the Plan.



The Delegate of Cuba did not possess the document. Hence he would reserve the right to revert to the matter.

Document No. DT 867, with these two reservations, was adopted.

Document No. DT 863

This was unanimously adopted.

Document No. 725 and Document No. DT 776 revised:

The Delegate of Turkey reiterated his proposal to leave the matter on one side, so that new amendments to Article 11 might be submitted, in accordance with Document No. 545. The Delegate of Spain supported him.

The Chairman said that consideration of the documents could not be postponed. Amendments could always be proposed as the Committee passed from item to item therein, or in plenary meeting.

Pages 2 to 23 of Document No. DT 776 revised were unanimously adopted.

The Delegate of Turkey, in connection with page 24, proposed that a number 339 rda be added, in accordance with paragraph 5, on page 7, of Document No. 618 (Spanish proposal). The Delegate of Spain supported him.

The Turkish proposal was put to the vote and rejected by 23 votes to 8, with 3 abstentions.

The Delegate of Paraguay had taken no part in the vote. Nor would he take any further part in votes, for the reasons he had already given.

The Delegate of Turkey asked that Nos. 339rc and 339rd be left in abeyance. The Delegate of Spain supported him, and suggested that the same should apply to No. 339rb too.

The Turko-Spanish proposal was rejected by 24 votes to 10, with 2 abstentions.

Pages 23 and 24 were adopted unchanged, and pages 25, 26 and 27 were unanimously adopted.

Page 28 : The Delegate of Spain, in connection with No. 339rc, said that if the Conference adopted that paragraph, Spain would not accept its application to the Copenhagen Plan.

The Delegate of Turkey submitted an amendment to No. 339rc, and then, requested to do so by the Delegate of Spain, withdrew it.

The Delegate of Israel made the same reservation as the Delegate of Spain.

Pages 28, 29, 30, 31, 32, 33, 34, and 35 were adopted.

Document No. DT 776 revised, Document No. 725, and Document No. DT 865, were adopted subject to the above reservations.

The Delegate of the U.S.S.R. made the following declaration:

"My Delegation considers the Master International Frequency Register as a legal document under which Administrations are entitled to international recognition of specific dates. The Register cannot lay down the operational use to be made of radio. That is entirely a matter for the Administrations themselves, and for them alone.

" But the draft Article 11 submitted for our consideration in a number of cases departs from the principle that Administrations shall be free to use their radio communications as they see fit, and gives the International Frequency Registration Board the right to interfere in the operation of radio circuits, to restrict administrations in the use of their registered frequencies, and even to query the information supplied by them.

" The above applies more particularly to the fixed-service bands.

" My Delegation reserves the right to notify the I.F.R.B. of frequency assignments and to go on using them in a manner which will fully safeguard the interests of its radio services."

" The Delegate of Turkey, too, made reservations about the adoption of the documents in question. Adoption of Document No. DT 776 revised ran counter to the decisions taken by the Committee in connection with Document No. 618.

The meeting rose at 6.15 p.m.

Rapporteur :  
J. Barrailler

Chairman :  
M. Joachim

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 806-E  
8 December, 1959

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PLENARY MEETING

Note by the Secretariat

The attached letter received from the Head of the Delegation of the Kingdom of Morocco is published for the information of participants in the Conference.

Annex: 1

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A N N E X

4 December, 1959.

The Secretary General,  
International Telecommunication  
Union,  
Geneva.

Dear Sir,

Would you be so kind as to instruct the I.T.U. Secretariat and the Secretariats of all the other Union organs:

- a) to amend the "Preface to the Radio Frequency Record", sixth edition (31 March, 1959) and Supplement No. 1 thereto (30 June, 1959) in accordance with the corrections in the annex to this letter, and
- b) in future, to incorporate these corrections in all I.T.U. documents, including the weekly I.F.R.B. circulats?

Yours faithfully,  
Head of the Delegation of  
the Kingdom of Morocco to the  
Administrative Radio Conference

Annex: 1

A N N E X

1. Corrections to be made to the "Preface" (6th edition)

1. Page 13: replace the abbreviations "MRE" and "MRF" by the single abbreviation MRC - Morocco (Kingdom of)
2. Page 14: delete the abbreviation "TGR"
3. Page 33: delete No. 102 "Morocco station (s)"
4. Page 141: delete the whole section "MRE"
5. Page 142: delete the whole section "MRF" and replace by:  
MRC Royaume du Maroc - Kingdom of Morocco - Reino de Marruecos  
Ministère des Postes, Télégraphes et Téléphones,  
RABAT GENTIL, Rabat
6. Page 171: delete the whole section "TGR"
7. Page 206: opposite the frequency 9,232.5 kc/s delete the abbreviation "TGR" and replace by "MRC"

2. Correction to the "Supplement to the Preface" (30 June, 1959)

Page 4: replace the abbreviation "MRF" by MRC and the footnote "MRF" by MRC 1

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 807-E  
8 December, 1959PLENARY MEETINGNote by the Chairman

PROPOSAL NO. 5574

The Chairman of Committee 7 has drawn my attention to the fact that the following proposal by the Delegations of Indonesia, Ireland, Israel and Pakistan was adopted at the twenty-fifth meeting of Committee 7:

The Administrative Radio Conference, Geneva, 1959

noting that:

- a) agreement has now been reached on a world-wide Speaking Table;
- b) the pronunciation of the words in the Speaking Table may vary according to the language habits of the speakers;
- c) in order to minimise the wide variations in pronunciation, a record has been prepared by I.C.A.O. which illustrates the pronunciation desired of the newly adopted alphabet and which is available with preambles in English, French and Spanish;

considering that:

I.T.U.; a similar record would be of great use to the Members of the

proposes that:

1. the Secretary-General be instructed to make similar records available to Members of the Union as one of its publications;
2. in so doing the Secretary-General may investigate the possibility of making use of the already existing records;
3. if this proposal is accepted, it would be desirable for a note to be appended to Appendix 11 as follows:

"The pronunciation of the words in the Speaking Table may vary according to the language habits of the speakers. In order to minimise the wide variations in pronunciation, a record has been prepared, which may be obtained from the Secretary-General".



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 808-E  
8 December, 1959

## COMMITTEE 7

### RECOMMENDATION TO THE SAFETY OF LIFE AT SEA CONFERENCE

The Administrative Radio Conference, Geneva, 1959,

considering

1. that the frequency 2 182 kc/s has been adopted as the international radiotelephone distress frequency for the mobile services;
2. that the Regulations relating to the Maritime Mobile Service of Radiotelephony have been revised to take account of the many changes in the service;

invites

the Safety of Life at Sea Conference, to be held in London in 1960 to take note of

1. the Provisions of the Radio Regulations, Geneva 1959, concerning distress, urgency and safety communication;
2. the following Recommendations of the C.C.I.R.:
  - a) No. 45 : Avoidance of interference from ships' radar to other radiocommunication apparatus on board.
  - b) No. 218 : Prevention of interference to radio reception on ships.
  - c) No. 219 : Alarm signal for use on the maritime radiotelephony distress frequency of 2 182 kc/s.
  - d) No. 224 : Testing of 500 kc/s radiotelegraph auto alarm receiving equipment on board ships.



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 809-E  
8 December, 1959COMMITTEE 5

## SUMMARY RECORD

Twenty-third Meeting of Committee 5

4 December, 1959, at 9 p.m. - Room A

Agenda: Document No. DT 869

The Chairman called the meeting to order and asked the Committee to consider the following documents: Nos. 760, 733, 670 with 670, Corrigendum No. 1 and Addendum No. 1, and No. DT 862.

Mr. George Searle (New Zealand), Chairman, Working Group 5A, submitted the documents. Document No. 670 was the basic one.

The Chairman called for comments, page by page, on Document No. 670, as amended, of course, by the associated documents. The twenty-one pages of the document were adopted.

The Delegate of Spain reverted to page 7, item 3, and proposed that "Columns 6 to 10" be replaced by "Columns 5a to 11". In the second line, he wanted "basic" struck out.

The first proposal was defeated by 14 votes to 8, with 9 abstentions.

A counter-proposal launched by the United States, in favour of replacing "Columns 6 to 10" by "Columns 5a to 10" was unanimously adopted.

The second proposal of Spain, for the deletion of "basic" in paragraph 3 on page 7, was unanimously adopted.

The Delegate of the Union of Soviet Socialist Republics said that the reservations he had made about Document No. 776 Rev. still held good for Document No. 670.

The Chairman ruled that Document No. 670 and its associated documents had been adopted, subject to the Soviet reservations.

Documents Nos. 739 and DT 848.

The Chairman had these documents adopted. A few little drafting changes were made.



Document No. DT 848, page 3, paragraph 7c), instead of "No. 10", read "No. 8".

Page 4, paragraph 14, instead of "Nos. 9 to 11", read: "Nos. 8, 10 and 11."

The Delegate of Cuba said that when the high-frequency broadcasting procedure was discussed, he had made a proposal. That proposal had been rejected. Nevertheless, Cuba would make every effort to apply the procedure set forth in Article 11a, in so far as its requirements were met.

The Delegate of Mexico recalled his misgivings as to the chances of evolving a high-frequency broadcasting plan by following the procedure proposed. He had still not heard anybody describe how the needs of the "new and developing" countries were to be met. Mexico reserved its position. He would not repeat what he had said over and over again.

The Delegate of the Union of Soviet Socialist Republics said he had already aired his views about high-frequency broadcasting. The arguments he had adduced at the Sixteenth Meeting of Committee 5 (page 2 of Document No. 731) still held good.

The Delegate of the People's Republic of Bulgaria likewise drew attention to the statements made by him in Committee 5 when high-frequency broadcasting was under discussion.

Document No. 740 and Document No. DT 849, with Corrigendum 1 and Addendum 1

After some discussion as to whether Column 5 should be amended, and Column 7 done away with, in the specimen form, Document No. 740 and Document No. DT 849 were adopted.

The Delegate of Mexico said that the reservations he had made in connection with Document No. 739 and Document No. DT 848 held good for Document No. 740 and Document No. DT 849 too.

The Delegate of the United States made the following statement:

"The United States wishes to point out that for those transmissions that are being interfered with intentionally there may be instances when the data requested in Column 11 cannot be supplied in their entirety. In such cases, the United States will submit the total number of frequencies used rather than the specific frequencies".

The Delegate of the Union of Soviet Socialist Republics said that the reservations he had made in connection with Document No. 739 and Document No. DT 848 held good for Document No. 740 and Document No. DT 849 too.

Documents Nos 759 and DT 860

These documents were adopted, with the following change, requested by the Delegate of Portugal: Document No. DT 860, page 2, paragraph 6, second line, add: "No. 328".

The Delegate of Mexico said that the reservations he had made in connection with Documents No. 739 and DT 848 still held good for Documents No. 759 and DT 860.

The Delegate of Cuba said that the reservations he had made for Document No. DT 848 held good for Document No. DT 860 too.

Document No. 729

This was unanimously adopted.

Document No. 730

This document was adopted, subject to a little adjustment to the Spanish and French versions.

The Chairman then read out a draft letter by the Chairman of the Administrative Radio Conference to the Chairman of the Plenipotentiary Conference about Technical Assistance to the "new or developing" countries, as reflected in the recommendations appearing in Document No. 652 (issued further to Document No. 781). The draft had been drafted by Working Group 5A.

The Delegate of the Union of Soviet Socialist Republics did not understand the letter. It was not for the Committee to appeal for extra staff for the I.F.R.B. The Committee should merely indicate the fresh duties it was proposing to entrust to that body, for the benefit of the Plenipotentiary Conference.

The Delegate of the United States approved the wording of the letter as it stood. It referred to decisions taken by the Committee and set forth in Document No. 652, and there was no call to amend it.

The Delegates of New Zealand and Portugal backed the United States.

The Delegate of the People's Republic of Bulgaria supported what the Delegate of the Union of Soviet Socialist Republics had said.

The majority view was in favour of the letter as submitted by Working Group 5A. Hence it would be forwarded to the Chairman of the Conference.

Document No. 809-E

Page 4

Document Nos. 734, DT 864 and DT 851

These documents were unanimously adopted.

Document No. DT 865

This was unanimously adopted, with the following amendment in the first line: instead of "Sub-Working Group 5A1 recommends", read: "As far as it is concerned, Committee 5 recommends...."

Document No. DT 867

This was unanimously adopted.

Document No. DT 868

After some little discussion, it was decided to postpone consideration until the next meeting.

Document No. DT 701

Mr. George Searle (New Zealand), Chairman, Working Group 5A, proffered a few introductory remarks, whereupon the Delegate of the Union of Soviet Socialist Republics said that since the Plenipotentiary Conference was at that moment considering the question of the I.F.R.B. Secretariat, it might be wise to await the findings of its Committee D before adopting the document.

The Delegate of the United States said that the wording of Document No. 308 had been approved by the Plenipotentiary Conference. There was no reason to postpone adoption of Document No. 701. The Delegate of New Zealand seconded him.

The Delegate of the Union of Soviet Socialist Republics suggested that the first three pages be adopted, and No. 308 left in abeyance.

The Delegate of the People's Republic of Bulgaria supported him.

The Delegate of the United States proposed that the whole of the Document be adopted.

The Delegates of Brazil, the United Kingdom of Great Britain and Northern Ireland, and Portugal, backed him up.

Document No. 701 was adopted. Certain reservations had, of course, been made.

The Delegate of the Union of Soviet Socialist Republics reserved the right to revert to No. 308 in Plenary Assembly.

The meeting rose at 11.45 p.m.

Rapporteur  
J. Barrailler

Chairman  
M. Joachim

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document N° 360-FES (CP)  
Document N° 810-FES (CAR)  
10 décembre 1959

## LISTE D'ADRESSES DES PARTICIPANTS APRES LA CLOTURE DES DEUX CONFERENCES

Il a paru utile d'établir, avant la fin des deux Conférences de 1959, une liste des adresses auxquelles on pourra écrire aux participants ou faire suivre leur correspondance après la clôture des Conférences.

Cette liste a été établie sur la base des indications données par les participants eux-mêmes sur la fiche d'enregistrement. Dans les cas où ces indications faisaient défaut, des notes ont été adressées aux intéressés pour leur demander de les fournir.

La liste ci-jointe est aussi complète que possible. Dans un nombre assez limité de cas, toutefois, les noms de certains participants ne sont pas suivis d'une adresse complète, soit qu'ils n'aient pas fourni les indications nécessaires, soit même que, tout en figurant sur la liste des participants, ils n'aient pas participé effectivement aux travaux des conférences.

Pour chaque pays, comme pour chacune des exploitations privées reconnues ou organisations, les noms des participants aux deux Conférences ont été groupés, et figurent dans un ordre strictement alphabétique. Pour toutes les adresses de participants qui résident dans le pays qu'ils représentent, on a simplement indiqué le nom de la ville où ils résident; lorsqu'ils résident dans un autre pays, le nom de la ville est suivi du nom du pays de résidence.

Si des indications complémentaires parvenaient au Secrétariat après l'établissement de cette liste, elles feraient l'objet d'un supplément.

## LIST OF ADDRESSES OF PARTICIPANTS AFTER THE CLOSE OF THE TWO CONFERENCES

It seemed advisable, before the end of the two 1959 Conferences, to prepare a list of addresses where participants could be reached and correspondence forwarded after the closing date of the Conferences.

This list has been prepared from the information given by the participants themselves on their registration forms. Where the information was missing, notes have been sent to those concerned, requesting them to supply it.

The attached list is as complete as possible. In a fairly limited number of cases, however, the names of certain participants are not followed by their full addresses, either because they have failed to hand in the necessary information or because, though appearing in the list of participants, they may not actually have attended the conferences.

For each country, and for each of the recognized private operating agencies and organizations, the names of the participants in the two Conferences have been grouped and appear in strict alphabetical order. For all the addresses of participants who live in the countries they represent, only the name of the town where they reside has been given; when they reside in another country, the name of the town is followed by the name of the country of residence.

A supplement will be issued if further information reaches the Secretariat after this list has been drawn up.



LISTA DE DIRECCIONES DE LOS PARTICIPANTES DESPUÉS DE LA  
CLAUSURA DE LAS CONFERENCIAS

Se ha creído de utilidad establecer, antes de que terminen sus trabajos las dos Conferencias de 1959, una lista con las direcciones de los participantes en las Conferencias a las que podrá enviarse la correspondencia que reciban después de su clausura.

Esta lista se ha establecido a base de los datos indicados por los propios participantes en su ficha de inscripción. En los casos en que se ha observado que estos datos no eran completos, se han enviado notas a los interesados para que faciliten las indicaciones omitidas.

La lista adjunta es, pues, lo más completa posible. Sólo en muy pocos casos no se indica la dirección completa, bien porque los interesados no han facilitado los datos necesarios, bien porque, aun figurando en la lista de participantes, no han tomado parte efectiva en los trabajos de las conferencias.

Los nombres de los participantes de cada país y de cada empresa privada de explotación o de cada organización figuran por orden estrictamente alfabético. En la dirección de los participantes que residen en el país que representan sólo se ha indicado el nombre de la ciudad en que habitan; en la de quienes residen en otro país, el nombre de la localidad va seguido del nombre del país de residencia.

Los datos complementarios que ulteriormente se reciban en la secretaría serán objeto de un suplemento.

1. DELEGATIONS  
DELEGATIONS  
DELEGACIONES

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1. AFGHANISTAN  
AFGANISTAN

Mr. Moussa M. ASGHAR  
Telecommunications Engineer  
Shar-I-Nao 350  
Kaboul

Mr. Mohammed Azim GRAN  
Director General of  
Telecommunications  
Ministry of PTT  
Kaboul

2. ALBANIE (République populaire d')  
ALBANIA (People's Republic of)  
ALBANIA (República Popular de)

M. Dhimiter LAMANI  
Ministre Plénipotentiaire  
de la R.P. d'Albanie  
131, rue de la Pompe  
Paris XVI (France)

M. Dilaver PENDERI  
Premier Secrétaire de la Légation  
de la R.P. d'Albanie  
131, rue de la Pompe  
Paris XVI (France)

3. ARABIE SAOUDITE (Royaume de l')  
SAUDI ARABIA (Kingdom of)  
ARABIA SAUDITA (Reino de)

Mr. Mahmood MIRDAD  
Assistant Chief Engineer  
Technical Affairs PTT  
Jeddah

ARABIE SAOUDITE (suite)

Mr. Ahmed ZAIDAN  
Director General of Posts  
and Telecommunications  
Mecca

4. ARGENTINE (République)  
ARGENTINE (Republic)  
ARGENTINA (Repubblica)

Sr. Juan Antonio AUTELLI  
Sub-Director general de Telecomunicaciones  
Paunero 482  
Avellaneda

Sr. Ovidio Nicanor CARLI  
Secretario ejecutivo  
(Secretaría de Estado de Comunicaciones)  
Ministerio de Comunicaciones  
Buenos Aires

Sr. Luis Julio CASSINELLI  
Inspector técnico de Radiocomunicaciones  
Sarmiento 131  
Buenos Aires

Teniente Coronel Pablo Enrique COMINO  
(Secretaría de Guerra)  
Tronador, 1652  
Buenos Aires

Sr. Antonio DARINO  
Encargado de la Sección Frecuencias  
de la Dirección general de Telecomunicaciones  
Arregui, 5439 - Dep. 1  
Buenos Aires

Sr. Julio José ETULAIN  
Jefe División Plantel  
Sarmiento 131  
Buenos Aires

ARGENTINE (suite)

Sr. Serafin Santiago GUILLANI  
Director General de Radiodifusión  
Debenedetti, 1032  
La Lucilla - Buenos Aires

Capitán de Navío Lorenzo P. GARRAHAN

Comandante Martin E. ITURRIOZ  
(Secretaría de Aeronáutica)  
Cangallo, 2060  
Buenos Aires

Sr. José Juan MASEDA  
Subof. Ppal. Mec. Rad. Enc. Prop. y Ant.  
Secretaría de Guerra  
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M. Gottfried CASPAR, Ingénieur  
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The BIELORUSSIAN Soviet Socialist Republic  
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BURMA (Union of)  
BIRMANIA (Unión de)

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BOLIVIA

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Ministerio de Comunicaciones  
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BRAZIL  
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Geraldo DUPRAT RIBEIRO  
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Capitaine de frégate  
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12. BULGARIE (République populaire de)  
BULGARIA (People's Republic of)  
BULGARIA (Repubblica popular de)

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13. CAMBODGE (Royaume du)  
CAMBODIA (Kingdom of)  
CAMBODIA (Reino de)

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15. CEYLAN  
CEYLON  
CEILAN

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Mr. Norman S. WICKREMASINGHE  
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16. CHILI  
CHILE

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Did not participate  
No participo

17. CHINE  
CHINA

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- 20 -

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18. CITE DU VATICAN (Etat de la)  
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CIUDAD DEL VATICANO (Estado de la)

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19. COLOMBIE (République de)  
COLOMBIA (Republic of)  
COLOMBIA (República de)

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Capitán Antonio PINZÓN  
Dirección General de Aeronáutica Civil  
Bogotá

20. TERRITOIRES D'OUTRE-MER dont les relations internationales sont assurées par le Gouvernement du ROYAUME-UNI de la GRANDE-BRETAGNE et de l'IRLANDE DU NORD  
OVERSEAS TERRITORIES for the international relations of which the Government of the UNITED KINGDOM of GREAT BRITAIN and NORTHERN IRELAND are responsible  
TERRITORIOS de ULTRAMAR de cuyas relaciones internacionales es responsable el Gobierno DEL REINO UNIDO de GRAN BRETANA e IRLANDA DEL NORTE

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BELGIAN CONGO and Territory of RUANDA-URUNDI  
CONGO BELGA y Territorio de RUANDA-URUNDI

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M. Serge SEGALL  
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22. COREE (République de)  
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Mr. Byung Kee MIN  
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Mr. Cho Wook PAK  
Chief Engineer, Chief of First Division,  
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23. COSTA RICA

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24. CUBA

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Ingeniero

Sr. Federico BELL-LLOCH y DENIS  
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25. DANEMARK  
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C.N.E.T.  
Issy-les-Moulineaux (Seine)

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Direction des Transmissions de l'Armée de Terre  
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36. GRECE  
GREECE  
GRECIA

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37. GUATEMALA

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38. GUINEE (République de)  
GUINEA (Republic of)  
GUINEA (Repubblica de)

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Directeur général des Postes  
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M. Franz REIMERINGER  
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Conakry

39. HAITI (République d')  
HAITI (Republic of)  
HAITI (Repubblica de)

N'a pas participé  
Did not participate  
No participò

40. HONDURAS (République de)  
HONDURAS (Republic of)  
HONDURAS (Repubblica de)

N'a pas participé  
Did not participate  
No participò

41. HONGROISE (République Populaire)  
HUNGARIAN PEOPLE'S REPUBLIC  
HUNGARA (Repubblica Popular)

Dr. Jozsef IVÁNYI  
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Directeur général des Postes  
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Direction Générale des PTT  
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Chef de Section  
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42. INDE (République de l')  
INDIA (Republic of)  
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43. INDONESIE (République d')  
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- 55 -

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S. Exc. Ing. H. SAMIY  
Sous-secrétaire d'Etat  
Ministère des PTT  
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45. IRAQ (République d')  
IRAQ (Republic of)  
IRAQ (Repubblica de)

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ISLANDIA

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ISRAEL (State of)  
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51. JORDANIE (Royaume Hachémite de)  
JORDAN (Hashemite Kingdom of)  
JORDANIA (Reino Hachemita de)

H.E. Abdul Meguid MORTADA  
Under Secretary of State  
Ministry of Communications  
Amman

52. KUWAIT

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Director General of P.T.T.  
Kuwait

Mr. Mohammad Ali ABU AL-AINAIN  
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Mr. Fathy GHEITH  
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Kuwait

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LAOS (Kingdom of)  
LAOS (Reino de)

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Ministère des Postes et Télécommunications  
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LIBANO

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LIBERIA

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56. LIBYE (Royaume-Uni de)  
LIBYA (United Kingdom of)  
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Chairman Broadcasting Service  
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Mr. Emanuel STEPHAN  
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MALAYA (Federation of )  
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Kuala Lumpur

Mr. W. STUBBS  
Director General of Telecommunications  
Kuala Lumpur

59. MAROC (Royaume du)  
MAROCCO (Kingdom of)  
MARRUECOS (Reino de)

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Rabat

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60. MEXIQUE  
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Bruxelles (Belgique)

Major Muhammad IQBAL  
MLO Post c/o DG P & T.  
Karachi 1

M. Mohamed Nazir MIRZA  
Director-General of Pakistan P.T.T.  
Karachi

Mr. A.M. QURESHY  
Assistant Director of Communications  
Civil Aviation  
Air Headquarters  
Karachi

Mr. S.A. SATHAR  
General Manager Telephones  
Karachi

Mr. Irfan ULLAH  
Research Engineer, Radio Pakistan  
2/61 C, P.E.C.H. Society  
Karachi 29

67. PANAMA  
PANAMA

N'a pas participé  
Did not participate  
No participó



68. PARAGUAY

Ingeniero Walter GARCIA RÍOS  
Administración Nacional de Telecomunicaciones  
25 de diciembre, 286  
Asunción

Sr. D. Salvador GUANES  
Administrador General  
Administración Nacional de Telecomunicaciones  
Asunción

Ingeniero Benito GUANES SERRANO  
Administración Nacional de Telecomunicaciones  
Ayolas, 615  
Asunción

69. PAYS-BAS (Royaume des)  
NETHERLANDS (Kingdom of the)  
PAISES BAJOS (Reino de los)

Prof. Ir. G.H. BAST  
Director General of P.T.T.  
The Hague

Mr. G.M. BRINKMAN  
Assistant Inspector of P.T.T.  
General Post Office  
The Hague

Mr. H. DENE<sup>1</sup>  
Executive Officer  
Rijksluchtvaartdienst,  
Kanaalweg 3  
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Ir. Adrianus Jan EHNLE  
Director in Chief of P.T.T.  
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Assistant Inspector of P.T.T.  
General Post Office  
The Hague

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Mr. Pieter de GROEN  
Inspector of P.T.T.  
General Post Office  
The Hague

Mr. J. HOUTSMULLER  
Chief Engineer for Special Services of P.T.T.  
General Post Office  
The Hague

Ir. H.T. HYLKEMA  
Chief Engineer of Radio-Holland N.V.  
Keizersgracht 562  
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Mr. T. PERRY  
Inspector in General Service of P.T.T.  
General Post Office  
The Hague

Miss J.J.W. POULUS  
General Post Office  
The Hague

Mr. A.A. de ROODE  
Chief Inspector of the Department of  
Civil Aviation  
Rijksluchtvaartdienst,  
The Hague

Mr. H.J. SCHIPPERS  
Inspector for Special Services of P.T.T.  
Fenacolijsplein 1 D  
Massluis

Mr. O.J. SELIS  
Head of the Department of Telecommunications  
and Air Traffic Control of Civil Aviation  
Rijksluchtvaartdienst,  
The Hague

Ir. B.J. STÖVER  
Chief Engineer in General Service of P.T.T.  
General Post Office  
The Hague

Mr. R.P. van DIJK  
Inspector in General Service of P.T.T.  
General Post Office  
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Mr. Cornelius van GEEL  
Der Schveningen Radio P.T.T.  
Ymuiden

Mr. Zegert Jacobus van den HOEK OSTENDE  
Mobile Communications KLM  
KLM Schiphol  
Amsterdam

Ir. J.D.H. van der TOORN  
Van Bergenlaan 4  
Wassenaar

Dr. Ir. G. Th. F. van der WIJCK  
Chief Engineer in General Service of P.T.T.  
General Post Office  
The Hague

Mr. Johann H.R. van der WILLINGEN  
Lieutenant Commander  
Ministry of Defence  
The Hague

Mr. J.F. VAREKAMP  
Head of Telecommunications  
Division of the Operations Group of  
the Royal Dutch Airlines  
Schiphol Airport (Netherlands)

Ir. J.C. VERTON  
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Inspection Coast and Ships Radio  
Central Direction P.T.T.  
Scheveningseweg 6  
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Mr. P.C. WILLEMS  
Higher Executive Officer of P.T.T.  
Central Direction of P.T.T.  
The Hague

70. PEROU  
PERU  
PERU

S.E. Sr. Max de la FUENTE LOCKER  
Embajador  
Representante permanente del Perú ante los  
Organismos Internacionales acreditados en  
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Genève (Suiza)

Señor Guillermo F. MENDOZA SERRANI  
Secretario de la Delegación Permanente del Perú  
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Genève (Suiza)

Señor Raúl María PEREIRA  
Secretario de la Delegación Permanente del Perú  
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71. PHILIPPINES (République des)  
PHILIPPINES (Republic of the)  
FILIPINAS (República de)

Mr. José S. ALFONSO  
Director, Bureau of Telecommunications  
Department of Public Works and Communications  
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Mr. Max D. ATIENZA  
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Mr. Guillermo CANON  
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Department of Public Works and Communications  
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PHILIPPINES (Suite)

Lt. Col. Angelo P.B. FRAGO  
Office of the Chief Signal Officer  
AFP, Camp Murphy  
Quezon City

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72. POLOGNE (République Populaire de)  
POLAND (People's Republic of)  
POLONIA (República Popular de)

M. l'Ingénieur Wladyslaw ADASZEWSKI  
Conseiller du Président du Comité de Coopération  
économique et technique avec l'étranger  
auprès du Conseil des Ministres  
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M. l'Ingénieur Henryk BACZKO  
Directeur général au Ministère  
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Conseiller supérieur  
Ministère des Postes et Télécommunications  
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M. Konrad KOZLOWSKI  
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Département de l'Aviation Civile  
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M. Jerzy ZIOLKOWSKI  
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Directeur de Département  
Ministère des Postes et Télécommunications  
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73. PORTUGAL

Ingénieur António Manuel Santiago  
BARJONA DE FREITAS WEINHOLTZ DE BIVAR  
Directeur des Services techniques  
Emetteur national de Radiodiffusion  
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Colonel Manuel Norton BRANDÃO  
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M. le Dr Fernando ELOY  
Conseiller juridique  
Administration générale des P.T.T.  
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Ingénieur  
Direction générale de l'Aéronautique civile  
Ministère des Communications  
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Secrétaire de l'Ambassade du Portugal  
50a Helvetiastrasse  
Berne (Suisse)

Premier-Lieutenant Carlos Guilherme  
IVENS FERRAZ DE MESQUITA  
D.S.E.C.  
Ministère de la Marine  
Lisbonne

Capitaine de Frégate  
Alfredo de OLIVEIRA BAPTISTA  
Directeur du Service d'Electricité et Communications  
Ministère de la Marine  
Lisbonne

Lieutenant de vaisseau  
Jaime de OLIVEIRA LEANDRO  
Secrétaire de la Commission de Coordination  
des Télécommunications  
Département de la Défense nationale  
Lisbonne

M. l'Ingénieur Henrique Manuel PEREIRA  
Administrateur adjoint de  
l'Administration générale des P.T.T.  
Lisbonne

M. Domingos PIRES FRANCO  
Ingénieur radiotechnique  
des Services des Etudes et des Essais  
Emetteur national de Radiodiffusion  
Rua do Quelhas  
Lisbonne

M. Alfredo de QUEIROZ RIBEIRO VAZ PINTO  
Président du Conseil d'administration  
de la Companhia Portuguesa de Radio Marconi  
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Lisbonne



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Lisbonne

Capitaine de Corvette Augusto SOUTO SILVA CRUZ  
Département de la Défense nationale  
Lisbonne

M. Henrique TORRES LEOTTE TAVARES  
Chef de la Division des Studios  
Emetteur national de Radiodiffusion  
Rua do Quelhas  
Lisbonne

Ingénieur Manuel Amaro VIEIRA  
Directeur des Services radioélectriques  
Administration générale des P.T.T.  
Lisbonne

74. PROVINCES ESPAGNOLES D'AFRIQUE  
SPANISH PROVINCES IN AFRICA  
PROVINCIAS ESPAÑOLAS DE AFRICA

N'ont pas participé  
Did not participate  
No participaron

75. PROVINCES PORTUGAISES D'OUTRE-MER  
PORTUGUESE OVERSEA PROVINCES  
PROVINCÍAS PORTUGUESAS DE ULTRAMAR

M. Abilio ANTUNES DOS SANTOS  
Directeur de 2ème classe des P.T.T.U.  
de la province de Mozambique  
Lourenço Marques (Mozambique)

Ingénieur António Jacinto MAGRO  
Directeur de 1ère classe des P.T.T.U.  
de la Province d'Angola  
37 rua da Penha de França  
Lisbonne (Portugal)

M. Joaquim Arnaldo ROGADO QUINTINO  
Directeur de 1ère classe des P.T.T.U.  
Ministère d'Outre-Mer  
22 rua Andrado Corvo, 1º  
Lisbonne (Portugal)

76. REPUBLIQUE ARABE UNIE  
UNITED ARAB REPUBLIC  
REPÚBLICA ARABE UNIDA

M. Salah Eldine Mohamed Youssef AMER  
Ingénieur

M. Anis Tewfik EL BARDAI  
Directeur général de la T.S.F.  
à l'Administration des Télécommunications  
de la Province égyptienne  
Le Caire

M. El Garhi Ibrahim EL KASHLAN  
Sous-Directeur de la Radiodiffusion  
pour les affaires techniques  
U.A. Broadcasting  
4, Rue Sherifein  
Le Caire

REPUBLIQUE ARABE UNIE (suite)

M. Shawkat EL SAWAF  
Directeur de la T.S.F.  
à l'Administration générale des P.T.T.  
de la Province syrienne  
Damas

M. Ibrahim FOUAD  
Directeur général du Mouvement  
des Communications T.S.F.  
Administration des Radiocommunications  
9 rue Sherifein  
Le Caire

M. Gamil Mohamed MEHREZ  
Directeur général des Communications par câbles  
au Ministère des Télécommunications  
de la Province égyptienne  
Le Caire

S.E. Dr Mahmoud Mohammed RIAD  
Directeur général de l'Administration des Télécommunications  
de la République Arabe Unie  
Le Caire

Dr. Ali Samir SAFWAT  
2ème Secrétaire  
Délégation de la R.A.U  
auprès de l'Office européen des Nations Unies  
2 place des Eaux-Vives  
Genève (Suisse)

M. Abdel Fattah El Mansy ZALAMA  
Chef de Section Adjoint  
Administration des Radiocommunications  
Rue Ramsis  
Le Caire

77. REPUBLIQUE FEDERALE D'ALLEMAGNE  
FEDERAL REPUBLIC OF GERMANY  
REPÚBLICA FEDERAL DE ALEMANIA

M. Bernward ARENS  
Koblenzerstrasse 81  
B.P.M.  
(22c) Bonn

M. Heinz BARTH  
Schlüterstrasse 53  
F.U.A.  
(24a) Hamburg 13

M. Hans U. BERKNER  
Rheinstrasse 110  
F.T.Z.  
(16) Darmstadt

M. W. BIERMANN  
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M. Rudolf BINZ  
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M. Helmut BORNEMANN  
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Bernhard-Nocht-Strasse 78  
B.M.V.  
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78. REPUBLIQUE FEDERATIVE POPULAIRE DE YOUGOSLAVIE  
FEDERAL PEOPLE'S REPUBLIC OF YUGOSLAVIA  
REPUBLICA FEDERATIVA POPULAR DE YUGOESLAVIA

M. Konstantin COMIC<sup>'</sup>  
Chef de section  
Administration des Radiocommunications  
Belgrade

M. Živan DABIĆ  
Chef de section  
Administration des Radiocommunications  
Belgrade

M. ~~Makso~~ DAKIĆ<sup>'</sup>  
Directeur de l'Administration des  
Radiocommunications  
Savezno Izvršno Vecé  
Belgrade

M. Miomir KOVACEVIC<sup>v</sup>  
Conseiller  
Direction générale des P.T.T.  
Belgrade

M. Ivan LIPKOVIC<sup>'</sup>  
Conseiller  
Direction générale des P.T.T.  
Belgrade

M. Vojin POPOVIC<sup>'</sup>  
Professeur à L'Université de Belgrade  
Savezno Izvršno Vecé  
Belgrade

M. Vladimir SENK<sup>v</sup>  
Directeur général suppléant des P.T.T.  
Belgrade

79. REPUBLIQUE SOCIALISTE SOVIETIQUE DE L'UKRAINE  
UKRAINIAN SOVIET SOCIALIST REPUBLIC  
REPUBLICA SOCIALISTA SOVIETICA DE UCRANIA

M. I. P. LIKSO  
Chef du Centre de Radio  
Kiev



REPUBLIQUE SOCIALISTE SOVIETIQUE DE L'UKRAINE (suite)

M. Nicolaï STAVITSKI  
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80. RHODESIE ET NYASSALAND (Fédération)  
RHODESIA AND NYASALAND (Federation of)  
RHODESIA Y NYASALAND (Federación de)

Mr. Hayden Wayne ROBERTS  
1st Secretary  
Rhodesia House  
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81. ROUMAINE (République Populaire)  
ROUMANIAN PEOPLE'S REPUBLIC  
RUMANA (Republica Popular)

M. Marin GRIGORE  
Directeur général des Postes  
et des Télécommunications  
Ministère des Transports et Télécommunications  
Bucarest

M. Bujor IONITA  
Directeur des P.T.T.  
Ministère des Transports et des Télécommunications  
Bucarest

M. Paul POSTELNICU  
Ingénieur des P.T.T.  
Ministère des Transports et Télécommunications  
Bucarest

82. ROYAUME-UNI de la GRANDE-BRETAGNE et de  
l'IRLANDE DU NORD  
UNITED KINGDOM OF GREAT BRITAIN AND  
NORTHERN IRELAND  
REINO UNIDO DE GRAN BRETAÑA e IRLANDA  
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Assistant Staff Engineer  
G.P.O.  
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Mrs. E. KEMP  
Shorthand Typist  
G.P.O.  
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Principal  
G.P.O.  
St. Martins-le-Grand  
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Radio Officers Union  
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Upminster  
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Mr. Ian T. LAWMAN  
Principal  
Ministry of Transport & Civil Aviation  
Berkeley Square House  
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Commander Peter Theodore LAWMAN, R.N.  
Signal Division  
Admiralty  
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Mr. Paul G. LINTZGY  
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Essex

Wing Commander R. J. MARKS, R.A.F.  
Air Ministry  
Whitehall  
London S.W.1

Miss C. MATTERS  
Clerk Secretary  
G.P.O.  
London E.C.1

ROYAUME-UNI de la GRANDE-BRETAGNE et de  
l'IRLANDE DU NORD (suite)

Mr. George J. McDONALD  
Marconi International Marine Communication Co.Ltd.  
Chelmsford  
Essex

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Clerk Secretary  
G.P.O.  
London E.C.1

Mr. R. MURRAY  
Chief Executive Officer  
G.P.O.  
London E.C.1

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Miss P. PANICHELLI  
Higher Executive Officer  
G.P.O.  
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ROYAUME-UNI de la GRANDE-BRETAGNE et de  
l'IRLANDE DU NORD (suite)

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War Office  
Whitehall, Serv.1  
London S.W.1

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Mr. Percy Norman PARKER  
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Mr. J.T. PENWARDEN  
Senior Signals Officer  
Ministry of Transport & Civil Aviation  
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Principal  
G.P.O.  
London E.C.1

Sir Thomas RAPP, K.B.E., C.M.G., M.C.  
formerly Ambassador in H.M.'s Foreign Service  
26, The Boltons  
Kensington  
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Colonel A.H. READ, C.B., O.B.E., T.D.  
U.K. Telecommunications Attaché  
British Embassy  
Washington, D.C.  
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Foreign Office  
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Mr. Clifford Edward SECKER  
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ROYAUME-UNI de la GRANDE-BRETAGNE et de  
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Ministry of Defence  
Storey's Gate  
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St. Martins-le-Grand  
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Mr. C.E. SHARWOOD  
Executive Officer Radio Services Department  
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Typist  
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Mr. I.M. SINCLAIR  
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Captain R.G. SWALLOW  
United Kingdom Chamber of Shipping  
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ROYAUME-UNI de la GRANDE-BRETAGNE et de  
l'IRLANDE DU NORD (suite)

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Miss Linda THEOBALD  
Shorthand Typist  
G.P.O.  
London E.C.1

Miss Millicent Violet THOMPSON  
Clerk Secretary  
G.P.O.  
London E.C.1

Mr. T.C. WEAVER  
Senior Executive Officer  
G.P.O.  
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Mr. Philip Douglas WEBB  
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Mr. W.A. WOLVERSON, C.B.  
Director of Radio Services  
G.P.O.  
London E.C.1

Mr. T.W. WOOLMORE  
Senior Executive Officer  
G.P.O.  
London E.C.1

83. SOUDAN (République du)  
SUDAN (Republic of)  
SUDÁN (República de)

Mr. Hassan Ibrahim BESHIR  
Assistant Controller  
Telegraph Service  
Khartoum

Mr. Suleiman HOSSEIN  
Director of P.T.T.  
Khartoum

84. SUEDE  
SWEDEN  
SUECIA

M. Per ÅKERLIND  
Directeur de section  
à la Direction générale des Télécommunications  
Stockholm

M. Gunnar ÅSEBO  
Capitaine de corvette  
Attaché naval adjoint  
Direction générale des Télécommunications  
Stockholm

M. Lars BERGMAN  
Capitaine de Frégate  
Etat-Major des Forces armées  
Stockholm

M. Göran BERNSTROM  
Capitaine de frégate  
Etat-Major de la Marine  
Stockholm

Mlle Hjördis BJERNERT  
Direction générale des Télécommunications  
Stockholm

SUEDE (suite)

M. Carl-Magnus von DÖBELN  
Capitaine de frégate  
Etat-Major général des Forces armées  
Stockholm

M. Gustaf ELMQUIST  
Directeur de Section  
Direction générale des télécommunications  
Stockholm

M. Harry EMBE  
Inspecteur de Service  
Direction générale des Télécommunications  
Stockholm

M. Erik ESPING  
Directeur technique  
Direction générale des Télécommunications  
Stockholm

M. Douglas FORSSBIAD  
Capitaine  
Directeur de l'Association suédoise des armateurs  
Stockholm

M. Sven GEJER  
Directeur de Division  
Direction générale des Télécommunications  
Stockholm 16

M. Simeon HULTARE  
Directeur de Section  
Direction générale des Télécommunications  
Stockholm

M. Artur LINDESTAM  
Directeur de Section  
Direction nationale de l'Aéronautique  
Stockholm

M. Sven ÖBERG  
Chef de Division  
Direction nationale de la navigation maritime  
Stockholm

M. Bertil OLTERS  
Directeur général adjoint des Télécommunications  
Stockholm

SUEDE (suite)

M. Thomas ÖVERGAARD  
Directeur de Division  
Direction générale des Télécommunications  
Stockholm

M. Arne RABERG<sup>o</sup>  
Premier Secrétaire de Division  
Direction générale des Télécommunications  
Stockholm

M. Sven RAHMN  
Premier ingénieur des Radiocommunications  
Chef de la Section des Radiocommunications  
Göteborg

M. Arne ROHDIN  
Ingénieur de Division  
Direction générale des Télécommunications  
Stockholm

Mlle Elisabeth SIV KARLSON  
Secrétaire  
Direction des Télécommunications  
Stockholm 16

M. Hans SJÖVALL<sup>o</sup>  
Commandant  
Etat-Major de l'Armée de l'Air  
Stockholm

M. Per STEFFEN  
Lieutenant-Colonel  
Chef de Division  
Direction générale des Télécommunications  
Stockholm

Dr Hakan STERKY<sup>o</sup>  
Directeur général des Télécommunications  
Stockholm

M. Sven THORNANDER  
Directeur de Section  
Direction générale des Télécommunications  
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M. Nisse UHLÉN  
Ingénieur  
Direction générale des Télécommunications  
Stockholm

SUEDE (suite)

M. Harald WERNEMANN  
Colonel  
Etat-Major général des Forces armées  
Stockholm

85. SUISSE (Confédération)  
SWISS CONFEDERATION  
SUIZA (Confederación)

M. le Cap. Erwin BEUSCH  
Ingénieur  
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Seftigenstrasse 264  
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Fonctionnaire technique  
de l'Office fédéral de l'Air  
Burgerstrasse 20  
Ittigen (Berne)

M. Charles CHAPPUIS  
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Direction générale des P.T.T.  
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M. Bernard DELALOYE  
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Direction générale des P.T.T.  
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Division des téléphones et télégraphes

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M. Harry LAETT

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Secrétaire  
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M. Otto WÜEST  
Chef de service de la radio  
Direction générale des P.T.T.  
Berne

86. TCHECOSLOVAQUIE  
CZECHOSLOVAKIA  
CHECOESLOVAQUIA

M. Stanislav HOUDEK  
Division internationale  
Ministère des Postes et Télécommunications  
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Ingénieur  
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M. Juraj MAŇAK  
Vice-Ministre des Postes et Télécommunications  
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M. Jan MUŽÍK  
Chef adjoint de la Délégation permanente  
de la République tchécoslovaque  
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Conches (Genève) (Suisse)

M. Zdenek SVOBODA  
Ingénieur des Télécommunications  
Ministère des Transports  
Prague

M. Gustav VODŇANSKÝ  
Chef de la Division internationale  
Ministère des Postes et Télécommunications  
Prague

M. Milan ZAHRADNICEK  
Ingénieur  
Ministère des Postes et Télécommunications  
Prague

87. TERRITOIRES DES ETATS-UNIS D'AMERIQUE  
TERRITORIES OF THE UNITED STATES OF AMERICA  
TERRITORIOS DE LOS ESTADOS UNIDOS DE AMÉRICA

Mr. Raymond L. HARRELL  
First Secretary of Embassy  
Telecommunications Division  
Department of State  
Washington 25 D.C.

Miss Helen G. KELLY  
Chief, International Organizations Branch  
Telecommunications Division  
Department of State  
Washington 25, D.C.

88. THAILANDE  
TAHILAND  
THAILANDIA

Mr. Mongkol CHULLAKESA  
Radio Engineer  
Post and Telegraph Department  
Bangkok

Mr. M.L. Ophat SIRIVONGS  
Chief Assistant of International  
Relations Division  
Post and Telegraph Department  
Bangkok

89. TUNISIE  
TUNISIA  
TUNEZ

M.. Abdallah BELLIL  
Ingénieur des travaux du  
Service de Navigation aérienne  
et de la météorologie  
Tunis

M. Mongi CHEFFAÏ  
Ingénieur Principal à la  
Radiodiffusion Tunisienne  
Tunis

M. Habib Ben CHEICH HAMOUDA  
Ingénieur Principal des Télécommunications  
Secrétariat d'Etat aux P.T.T.  
Tunis

M. Mustapha Ben CHEIKH  
Ingénieur Principal des Télécommunications  
Secrétariat d'Etat aux P.T.T.  
Tunis

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Légation de Tunisie  
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M. Zouhir Ben LAKHAL  
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Secrétariat d'Etat aux P.T.T.  
Tunis

M. MENIF  
Ingénieur des Travaux  
de la Navigation Aérienne  
Tunis

M. Mohamed MILLI  
Ingénieur en Chef des Télécommunications  
Secrétariat d'Etat aux P.T.T.  
Tunis

M. ZALILA  
Ingénieur Principal de l'Aéronautique  
civile et de la Météorologie  
Tunis

90. TURQUIE  
TURKEY  
TURQUİA

M. Izzet BILGIC  
Ingénieur des Radiocommunications  
Direction Générale des P.T.T.  
Ankara

Mr. Muzaffer EKE  
Directorate General  
Press and Broadcasting  
Ankara

Mr. Mithat ESMER  
Radio Engineer, Technical Adviser  
Ministry of Press, Broadcasting and Tourism  
Ankara

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M. Talât TOLUNAY  
Conseiller  
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Ankara

M. Galip YENAL  
Ingénieur et Premier Conseiller  
Ministère des Communications  
Ankara

91. UNION DE L'AFRIQUE DU SUD et TERRITOIRE de  
l'AFRIQUE DU SUD-OUEST  
UNION OF SOUTH AFRICA and TERRITORY OF  
SOUTH-WEST AFRICA  
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Mr. Jacob Lourens de VRIES  
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Organisation and Methods Section  
G.P.O.  
Pretoria

92. UNION DES REPUBLIQUES SOCIALISTES SOVIETIQUES  
UNION OF SOVIET SOCIALIST REPUBLIC  
UNION DE REPUBLICAS SOCIALISTAS SOVIETICAS

M. Ivan ARTEMIEV  
Chef de la division des radiocommunications  
Ministère des Communications postales et électriques  
Moscou

M. Achot BADALOV  
Chef de la Direction générale  
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Mme Bella ELKINA  
Interprète  
Ministère des Communications postales et électriques  
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Mme Nina KARABANOVA  
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Moscou

M. Ivan KLOKOV  
Vice-Ministre  
Ministère des Communications postales et électriques  
Moscou

M. Léonid KOPYTINE  
Directeur adjoint de l'Institut de la  
Recherche scientifique  
Ministère des Communications postales et électriques  
Moscou

Mme Valentina KOULBATSKAIA  
Institut des Télécommunications  
Moscou

M. Nicolai KRASNOSSELSKI  
Vice-Directeur du Département  
des relations extérieures  
Ministère des Communications postales et électriques  
Moscou

Mme Maïa LEVTCHENKO  
Interprète  
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Moscou

M. E.A. MOTIN  
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Moscou

M. Boris OJOGUINE  
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Moscou

M. Mikhail SINITSYNE  
Ingénieur en chef  
Division des radiocommunications  
Ministère des Transports maritimes  
Moscou

93. URUGUAY (République orientale de l')  
URUGUAY (Oriental Republic of)  
URUGUAY (República Oriental del)

Sr. Benjamín BARREIRO  
Director de la División Técnica  
Servicio de Transmisiones  
Montevideo

Sr. Alfonso M. GALIMBERTI  
Jefe de la División  
Telégrafo Nacional  
Servicio de Transmisiones  
Montevideo

S.E. Sr. Víctor POMES  
Ministro Plenipotenciario  
Delegado Permanente ante la Oficina  
Europea de las Naciones Unidas  
18, rue Crespin  
Genève (Suiça)

94. VENEZUELA (République de)  
VENEZUELA (Republic of)  
VENEZUELA (República de)

Sr. D. Guillermo S. GARCIA  
Urb. San Martín, Bloque 5, Apto. 6  
Caracas

Sr. D. José Vicente HERNANDEZ  
Los Castaños  
Manzana G  
Quinta Yoly  
Caracas

Sr. D. José Antonio LÓPEZ  
Jefe de la División Internacional de  
Telecomunicaciones  
Ministerio de Comunicaciones  
Caracas

Sr. D. José Ramón MARCANO  
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San Bernardino  
Caracas

Sr. José Martín MEDINA  
Inspector de Aeronáutica Civil  
Ministerio de Comunicaciones  
Caracas

Sr. Miguel A. TEJEDA R.  
Coordinador-Adjunto  
División de Radiocomunicaciones  
Ministerio de Comunicaciones  
Vereda 61-49 Coche  
El Valle  
Caracas

95. VIET-NAM (République du)  
VIET-NAM (Republic of)  
VIET-NAM (República del)

M. Nguyễn- KHÁC-THAM  
Directeur général des Postes & Télécommunications  
Saïgon



VIET-NAM (République du) (Suite)

M. Nguyen- QUANG-TUAN  
Ingénieur des Télécommunications  
Chef du Service des Télégraphes & Téléphones  
Saigon

96. YEMEN

N'a pas participé  
Did not participate  
No participó

97. AFRIQUE OCCIDENTALE BRITANNIQUE  
BRITISH WEST AFRICA  
AFRICA OCCIDENTAL BRITANICA

Mr. Victor A. HAFNER  
Area Engineer (Radio)  
Post and Telegraph Department  
Lagos (Nigeria)

Mr. David H. SMITH  
Assistant Engineer in Chief (Wireless)  
Post and Telegraph Department  
Lagos (Nigeria)

98. AFRIQUE ORIENTALE BRITANNIQUE  
BRITISH EAST AFRICA  
AFRICA ORIENTAL BRITÁNICA

Mr. R. BOLTON, A.M.I.E.E.  
A.M. Brit. I.R.E.  
Staff Engineer  
East African Posts & Telecommunications Administration  
P.O. Box 30 310  
Nairobi (Kenya)

Mr. Magnus William MANSON  
Engineer in Chief and Assistant to  
the Postmaster General (Engineering)  
General Post Office  
Nairobi (Kenya)

99. BERMUDES - CARAIBES BRITANNIQUES (Groupe des)  
BERMUDA - BRITISH CARIBBEAN GROUP  
BERMUDAS - CARIBE BRITÁNICAS (Grupo)

N'ont pas participé  
Did not participate  
No participaron

100. SINGAPORE - BORNEO BRITANNIQUE (Groupe)  
SINGAPORE - BRITISH BORNEO GROUP  
SINGAPUR - BORNEO BRITÁNICO (Grupo)

N'ont pas participé  
Did not participate  
No participaron

101. Territoire sous tutelle de la SOMALIE  
sous Administration italienne  
Trust territory of SOMALILAND under  
Italian Administration  
Territorio en fideicomiso de SOMALIA  
bajo Administración italiana

N'a pas participé  
Did not participate  
No participò

2. EXPLOITATIONS PRIVEES RECONNUES  
RECOGNIZED PRIVATE OPERATING AGENCIES  
EMPRESAS PRIVADAS DE EXPLOTACIÓN RECONOCIDAS

201. COMPAGNIE GENERALE DE TELEGRAPHIE SANS FIL

M. André BERCEAU  
Chef des Services d'Exploitation  
Compagnie générale de T.S.F.  
79, Bd. Haussmann  
Paris 8e (France)

M. Maurice PONTE  
Vice-Président Directeur Général  
Compagnie générale de T.S.F.  
Paris 8e (France)

M. Albert ROPER  
Conseiller  
Chargé de Mission  
Compagnie générale de T.S.F.  
79, Bd. Haussmann  
Paris 8e (France)

M. Robert TABOUIS  
Président  
Compagnie générale de T.S.F.  
79, Bd. Haussmann  
Paris 8e (France)

202. SOCIETE RADIO-ORIENT

M. André BERCEAU  
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M. Emile GIRARDEAU  
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M. Albert ROPER  
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Société Radio-Orient  
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204. TRANSRADIO ESPAÑOLA S.A.

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208. INDEPENDENT TELEVISION AUTHORITY

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209. MARCONI INTERNATIONAL MARINE COMMUNICATION  
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3. NATIONS UNIES ET INSTITUTIONS SPECIALISEES  
UNITED NATIONS AND SPECIALIZED AGENCIES  
NACIONES UNIDAS E INSTITUCIONES ESPECIALIZADAS

301. ORGANISATION DES NATIONS UNIES (O.N.U.)  
UNITED NATIONS ORGANIZATIONS (U.N.O.)  
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302. AGENCE INTERNATIONALE DE L'ENERGIE ATOMIQUE  
INTERNATIONAL ATOMIC ENERGY AGENCY  
AGENCIA INTERNACIONAL DE LA ENERGIA ATOMICA

N'a pas participé  
Did not participate  
No participó

303. BANQUE INTERNATIONALE POUR LA RECONSTRUCTION  
ET LE DEVELOPPEMENT  
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
BANCO INTERNACIONAL DE RECONSTRUCCION Y FOMENTO

N'a pas participé  
Did not participate  
No participó

304. FONDS MONETAIRE INTERNATIONAL  
INTERNATIONAL MONETARY FUND  
FONDO MONETARIO INTERNACIONAL

N'a pas participé  
Did not participate  
No participó

305. ORGANISATION CONSULTATIVE INTERGOUVERNEMENTALE  
DE LA NAVIGATION MARITIME (I.M.C.O.)  
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306. ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE (O.A.C.I.)  
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307. ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION  
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ORGANIZACIÓN DE LAS NACIONES UNIDAS PARA LA ALIMENTACIÓN Y  
LA AGRICULTURA (F.A.O.)

N'a pas participé  
Did not participate  
No participó

308. ORGANISATION DES NATIONS UNIES POUR L'EDUCATION,  
LA SCIENCE ET LA CULTURE (U.N.E.S.C.O.)  
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N'a pas participé  
Did not participate  
No participó

310. ORGANISATION METEOROLOGIQUE MONDIALE (O.M.M.)  
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Mr. Charles L. SEEGER  
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414. ASSOCIATION INTERNATIONALE DES INTERETS RADIO-MARITIMES (AIIRM)  
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415. FEDERATION INTERNATIONALE DES OPERATEURS RADIOTELEGRAPHISTES  
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416. ORGANISATION INTERNATIONALE DE LA POLICE CRIMINELLE (INTERPOL)  
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# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 811-E  
8 December 1959

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PLENARY MEETING

A G E N D A

Seventeenth Plenary Meeting

Wednesday, 9 December 1959 at 11.00 a.m.

1. Draft Resolution - Telecommunication and the Peaceful Uses of Outer Space Vehicles (Document No. 778).
2. Statement by the Federal Republic of Germany (Document No. 794).
3. Note by the Chairman - Article 6 of the new Convention (Document No. 795).
4. Approval of the Minutes of the Eleventh Plenary Meeting (Document No. 757).
5. Draft Letter to the Chairman of the Plenipotentiary Conference (Document No. 781).
6. Plan for the future Radio regulations (Document No. 814).
7. Miscellaneous.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 812-E  
8 December, 1959COMMITTEE 5

## SUMMARY RECORD

Twenty-fourth meeting of Committee 5

5 December, 1959 at 3 p.m., Room C

Agenda: Document No. DT 869

Opening the meeting, the Chairman asked the Committee to proceed to the study of Document No. DT 868.

Document No. DT 868 was unanimously approved.

Documents Nos. 751, DT 859 and DT 852

Mr. Searle, Chairman of Group 5A, introduced the documents and said that Documents Nos. DT 859 and 751 from Sub-Group 5A1 had not been studied by Group 5A.

Mr. Place, Chairman of Sub-Group 5A1, said that his group had amended Annexes 3 and 4 to Document No. DT 852 in line with the results obtained by Group 5B.

Document No. DT 852 was then studied page by page.

Page 1 was adopted subject to the following amendments:

paragraph 1.2: delete the brackets round "1 January 1961";  
" 2.1.a) delete the brackets round "31 December 1960";

Page 2 was adopted subject to the following modifications:

paragraph 3.1: 2nd line, after "E.A.R.C. Agreement" add  
"(Geneva 1951)";  
6th line, delete the brackets round "30 June,  
1960";  
8th and 9th lines, instead of "by 1 January,  
1961 at the latest" read "by  
31 December, 1960 at the latest".

Page 3 was adopted.

Page 4 was adopted.

The Delegate of Spain made a reservation as to the validity of certain dates entered in column 2a for the band (415 - 1 605 kc/s) in Region 1. The reservation was likewise valid for Turkey which had asked the Delegate of Spain to represent it.

Pages 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 were adopted.

The Delegate of Cuba said that he had already made reservations in respect of the frequency bands above 27 500 kc/s. He could not accept Annex 6.

Pages 15, 16 and 17 were adopted, account being taken of the Cuban reservation.

Documents Nos. 751, DT 852 and DT 859 were adopted, subject to the Spanish, Turkish and Cuban reservations.

Mr. Searle, Chairman of Group 5A, proposed that Document No. 765 should be studied before the meeting closed.

Agreed.

Mr. Searle, Chairman of Group 5A introduced the document. He asked for the following corrections to be made:

paragraph 2: add "Malay";

paragraph 4, page 6, 42nd meeting: add "Documents Nos. DT 867 and DT 868."

Using the words in paragraph 7, he conveyed his thanks to all those who had helped him in his task.

The Delegate of Cuba asked for the name of his country to be added to the list of participants.

The Delegate of the U.S.S.R., on behalf of Working Group 5A, thanked Mr. Searle for his excellent work as Chairman of that Group. It had been a great pleasure to work with him. He asked that Document No. 765 should be adopted.

Mr. Searle apologized for the omission of Cuba from the list of participants.

The Chairman joined in the thanks conveyed by the U.S.S.R. Delegate.

The Delegate of Mexico asked that Documents Nos. 537 and DT 689 should be listed on page 6 of the Summary Record of the 33rd meeting. He then expressed his thanks to Mr. Searle.

The Delegate of Spain also thanked Mr. Searle and asked that Document No. DT 866 should be added to the list of documents submitted to Committee 5.

Mr. Searle thanked the delegates and said that he had been able to accomplish his task thanks to the work carried out by the sub-groups to whose Chairmen, Mr. Henry, Mr. Bace, Mr. Dawson, Mr. Miles and Mr. Dellamula he was grateful.

The Chairman thanked Mr. Searle for the excellent work accomplished by Group 5A and asked the Committee to show its appreciation in the customary manner. (Applause).

The meeting rose at 4.05 p.m.

Rapporteur:

D. Barrailler

Chairman:

M. Joachim

ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959

Document No. 813-E  
8 December 1959

## SERIES 19

## PLENARY MEETING

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

## SUMMARY

| Source  | Document No. | Reference                | Page           | Remarks |
|---------|--------------|--------------------------|----------------|---------|
| Comm. 6 | 708/DT/851   | Appendix 6               | 19—01          |         |
| Comm. 7 | 698          | Appendix 7               | 19—16          |         |
| Comm. 5 | 676          | Appendix 12<br>„ 12 zero | 19—19<br>19—22 |         |
| Comm. 7 | 633<br>„     | Appendix 12b<br>„ 12c    | 19—52<br>19—54 |         |
| Comm. 5 | 590          | Appendix 13              | 19—55          |         |



APPENDIX 6  
Service Documents  
(See Articles 10, 11, 11a, and 20)  
**List I. International Frequency List**

| Assigned frequency (kc/s or Mc/s) <sup>1)</sup> |   |    |    |    |                                  |   |    |           |  |    |  |  |   |    |   |         |    |   |     |     |     |     |     |  |
|---|---|----|----|----|----------------------------------|---|----|-----------|--|----|--|--|---|----|---|---------|----|---|-----|-----|-----|-----|-----|--|
| Dates   |   |    |    |    | Location of transmitting station |   |    | Reception |  |    | Transmitting Antenna Characteristics <sup>4)</sup> |  |   |    |   | Remarks |    |   |     |     |     |     |     |  |
| 2\  |   |    |    |    | 4                                |   |    | 5         |  |    | 9  |  |   |    |   |         |    |   |     |     |     |     |     |  |
| 1   | 2a  | 2b | 2c | 2d | 3                                | 4a  | 4b | 4c        | 5a   | 5b | 6  | 7  | 8 | 9a | 9b  | 9c      | 10 | 11  | 12a | 12b | 13a | 13b | 13c |  |
|   | Of registration <sup>2)</sup>   |    |    |    | Call sign (Identification)       | Name of the locality by which the transmitting station is known or in which it is situated<br><br>Country in which the transmitting station is located<br><br>Geographical co-ordinates of the transmitter site (longitude-latitude) in degrees and minutes |    |           | Locality(ies) or area(s) with which communication is established<br><br>Length of circuit (km) |    |  | Class of station and nature of service<br><br>Class of emission, necessary bandwidth and description of transmission<br><br>Power (kW) |   |    | Azimuth of maximum radiation (ND if a transmitting antenna with non-directional characteristics is used)<br><br>Angular width of radiation main lobe<br><br>Antenna gain (db) |         |    | Maximum hours of operation of the circuit to each locality or area (G.M.T.)<br><br>Megacycle order of the other frequencies normally utilized for the same circuit <sup>4)</sup><br><br>Operating Administration or Company <sup>5)</sup><br><br>Postal and telegraphic address of the administration responsible for the station <sup>6)</sup><br><br>Results of examination <sup>6)</sup> and investigations <sup>7)</sup> by the I.F.R.B.<br><br>Remarks related to the finding by the I.F.R.B.<br><br>Other remarks <sup>8)</sup> |     |     |     |     |     |  |
|   | Of notification <sup>2)</sup>   |    |    |    |                                  |   |    |           |  |    |  |  |   |    |   |         |    |   |     |     |     |     |     |  |
|   | Of putting into use   |    |    |    |                                  |   |    |           |  |    |  |  |   |    |   |         |    |   |     |     |     |     |     |  |
|   | Of receipt of the notice by the I.F.R.B. when Columns 2a or 2b are not to be used <sup>3)</sup> |    |    |    |                                  |   |    |           |  |    |  |  |   |    |   |         |    |   |     |     |     |     |     |  |

<sup>1)</sup> In the case of television broadcasting stations in Region 1, the Frequency in this column is that of the sound and vision carriers (See Appendix 1 to the Radio Regulation, Geneva, 1959). <sup>2)</sup> See Article 11, Nos. 339zc and 339zd, of the Radio Regulations, Geneva, 1959. <sup>3)</sup> A symbol instead of a date indicates an assignment notified pursuant to No. 272 of the Extraordinary Administrative Radio Conference Agreement (Geneva, 1951), or, in the frequency bands above 27·500 kc/s, an assignment for which the notice was received by the I.F.R.B. before 1 April 1952. <sup>4)</sup> See Appendix 1 to the Radio Regulations, Geneva, 1959. <sup>5)</sup> Columns 12a and 12b contain numbers or letters which are explained in the Preface to the International Frequency List. <sup>6)</sup> See Article 11, Section III, of the Radio Regulations, Geneva, 1959. <sup>7)</sup> See Article 11, Nos. 338a, 338b, 347a and 347b, of the Radio Regulations, Geneva, 1959. <sup>8)</sup> Including dates referred to in Article 11, Nos. 337, 338, 339d, 339i, and 339L, of the Radio Regulations, Geneva, 1959.

**List II. List of Fixed Stations Operating International Circuits**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the locality by which the transmitting station is known or in which it is situated | Call Sign (Identification) | Assigned Frequency (kc/s or Mc/s) | Locality(ies) or Area(s) with which communication is established | Remarks |
|--|----------------------------|-----------------------------------|--|---------|
| 1  | 2                          | 3                                 | 4  | 5       |

**List IIIA. List of Broadcasting Stations Operating in Bands below 5 950 kc/s**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the locality by which the transmitting station is known or in which it is situated | Assigned frequency in kc/s | Call sign (Identification) | Geographical co-ordinates of the transmitter site (longitude-latitude) in degrees and minutes | Zones or areas of reception | Power (kW) | Azimuth of maximum radiation (ND if a transmitting antenna with non-directional characteristics is used) | Maximum hours of operation (G.M.T.) | Operating Administration or Company | Other remarks |
|--|----------------------------|----------------------------|---|-----------------------------|------------|--|-------------------------------------|-------------------------------------|---------------|
| 1  | 2                          | 3                          | 4   | 5                           | 6          | 7  | 8                                   | 9                                   | 10            |



**List IIIB. List of Broadcasting Stations Operating in Bands  
between 5 950 and 26 100 kc/s**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| 1                            | 2   | 3                         | 4                          | 5                               | 6          | Transmitting antenna characteristics |                                      |                    |                    |                 | 12                          | 13   | 14      |
|------------------------------|---|---------------------------|----------------------------|---------------------------------|------------|--------------------------------------|--------------------------------------|--------------------|--------------------|-----------------|-----------------------------|--|---------|
|                              |   |                           |                            |                                 |            | 7                                    | 8                                    | 9                  | 10                 | 11              |                             |  |         |
| Name of transmitting station | Longitude and latitude in degrees and minutes of the transmitter site | Assigned frequency (kc/s) | Call sign (Identification) | Zone(s) or area(s) of reception | Power (kW) | Azimuth of maximum radiation         | Angular width of radiation main lobe | Angle of elevation | Antenna gain in db | Type of antenna | Hours of operation (G.M.T.) | Name, postal and telegraphic address of Administration | Remarks |

### List IV. List of Coast Stations

#### Part A. Alphabetical index of coast stations.

| Name of the station | Call sign | See part B, page |
|---------------------|-----------|------------------|
| 1                   | 2         | 3                |

#### Part B. Particulars of coast stations.

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the station <sup>1)</sup> | Call sign | Emission                                  |       |                          | Service |                              | Charges <sup>4)</sup> <sup>5)</sup> | Geographical position of the transmitting antenna (longitude and latitude) in degrees, minutes and seconds | Remarks <sup>6)</sup> <sup>7)</sup> |
|-----------------------------------|-----------|---|-------|--------------------------|---------|------------------------------|-------------------------------------|--|-------------------------------------|
|                                   |           | Frequencies <sup>2)</sup><br>kc/s or Mc/s | Class | Power (kW) <sup>3)</sup> | Nature  | Hours of service<br>(G.M.T.) |                                     |  |                                     |
| 1                                 | 2         | 3   | 4     | 5                        | 6       | 7                            | 8                                   | 9  | 10                                  |

<sup>1)</sup> The coast station or coast stations to which radiotelegrams intended for high frequency transmission to ship stations should be sent shall be indicated for each country.

<sup>2)</sup> The normal working frequency is printed in heavy type. In the case of duplex telephony, frequencies used for transmission and reception are indicated in conformity with N° 810.

<sup>3)</sup> In the case of directive antennae, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from true north clockwise.

<sup>4)</sup> The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given at the end of this List.

<sup>5)</sup> If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should, if necessary, be stated.

<sup>6)</sup> Indicate if radar service is provided.

<sup>7)</sup> Special information concerning the times of transmission of traffic lists, and the hours of watch keeping of the coast station on the various frequencies, etc.

**List V. List of Ship Stations***Particulars of ship stations*

The information concerning these stations shall be published in two or three lines in the following order :

*1st line :*

- call sign, name of the ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names (in this case, the name and the call sign shall be separated by a fraction bar) and the service symbols (see Appendix 7) ;
- nature of service ;
- hours of service in the form of a symbol or a reference.

Times not indicated by a symbol shall be given in Greenwich mean time (G.M.T.).

*2nd and 3rd lines :*

- below the call sign :
  - the basic ship charge per word for a radiotelegram \* ;
  - if appropriate, the basic ship charge for a radiotelephone call of three minutes \*.

This information shall be followed by a note reference to indicate the administration or private enterprise to which the accounts should be addressed. In case of a change of address of the operating authority, a second note reference after the charge should indicate the new address and the date from which the change will take effect ;

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\* These charges are fixed or approved by each administration.

- when two or more ships of the same nationality bear the same name, and also where the accounts for the charges should be sent directly to the owner of the ship, the name of the shipping line or of the firm to which the ship belongs shall be given by means of a note reference ;
- the country to which the station is subject (abbreviated indication) ;
- the bands of frequencies and the classes of emission shall be indicated by means of the following abbreviations printed in heavy type :

## Radiotelegraphy :

**w** = 110 — 150 kc/s  
**x** = 405 — 535 kc/s  
**y** = 1 605 — 3 800 kc/s  
**z** = 4 000 — 25 110 kc/s

## Radiotelephony :

**t** = 1 605 — 4 000 kc/s  
**u** = 4 000 — 23 000 kc/s  
**v** = 156 — 174 Mc/s

These abbreviations should, if necessary, be followed by references to brief notes and indications of the frequencies for which the transmitters are adjusted which shall appear at the end of the List.

The meanings of abbreviations shall be printed at the foot of every second page of the List.

#### List VI. List of Radiodetermination and Special Service Stations

(For navigational purposes, this List should be used with caution.  
See Article 44.)

##### Part A. Alphabetical index of stations.

| Name of the station | Call sign | Nature of the service | See Part B,<br>page |
|---------------------|-----------|-----------------------|---------------------|
| 1                   | 2         | 3                     | 4                   |

*Part B. Particulars of stations.*

*1. Direction-finding stations*

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| 1                   | 2   | 3         | Frequencies (kc/s or Mc/s) and classes of emissions |   |   | 7          | 8  | 9       | 10   |
|---------------------|---|-----------|---|---|---|------------|--|---------|--|
|                     |   |           | 4   | 5   | 6   |            |  |         |  |
| Name of the station | Geographical position (longitude and latitude in degrees, minutes and seconds) of:<br>a) the receiving antenna of the direction-finding station<br>b) the transmitting antenna of the direction-finding station<br>c) the transmitting antenna of the station mentioned in Column 8 | Call sign | For calling the direction-finding station           | For transmitting to the direction-finding station the signals necessary for taking bearings | For the transmission of the bearings by the direction-finding station | Power (kW) | Name and call sign of the station with which communication should be established if the direction-finding station is not equipped with a transmitter | Charges | Remarks<br>a) sectors in which bearings are normally accurate and references to national or international publications other than the present List<br>b) hours of service (G.M.T.), etc. |

## 2. Radiobeacon stations

Names of the countries arranged in alphabetical order of abbreviations.

Names of the stations in alphabetical order.

| 1                   | 2 | 3   | 4 | 5  | 6 | 7                                     | 8 | 9   | 10 | 11 |
|---------------------|---|---|---|--|---|---------------------------------------|---|---|----|----|
| Name of the station |   | Geographical position of the transmitting antenna of the radiobeacon (longitude and latitude) in degrees, minutes and seconds |   | Characteristic signal of the radiobeacon |   | Call sign of the radiobeacon (if any) |   | Emission  |    |    |
|                     |   |   |   | Frequency (kc/s or Mc/s)                 |   | Class                                 |   | Frequency of modulation (if any) (c/s)  |    |    |
|                     |   |   |   |  |   |                                       |   | Normal range in nautical miles  |    |    |
|                     |   |   |   |  |   |                                       |   | Name and call sign of the station to which requests for the emission of beacon signals may be addressed     |    |    |
|                     |   |   |   |  |   |                                       |   | Calling frequency of the station indicated in Column 9 (kc/s or Mc/s)                                       |    |    |
|                     |   |   |   |  |   |                                       |   | Remarks   |    |    |
|                     |   |   |   |  |   |                                       |   | a) sectors normally reliable and references to national or international publications other than this List; |    |    |
|                     |   |   |   |  |   |                                       |   | b) hours of service (G.M.T.);   |    |    |
|                     |   |   |   |  |   |                                       |   | c) description of the emission;   |    |    |
|                     |   |   |   |  |   |                                       |   | d) charges, etc.  |    |    |

## 3. Ocean-station vessels

Ocean Regions in alphabetical order  
Names of stations in alphabetical order

|   | Name of the station | Geographical position assigned to the station | Call sign of the station vessel | Frequency for calling the station (kc/s or Mc/s) | Radiobeacon           |                                       |                   |  |                                | Direction-finding   |   | Remarks |
|---|---------------------|---|---------------------------------|--|-----------------------|---------------------------------------|-------------------|--|--------------------------------|---|---|---------|
|   |                     |   |                                 |  | Characteristic signal | Transmitting frequency (kc/s or Mc/s) | Class of emission | Frequency of modulation (if any) (c/s) | Normal range in nautical miles | Frequency for transmitting the signals necessary for taking bearings (kc/s or Mc/s) | Frequency for the transmission of the bearings (kc/s or Mc/s) |         |
| 1 | 2                   | 3   | 4                               | 5  | 6                     | 7                                     | 8                 | 9                                      | 10                             | 11  | 12  | 13      |

4. *Direction-finder calibration stations*

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| 1                   | 2   | 3                     | 4                                     | Emission                 |       |  | 8                              | 9  | 10  | 11  |
|---------------------|---|-----------------------|---------------------------------------|--------------------------|-------|--|--------------------------------|--|---|---|
|                     |   |                       |                                       | Frequency (kc/s or Mc/s) | Class | Frequency of modulation (if any) (c/s) |                                |  |   |   |
| Name of the station | Geographical position of the transmitting antenna of the radiobeacon (longitude and latitude) in degrees, minutes and seconds | Characteristic signal | Call sign of the radiobeacon (if any) |                          |       |  | Normal range in nautical miles | Name and call sign of the station to which requests may be addressed | Calling frequency of the station mentioned in Column 9 (kc/s or Mc/s) | Remarks   |
|                     |   |                       |                                       |                          |       |  |                                |  |   | a) sectors normally reliable and references to national or international publications other than this List;<br>b) hours of service (G.M.T.);<br>c) description of the emission;<br>d) charges, etc. |



### 5. Stations transmitting time signals

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Method <sup>1)</sup> |
|---------------------|-----------|--------------------------|-------------------|----------------------------|----------------------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6                    |

<sup>1)</sup> General instructions concerning time signals.

### 6. Stations transmitting standard frequencies

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|--------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6       |

### 7. Stations transmitting regular meteorological bulletins

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Remarks <sup>1)</sup> |
|---------------------|-----------|--------------------------|-------------------|----------------------------|-----------------------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6                     |

<sup>1)</sup> General instructions concerning meteorological bulletins including code used.

### 8. Stations transmitting notices to navigators

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|--------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6       |

### 9. Stations transmitting medical advice

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Hours of Service (G.M.T.) | Remarks |
|---------------------|-----------|--------------------------|-------------------|---------------------------|---------|
| 1                   | 2         | 3                        | 4                 | 5                         | 6       |

### 10. Stations transmitting epidemiological bulletins

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|--------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6       |

### 11. Stations transmitting Ursigrams

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call Sign | Frequencies kc/s or Mc/s | Class of Emission | Times of Emission (G.M.T.) | Remarks and nature of information |
|---------------------|-----------|--------------------------|-------------------|----------------------------|-----------------------------------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6                                 |

*Note :* The Secretary General, if he considers it necessary, may introduce in this List additional sections to cover new systems that may be developed and used.

### **List VIII. List of International Monitoring Stations.**

#### *Part I. Centralizing offices.*

- Names of countries arranged in alphabetical order of abbreviations.
- National centralizing office (postal and telegraphic address, telephone number, any other information).

#### *Part II*

##### *A. Particulars of monitoring stations carrying out frequency measurements.*

- Names of countries arranged in alphabetical order of abbreviations.
- Names of stations in alphabetical order.
- Name and geographical location of the station (longitude and latitude) in degrees and minutes.
- Hours of service (G.M.T.).
- Range of measurable frequencies (kc/s or Mc/s).
- Accuracy of measurements.<sup>1</sup>
- Remarks.

##### *B. Particulars of monitoring stations carrying out field strength measurements.*

- Names of countries arranged in alphabetical order of abbreviations.

<sup>1</sup> Indicates the maximum attainable accuracy for each frequency range.

- Names of stations in alphabetical order.
- Name and geographical location of the station (longitude and latitude) in degrees and minutes.
- Hours of service (G.M.T.).
- Ranges of frequencies (kc/s or Mc/s).
- Value of measurable field strengths.
- Accuracy of measurements in db.<sup>1</sup>
- Remarks.

*C. Particulars of monitoring stations carrying out direction-finding measurements.*

- Names of countries arranged in alphabetical order of abbreviations.
- Names of stations in alphabetical order.
- Name and geographical location of the station (longitude and latitude) in degrees, minutes and seconds.
- Hours of service (G.M.T.).
- Ranges of measurable frequencies (kc/s or Mc/s).
- Type of antennae in use.
- Remarks.

*D. Particulars of monitoring stations carrying out bandwidth measurements.*

- Names of countries arranged in alphabetical order of abbreviations.
- Names of stations in alphabetical order.
- Name and geographical location of the station (longitude and latitude) in degrees and minutes.

---

<sup>1</sup> Indicates the maximum attainable accuracy for each frequency range.

- Hours of service (G.M.T.).
- Ranges of measurable frequencies (kc/s or Mc/s).
- Method(s) of measurement.<sup>1</sup>
- Resolution at —60 db (if appropriate).
- Remarks.

*E. Particulars of monitoring stations carrying out automatic spectrum occupancy surveys.*

- Names of countries arranged in alphabetical order of abbreviations.
- Names of stations in alphabetical order.
- Name and geographical location of the station (longitude and latitude) in degrees and minutes.
- Hours of service (G.M.T.).
- Ranges of frequencies (kc/s or Mc/s).
- Method(s) employed.
- Remarks.

### Radio Communication Statistics

| Part I. Number of Stations                        |                  |       |                  |                  |          | Part II. Traffic                                     |                              |                           |                        |                       |
|---|------------------|-------|------------------|------------------|----------|--|------------------------------|---------------------------|------------------------|-----------------------|
| - Maritime mobile                                 |                  |       |                  |                  | Amateurs | Of coast stations transmitting public correspondence |                              |                           |                        |                       |
| Coast stations transmitting public correspondence |                  |       | Ship stations    |                  |          | Number of  |                              |                           |                        |                       |
| Radio-tele-graph                                  | Radio-tele-phone | Mixed | Radio-tele-graph | Radio-tele-phone |          | Mixed  | Radio-tele-grams transmitted | Radio-tele-grams received | Radio-tele-phone calls | Radio medical advices |

<sup>1</sup> See the reports and relevant C.C.I.R. Recommendations.

## APPENDIX 7

Title NOC

## Service Document Symbols

(See Article 20 and Appendix 6)

|     |     |  |
|-----|-----|--|
| MOD | ⌘   | Station on board a warship or a military or naval aircraft ("GS") <sup>1</sup>   |
| SUP | ⌘   |  |
| MOD | ■   | Station classified as situated in a region of heavy traffic (Article 33) ("TI") <sup>1</sup>   |
| MOD | ○   | By day ("HJ") <sup>1</sup>   |
| MOD | ●   | By night ("HN") <sup>1</sup>   |
| MOD | [ ] | A ship which carries lifeboats equipped with radio apparatus; a number inside the brackets shows the number of such lifeboats ("S") <sup>1</sup> |
| MOD | [△] | Radio direction-finder on board a mobile station ("GN") <sup>*1</sup>  |
| ADD | [▼] | High traffic ship ("HS") <sup>1</sup>  |
| ADD | ☉   | Radar facilities available ("R") <sup>1</sup>  |
| NOC | AL  | Aeronautical radionavigation land station  |
| NOC | AM  | Aeronautical radionavigation mobile station  |
| ADD | AT  | Amateur station  |
| ADD | AX  | Aeronautical fixed station   |
| MOD | BC  | Broadcasting station, sound  |
| ADD | BT  | Broadcasting station, television   |
| ADD | C   | Continuous operation during hours shown  |
| ADD | Ca  | Cargo ship   |
| SUP | CF  |  |
| NOC | CO  | Station open to official correspondence exclusively  |
| NOC | CP  | Station open to public correspondence  |

<sup>1</sup> These symbols may be used in notifications.<sup>\*</sup> Committee 8 does not yet know whether this symbol will be required.

|       |      |  |
|-------|------|--|
| NOC   | CR   | Station open to limited public correspondence  |
| SUP   | CT   |  |
| NOC   | CV   | Station open exclusively to correspondence of a private agency   |
| NOC   | D30° | Directive antenna having maximum radiation in the direction of 30° (expressed in degrees from true North, from 0 to 360 clockwise) |
| NOC   | DR   | Directive antenna provided with a reflector  |
| ADD   | EX   | Experimental station   |
| NOC   | FA   | Aeronautical station   |
| SUP   | FAX  |  |
| NOC   | FB   | Base station   |
| NOC   | FC   | Coast station  |
| ADD   | FE   | Earth station (Space service)  |
| ADD   | FL   | Land station   |
| ADD   | FP   | Port station   |
| NOC   | FR   | Receiving station only, connected with the general network of telecommunication channels   |
| NOC   | FS   | Land station established solely for the safety of life   |
| NOC   | FX   | Fixed station  |
| SUP   | GMT  |  |
| ADD   | H    | Scheduled operation  |
| (MOD) | H8   | 8-hour service provided by a ship station of the second category   |
| (MOD) | H16  | 16-hour service provided by a ship station of the second category  |
| (MOD) | H24  | Continuous throughout the twenty-four hours  |
| (MOD) | HJ   | Day service  |
| ADD   | HN   | Night service  |
| ADD   | HT   | Transition period service  |

|      |     |  |
|------|-----|--|
| MOD  | HX  | Intermittent throughout the twenty-four hours, or station having no specific working hours |
| ADD  | I   | Intermittent operation during the time indicated   |
| ADD* | LP  | Land radiopositioning station  |
| ADD  | MA  | Aircraft station   |
| ADD  | ME  | Space station  |
| ADD  | ML  | Land mobile station  |
| ADD  | MO  | Mobile station   |
| ADD* | MP  | Mobile radiopositioning station  |
| ADD  | MS  | Ship station   |
| ADD  | MD  | Non-directional antenna  |
| ADD  | ML  | Maritime radionavigation land station  |
| NOC  | OT  | Station open exclusively to operational traffic of the service concerned                   |
| ADD  | Pa  | Passenger ship   |
| NOC  | RC  | Non-directional radiobeacon  |
| NOC  | RD  | Directional radiobeacon  |
| NOC  | RG  | Radio direction-finding station  |
| NOC  | RM  | Maritime radionavigation mobile station  |
| NOC  | RT  | Revolving radiobeacon  |
| SUP  | SF  |  |
| ADD  | SM  | Meteorological aids station  |
| NOC  | SS  | Standard frequency station   |
| ADD  | TMG | Greenwich mean time  |
| ADD  | TS  | Television, sound channel  |
| ADD  | TV  | Television, video channel  |
| SUP  | ST  |  |



## APPENDIX 12

**Duplex Channelling of the Maritime Mobile Radiotelephone Bands  
4 000 - 23 000 kc/s**

1. The following Table indicates the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radiotelephone service between 4 000 and 23 000 kc/s.
2. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprises a transmitting and a receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, as far as possible, harmful interference between the services of different coast stations.
3. Assignments to stations utilizing single sideband or independent sideband emissions shall be considered to be in accordance with the following Table if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double sideband emissions in accordance with the Table.
  - 3.1. Stations employing double sideband emission (A3) or two channel independent sideband emission (A3B) should operate with assigned frequencies at the values listed in the Table.
  - 3.2. Stations using single sideband single channel emissions (A3A, A3H or A3J) should operate either in the upper half or in the lower half of the channels designated by the centre frequencies in the Table.
    - 3.2.1. A station operating in the upper half of the channel should use upper sideband emission with its carrier frequency at a value listed in the Table; its assigned frequency would then be 1 400 cycles higher than that listed in the Table.

- 3.2.2. A station operating in the lower half of the channel should use upper sideband emission, its carrier frequency being the appropriate following amounts, below the midband frequency of the channel as listed in the Table :

| Band               | Carrier frequency relative to Midband Frequency of channel as listed in Table |
|--------------------|---|
| 4 and 8 Mc/s       | — 3 100 c/s   |
| 12, 16 and 22 Mc/s | — 3 300 c/s   |

The frequencies assigned to such stations should be 1 400 cycles higher than the value indicated above for their carrier frequencies.

4. If an administration assigns frequencies other than those indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with this Appendix.

Table of Frequencies (in Kc/s)

| Series No. | 4 Mc/s Band             |                        | 8 Mc/s Band             |                        | 12 Mc/s Band            |                        | 16 Mc/s Band            |                        | 22 Mc/s Band            |                        |
|------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|
|            | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency |
| 1          | 4371.1                  | 4066.1                 | 8748.1                  | 8198.1                 | 13133.5                 | 12333.5                | 17293.5                 | 16463.5                | 22653.5                 | 22003.5                |
| 2          | 4377.4                  | 4072.4                 | 8754.4                  | 8204.4                 | 13140.5                 | 12340.5                | 17300.5                 | 16470.5                | 22660.5                 | 22010.5                |
| 3          | 4383.8                  | 4078.8                 | 8760.8                  | 8210.8                 | 13147.5                 | 12347.5                | 17307.5                 | 16477.5                | 22667.5                 | 22017.5                |
| 4          | 4390.2                  | 4085.2                 | 8767.2                  | 8217.2                 | 13154.5                 | 12354.5                | 17314.5                 | 16484.5                | 22674.5                 | 22024.5                |
| 5          | 4396.6                  | 4091.6                 | 8773.6                  | 8223.6                 | 13161.5                 | 12361.5                | 17321.5                 | 16491.5                | 22681.5                 | 22031.5                |
| 6          | 4403.0                  | 4098.0                 | 8780.0                  | 8230.0                 | 13168.5                 | 12368.5                | 17328.5                 | 16498.5                | 22688.5                 | 22038.5                |
| 7          | 4409.4                  | 4104.4                 | 8786.4                  | 8236.4                 | 13175.5                 | 12375.5                | 17335.5                 | 16505.5                | 22695.5                 | 22045.5                |
| 8          | 4415.8                  | 4110.8                 | 8792.8                  | 8242.8                 | 13182.5                 | 12382.5                | 17342.5                 | 16512.5                | 22702.5                 | 22052.5                |
| 9          | 4422.2                  | 4117.2                 | 8799.2                  | 8249.2                 | 13189.5                 | 12389.5                | 17349.5                 | 16519.5                | 22709.5                 | 22059.5                |
| 10         | 4428.6                  | 4123.6                 | 8805.6                  | 8255.6                 | 13196.5                 | 12396.5                | 17356.5                 | 16526.5                | 22716.5                 | 22066.5                |
| 11         | 4434.9                  | 4129.9                 | 8811.9                  | 8261.9                 |                         |                        |                         |                        |                         |                        |

## APPENDIX 12zero

**Frequency Allotment Plan for Coast Radiotelephone Stations  
Operating in the Exclusive Maritime Mobile Bands  
between 4 000 and 23 000 kc/s**

*Note 1* The power indicated in this Plan is the mean power as defined in No. 63 of these Regulations.

*Note 2* It is recommended that when countries bring additional frequencies into use the assistance of the International Frequency Registration Board should be sought in choosing specific frequencies so as to avoid harmful interference to assignments which are in conformity with the following Frequency Allotment Plan.

**Section I. Frequencies for which the date of 3 December, 1951,  
shall be inserted in Column 2a of the Master International Frequency Register**

| Fre-<br>quency<br>in kc/s                       | Country                | Power<br>in kW | Remarks |
|---|------------------------|----------------|---------|
| (1)   | (2)                    | (3)            | (4)     |
| 4371.1<br><br><br><br><br><br><br><br>(cont'd.) | South Africa           | 2              |         |
|   | Cook or Hervey Islands | 0.1            |         |
|   | Malaya                 | 0.5            |         |
|   | Nigeria                | 0.3            |         |
|   | Netherlands New Guinea | 1              |         |
|   | Nyasaland              | 0.03           |         |
|   | Panama Republic        | 2.5            |         |
|   | Western Samoa          | 0.25           |         |

| Fre-<br>quency<br>in kc/s | Country  | Power<br>in kW | Remarks                                  |
|---------------------------|--|----------------|--|
| (1)                       | (2)  | (3)            | (4)                                      |
| 4371.1<br>(cont'd.)       | Singapore  | 0.5            |  |
|                           | Somaliland (Italian Admin-<br>istration)                                     | 0.03           |  |
|                           | Ukraine  | 15             |  |
|                           | U.S.S.R. (Southern Asia)   | 5              |  |
|                           | U.S.S.R. (Northern Asia)   | 15             |  |
|                           | U.S.S.R. (Europe)  | 15             |  |
|                           | U.S.S.R. (Far East)  | 15             |  |
|                           | U.S.S.R. (North West)  | 15             |  |
|                           | Uruguay  | 5              |  |
| 4377.4                    | United States (West)   | 20             | <sup>1)</sup> Second frequency for Japan |
|                           | South Georgia  | 0.3            | <sup>2)</sup> Second frequency for the   |
|                           | Japan <sup>1)</sup>  | 0.2            | U.S.S.R. (Southern Asia)                 |
|                           | Territory of New Guinea  | 0.25           |  |
|                           | Pakistan   | 3.5            |  |
|                           | United Kingdom   | 20             |  |
|                           | U.S.S.R. (Southern Asia) <sup>2)</sup><br>Directional antenna<br>azimuth 80° | 3              |  |

| Fre-<br>quency<br>in kc/s | Country                          | Power<br>in kW | Remarks  |
|---------------------------|----------------------------------|----------------|--|
| (1)                       | (2)                              | (3)            | (4)  |
| 4383·8                    | South Africa                     | 3              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><sup>2)</sup> Second frequency for the U.S.S.R. (Far East) |
|                           | Brazil                           | 3              |  |
|                           | Denmark <sup>1)</sup>            | 5              |  |
|                           | Ethiopia                         | 2              |  |
|                           | Fiji                             | 0·4            |  |
|                           | India (South)                    | 5              |  |
|                           | Macao                            | 0·15           |  |
|                           | Mexico                           | 2·5            |  |
|                           | Norway <sup>1)</sup>             | 5              |  |
|                           | Sweden <sup>1)</sup>             | 5              |  |
|                           | Portuguese Timor                 | 0·5            |  |
|                           | U.S.S.R. (Far East) <sup>2</sup> | 10             |  |
| 4390·2                    | Cameroon                         | 1              |  |
|                           | Chile (South)                    | 0·1            |  |
|                           | Congo                            | 1              |  |
|                           | Ivory Coast                      | 1              |  |
|                           | Dahomey                          | 1              |  |
|                           | France                           | 20             |  |
|                           | Gabon                            | 1              |  |
|                           | Guinea                           | 1              |  |
| (cont'd.)                 |                                  |                |  |

| Fre-<br>quency<br>in kc/s    | Country                | Power<br>in kW | Remarks                                    |
|------------------------------|------------------------|----------------|--|
| (1)                          | (2)                    | (3)            | (4)  |
| <b>4390·2</b><br>(cont'd.)   | Madagascar             | 1              |  |
|                              | Martinique             | 2              |  |
|                              | Mauritania             | 1              |  |
|                              | Monaco                 | 1              |  |
|                              | New Caledonia          | 1              |  |
|                              | Reunion                | 0·5            |  |
|                              | S. Pierre and Miquelon | 0·5            |  |
|                              | Senegal                | 1              |  |
|                              | Togo                   | 1              |  |
| <b>4396·6</b>                | Germany <sup>1)</sup>  | 6              | <sup>1)</sup> Second frequency for Germany |
|                              | Australia (East)       | 1              |  |
|                              | Egypt                  | 3              |  |
|                              | United States (East)   | 20             |  |
|                              | Indonesia              | 3              |  |
|                              | Uruguay                | 5              |  |
| <b>4403</b><br><br>(cont'd.) | Ceylon                 | 1              |  |
|                              | Cuba                   | 3              |  |
|                              | Finland                | 3              |  |

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                     | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)   |
|--------------------------------------|--|---------------------------|--|
| <b>4403</b><br>(cont'd.)             | Iceland <sup>1)</sup>                  | 1                         | <sup>1)</sup> Iceland requires two 40-minute periods per day.  |
|                                      | Italy                                  | 10                        |  |
|                                      | Japan                                  | 2.5                       |  |
|                                      | New Hebrides                           | 0.2                       |  |
| <b>4409.4</b>                        | Germany                                | 6                         | <sup>1)</sup> Third frequency for the United States (East)   |
|                                      | Canaries                               | 5                         |  |
|                                      | China (Central)                        | 3                         | <sup>2)</sup> Second frequency for the U.S.S.R. (Northern Asia)  |
|                                      | Spain                                  | 5                         |  |
|                                      | United States (East) <sup>1)</sup>     | 20                        | <sup>3)</sup> Second frequency for the U.S.S.R. (North-West)   |
|                                      | Solomon Islands/Aus                    | 0.25                      |  |
|                                      | Kenya                                  | 0.5                       |  |
|                                      | Poland                                 | 5                         |  |
|                                      | U.S.S.R. (Northern Asia) <sup>2)</sup> | 5                         |  |
|                                      | U.S.S.R. (North West) <sup>3)</sup>    | 5 (HJ)<br>2 (HN)          |  |
| <b>4415.8</b><br><br>(cont'd.)       | Angola <sup>1)</sup>                   | 1                         | <sup>1)</sup> Time sharing if necessary between Portugal, Angola, Portuguese Guinea, Cape Verde Islands, S. Tomé and Príncipe on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                                      | Netherlands Antilles <sup>1)</sup>     | 1                         |  |
|                                      | Canada (East and Central)              | 12                        |  |
|                                      | Cape Verde <sup>1)</sup>               | 0.1                       |  |



| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks  |
|---------------------------|------------------------------------|----------------|--|
| (1)                       | (2)                                | (3)            | (4)  |
| 4415·8<br>(cont'd.)       | Portuguese Guinea <sup>1)</sup>    | 0·1            | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, Portuguese Guinea, Cape Verde Islands, S. Tomé and Príncipe on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                           | Portuguese Indies                  | 0·5            |  |
|                           | Indonesia                          | 0·5            |  |
|                           | Japon <sup>2)</sup>                | 0·2            |  |
|                           | Mozambique                         | 0·5            | <sup>2)</sup> Third frequency for Japan.   |
|                           | New Zealand                        | 1              | <sup>3)</sup> Second frequency for the U.S.S.R. (Europe)   |
|                           | Netherlands <sup>1)</sup>          | 10             |  |
|                           | Portugal <sup>1)</sup>             | 5              |  |
|                           | S. Tomé and Príncipe <sup>1)</sup> | 0·5            |  |
|                           | Surinam <sup>1)</sup>              | 0·35           |  |
|                           | U.S.S.R. (Europe) <sup>3)</sup>    | 2              |  |
|                           | Yugoslavia                         | 1              |  |
| 4422·2<br><br>(cont'd.)   | Chile (North)                      | 0·2            | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.                                   |
|                           | Colombia                           | 2              |  |
|                           | Denmark <sup>1)</sup>              | 5              |  |
|                           | United States (Central)            | 1              |  |
|                           | France <sup>2)</sup>               | 20             | <sup>2)</sup> Second frequency for France.   |
|                           | Gambia                             | 0·7            |  |
|                           | Ghana                              | 3              |  |

| Fre-<br>quency<br>in kc/s                                      | Country                         | Power<br>in kW | Remarks  |
|--|---------------------------------|----------------|--|
| (1)  | (2)                             | (3)            | (4)  |
| <b>4422·2</b><br>(cont'd.)                                     | Hawaii                          | 3              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries. |
|  | India (North)                   | 5              |  |
|  | Italy <sup>3)</sup>             | 10             |  |
|  | Norway <sup>1)</sup>            | 5              | <sup>2)</sup> Second frequency for Italy.  |
|  | Philippines                     | 3              |  |
|  | Sweden <sup>1)</sup>            | 5              |  |
|  | Venezuela                       | 2              |  |
| <b>4428·6</b><br><br><br><br><br><br><br><br><br><br>(cont'd.) | Argentina (South) <sup>1)</sup> | 0·5            | <sup>1)</sup> Second frequency for Argentina (South).  |
|  | Bermuda                         | 3              |  |
|  | Canada (West)                   | 0·4            | <sup>2)</sup> Second frequency for Poland.   |
|  | China (East)                    | 10             |  |
|  | United States (South)           | 0·4            |  |
|  | Greece                          | 3·5            |  |
|  | Israel                          | 3·5            |  |
|  | Nicaragua                       | 0·1            |  |
|  | New Zealand                     | 0·3            |  |
|  | [Poland]* <sup>2)</sup>         | 2·5            |  |

\* This symbol [.....] concerns an additional allotment for which the necessary co-ordination was not carried out before the date of examination of this document.

| Fre-<br>quency<br>in kc/s      | Country                            | Power<br>in kW   | Remarks   |
|--------------------------------|------------------------------------|------------------|---|
| (1)                            | (2)                                | (3)              | (4)   |
| <b>4428·6</b><br>(cont'd.)     | Dominican Republic                 | 0·15             | <sup>3)</sup> Second frequency for the United Kingdom.      |
|                                | United Kingdom <sup>3)</sup>       | 15               |   |
|                                | Turkey                             | 3·5              |   |
| <b>4434·9</b>                  | Argentina (North)                  | 20               | <sup>1)</sup> Second frequency for the United States (East) |
|                                | Australia (West)                   | 0·25             |   |
|                                | Belgium                            | 3                | <sup>2)</sup> Second frequency for Ukraine.                 |
|                                | Bulgaria                           | 0·5              |   |
|                                | Belgian Congo                      | 1                |   |
|                                | United States (East) <sup>1)</sup> | 20               |   |
|                                | Hongkong                           | 3                |   |
|                                | Iran                               | 1                |   |
|                                | [Ukraine] * <sup>2)</sup>          | 5 (HJ)<br>3 (HN) |   |
| <b>8748·1</b><br><br>(cont'd.) | South Africa                       | 2                |   |
|                                | Cook or Hervey Islands             | 0·1              |   |
|                                | Persian Gulf                       | 0·5<br>(HJ)      |   |
|                                | Greenland                          | 0·05             |   |

\* See note page 28.

| Fre-<br>quency<br>in kc/s  | Country               | Power<br>in kW | Remarks                                   |
|----------------------------|-----------------------|----------------|---|
| (1)                        | (2)                   | (3)            | (4)                                       |
| <b>8748·1</b><br>(cont'd.) | Malaya                | 0·5            |   |
|                            | Panama Republic       | 2·5            |   |
|                            | Western Samoa         | 0·25           |   |
|                            | Sierra Leone          | 0·5            |   |
|                            | Singapore             | 0·5            |   |
|                            | Ukraine               | 15             |   |
|                            | U.S.S.R. (Europe)     | 15             |   |
|                            | U.S.S.R. (Far East)   | 15             |   |
|                            | U.S.S.R. (North West) | 15             |   |
|                            | Uruguay               | 1              |   |
| <b>8754·4</b>              | Bahamas               | 0·5            | <sup>1)</sup> Second frequency for Japan. |
|                            | United States (West)  | 20             |   |
|                            | South Georgia         | 0·3            |   |
|                            | Solomon Is/Aus        | 0·25           |   |
|                            | Indonesia             | 0·5            |   |
|                            | Japan <sup>1)</sup>   | 0·2            |   |
|                            | United Kingdom        | 20             |   |
|                            |                       |                |   |

| Fre-<br>quency<br>in kc/s | Country  | Power<br>in kW | Remarks   |
|---------------------------|--|----------------|---|
| (1)                       | (2)  | (3)            | (4)   |
| 8760·8                    | South Africa   | 3              | 1) The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. |
|                           | Australia (West)   | 0·13           |   |
|                           | Cambodia   | 0·2            | 2) Second frequency for the U.S.S.R.  |
|                           | Chile (South)  | 0·1            |   |
|                           | Denmark <sup>1)</sup>  | 5              |   |
|                           | Laos   | 0·2            |   |
|                           | Nicaragua  | 0·1            |   |
|                           | Norway <sup>1)</sup>   | 5              |   |
|                           | Dominican Republic   | 0·15           |   |
|                           | Sweden <sup>1)</sup>   | 5              |   |
|                           | U.S.S.R. (Southern Asia:<br>Caspian and Aral Sea) <sup>2)</sup><br>(Directional antenna azimuth 80°) | 3              |   |
|                           | Viet-Nam   | 0·2            |   |
| (cont'd.)                 | Cameroon   | 1              |   |
|                           | Congo  | 1              |   |
|                           | Ivory Coast  | 1              |   |
|                           | Dahomey  | 1              |   |
|                           | France   | 20             |   |
|                           |  |                |   |

| Fre-<br>quency<br>in kc/s | Country                 | Power<br>in kW | Remarks |
|---------------------------|-------------------------|----------------|---------|
| (1)                       | (2)                     | (3)            | (4)     |
| 8767·2<br>(cont'd.)       | Gabon                   | 1              |         |
|                           | Guinea                  | 1              |         |
|                           | Hawaii                  | 3              |         |
|                           | India (South)           | 5              |         |
|                           | Macao                   | 0·15           |         |
|                           | Madagascar              | 1              |         |
|                           | Morocco                 | 1              |         |
|                           | Martinique              | 2              |         |
|                           | Mauritania              | 1              |         |
|                           | Monaco                  | 1              |         |
|                           | Reunion                 | 0·5            |         |
|                           | S. Pierre and Miquelon  | 0·5            |         |
|                           | Senegal                 | 1              |         |
|                           | Portuguese Timor        | 0·5            |         |
|                           | Togo                    | 1              |         |
| 8773·6<br><br>(cont'd.)   | Burma                   | 2·5            |         |
|                           | Egypt                   | 3              |         |
|                           | United States (East)    | 20             |         |
|                           | Territory of New Guinea | 0·25           |         |

| Fre-<br>quency<br>in kc/s      | Country                         | Power<br>in kW | Remarks   |
|--------------------------------|---------------------------------|----------------|---|
| (1)                            | (2)                             | (3)            | (4)   |
| <b>8773·6</b><br>(cont'd.)     | [Poland] * <sup>1)</sup>        | 2·5            | <sup>1)</sup> Second frequency for Poland.                    |
|                                | U.S.S.R. (Northern Asia)        | 15             |   |
| <b>8780</b>                    | Ceylon                          | 1              | <sup>1)</sup> Iceland requires two 40-minute periods per day. |
|                                | Cuba                            | 3              |   |
|                                | Faroes                          | 0·2            |   |
|                                | Finland                         | 3              |   |
|                                | Iceland <sup>1)</sup>           | 1              |   |
|                                | Italy                           | 10             |   |
|                                | Japan                           | 2·5            |   |
|                                | New Caledonia                   | 1              |   |
|                                | New Hebrides                    | 0·2            |   |
| <b>8786·4</b><br><br>(cont'd.) | Germany                         | 6              | <sup>1)</sup> Second frequency for Argentine (South).         |
|                                | Netherlands Antilles            | 1 (HJ)         |   |
|                                | Argentina (South) <sup>1)</sup> | 1              |   |
|                                | Bulgaria                        | 0·5            |   |
|                                | Canada (East and Central)       | 12             |   |
|                                | Canaries                        | 5              |   |
|                                | Belgian Congo                   | 1              |   |

\* See note on page 28.

| Fre-<br>quency<br>in kc/s  | Country   | Power<br>in kW | Remarks  |
|----------------------------|---|----------------|--|
| (1)                        | (2)   | (3)            | (4)  |
| <b>8786.4</b><br>(cont,d.) | Spain   | 5              | <sup>2)</sup> Time sharing, if necessary frequency, between India (North) and New Zealand.   |
|                            | India (North) <sup>2)</sup>                       | 5              |  |
|                            | New Zealand <sup>2)</sup>                         | 5              | <sup>3)</sup> Second frequency for the U.S.S.R. (Europe).  |
|                            | Surinam   | 0.35<br>(HJ)   |  |
|                            | U.S.S.R. (Europe) <sup>3)</sup>                   | 2              |  |
| <b>8792.8</b>              | Angola <sup>1)</sup>                              | 1              | <sup>1)</sup> Time sharing, if necessary, between Portugal, S. Tomé and Príncipe, Angola, Portuguese Guinea and Cape Verde Islands, on the one hand, and Netherlands on the other. |
|                            | Cape Verde <sup>1)</sup>                          | 0.1            |  |
|                            | China (Central)                                   | 3              |  |
|                            | Gilbert and Ellice                                | 0.25           |  |
|                            | Portuguese Guinea <sup>1)</sup>                   | 0.1            | <sup>2)</sup> Second frequency for the U.S.S.R. (North West).  |
|                            | Portuguese Indies                                 | 0.5            |  |
|                            | Mexico  | 2.5            |  |
|                            | Netherlands <sup>1)</sup>                         | 10             |  |
|                            | Philippines                                       | 1              |  |
|                            | Poland  | 5              |  |
|                            | Portugal <sup>1)</sup>                            | 5              |  |
|                            | S. Tomé and Príncipe <sup>1)</sup>                | 0.5            |  |
|                            | U.S.S.R. (North West: Arctic Ocean) <sup>2)</sup> | 3              |  |
|                            | Uruguay   | 5              |  |



| Fre-<br>quency<br>in kc/s  | Country  | Power<br>in kW | Remarks   |
|----------------------------|--|----------------|---|
| (1)                        | (2)  | (3)            | (4)   |
| <b>8799·2</b>              | Chile (North)  | 0·2            | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.<br><sup>2)</sup> Second frequency for France.<br><sup>3)</sup> Second frequency for Italy.<br><sup>4)</sup> Third frequency for Japan.<br><sup>5)</sup> Second frequency for Ukraine. The Ukraine will not use this frequency outside the hours of 0200 to 0800 G.M.T. and 1000 to 2000 G.M.T. |
|                            | Colombia   | 2              |   |
|                            | Denmark <sup>1)</sup>  | 5              |   |
|                            | United States<br>(North and Central)                             | 1              |   |
|                            | France <sup>2)</sup>   | 20             |   |
|                            | Indonesia  | 3              |   |
|                            | Italy <sup>3)</sup>  | 10             |   |
|                            | Japan <sup>4)</sup>  | 0·2            |   |
|                            | Mozambique   | 0·5            |   |
|                            | Nigeria  | 0·3            |   |
|                            | Norway <sup>1)</sup>   | 5              |   |
|                            | Seychelles   | 0·5            |   |
|                            | Sweden <sup>1)</sup>   | 5              |   |
|                            | Ukraine <sup>5)</sup>  | 5              |   |
|                            | U.S.S.R. (Southern Asia)<br>(Directional antenna<br>azimuth 80°) | 3              |   |
|                            | Venezuela  | 2              |   |
| <b>8805·6</b><br>(cont'd.) | Australia (East)   | 1              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary.   |
|                            | Belgium <sup>1)</sup>  | 3              |   |

| Fre-<br>quency<br>in kc/s  | Country                           | Power<br>in kW | Remarks   |
|--|-----------------------------------|----------------|---|
| (1)  | (2)                               | (3)            | (4)   |
| <b>8805·6</b><br>(cont'd.)   | Bermuda                           | 3              | <sup>2)</sup> Second frequency for the United Kingdom.      |
|  | Brazil (South of 21° South)       | 3              | <sup>3)</sup> Second frequency for the U.S.S.R. (Far East). |
|  | Hongkong                          | 1              |   |
|  | Iran                              | 1              |   |
|  | Kenya                             | 0·5            |   |
|  | United Kingdom <sup>2)</sup>      | 15             |   |
|  | U.S.S.R. (Far East) <sup>3)</sup> | 15             |   |
|  | Yugoslavia                        | 2              |   |
| <b>8811·9</b><br><br><br><br><br><br><br><br><br><br><br><br>(cont'd.) | Germany <sup>1)</sup>             | 6              | <sup>1)</sup> Second frequency for Germany.                 |
|  | Argentina (North)                 | 20             | <sup>2)</sup> Second frequency for the United States.       |
|  | China (East)                      | 5              |   |
|  | United States <sup>2)</sup>       | 20             |   |
|  | Fiji                              | 0·5            |   |
|  | Gambia                            | 0·7            |   |
|  | Ghana                             | 3              |   |
|  | Greece                            | 3·5            |   |
|  | Israel                            | 3·5            |   |
|  | Pakistan                          | 3·5            |   |
|  | Turkey                            | 3·5            |   |

| Frequency<br>in kc/s       | Country   | Power<br>in kW | Remarks   |
|----------------------------|---|----------------|---|
| (1)                        | (2)   | (3)            | (4)   |
| <b>8811·9</b><br>(cont'd.) | U.S.S.R. (Northern Asia<br>East of Meridian 60°E) <sup>3)</sup> | 10             | <sup>3)</sup> Second frequency for the<br>U.S.S.R. (Northern Asia). |
| <b>13133·5</b>             | Argentina   | 0·5            |   |
|                            | Greenland   | 0·05           |   |
|                            | Nigeria   | 0·5            |   |
|                            | Netherlands New Guinea  | 1              |   |
|                            | Panama Republic   | 2·5            |   |
|                            | Ukraine   | 15             |   |
|                            | U.S.S.R. (Europe)   | 15             |   |
|                            | U.S.S.R. (Far East)   | 15             |   |
|                            | U.S.S.R. (North West)   | 15             |   |
| <b>13140·5</b>             | Bahamas   | 0·5            |   |
|                            | Bermuda   | 3              |   |
|                            | Cambodia  | 0·2            |   |
|                            | Fiji  | 0·5            |   |
|                            | Laos  | 0·2            |   |
|                            | United Kingdom  | 20             |   |
|                            | U.S.S.R. (Northern Asia)  | 15             |   |
|                            | Viet-Nam  | 0·2            |   |

| Fre-<br>quency<br>in kc/s | Country                           | Power<br>in kW | Remarks   |
|---------------------------|-----------------------------------|----------------|---|
| (1)                       | (2)                               | (3)            | (4)   |
| 13147.5                   | Australia (East)                  | 1              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><sup>2)</sup> Second frequency for the U.S.S.R. (Far East). |
|                           | Colombia                          | 2.5            |   |
|                           | Denmark <sup>1)</sup>             | 5.             |   |
|                           | Norway <sup>1)</sup>              | 5              |   |
|                           | Pakistan                          | 3              |   |
|                           | Sweden <sup>1)</sup>              | 5              |   |
|                           | U.S.S.R. (Far East) <sup>2)</sup> | 15             |   |
|                           | Venezuela                         | 2.5            |   |
| 13154.5                   | Cameroon                          | 1              |   |
|                           | Congo                             | 1              |   |
|                           | Ivory Coast                       | 1              |   |
|                           | Dahomey                           | 1              |   |
|                           | France                            | 20             |   |
|                           | Gabon                             | 1              |   |
|                           | Guinea                            | 1              |   |
|                           | Portuguese Indies                 | 0.5            |   |
|                           | Japan                             | 2.5            |   |
|                           | Macao                             | 0.15           |   |
|                           | Madagascar                        | 1              |   |
| (cont'd.)                 |                                   |                |   |

| Frequency<br>in kc/s     | Country                             | Power<br>in kW | Remarks  |
|--------------------------|-------------------------------------|----------------|--|
| (1)                      | (2)                                 | (3)            | (4)  |
| 13154.5<br>(cont'd.)     | Morocco                             | 1              |  |
|                          | Martinique                          | 2              |  |
|                          | Mauritania                          | 1              |  |
|                          | Mozambique                          | 0.5            |  |
|                          | Senegal                             | 1              |  |
|                          | Portuguese Timor                    | 0.5            |  |
|                          | Togo                                | 1              |  |
| 13161.5                  | China (East)                        | 5              | <sup>1)</sup> Second frequency for Poland.                   |
|                          | United States (East)                | 20             | <sup>2)</sup> Second frequency for Ukraine.                  |
|                          | Iran                                | 1              | <sup>3)</sup> Second frequency for the<br>U.S.S.R. (Europe). |
|                          | [Poland] * <sup>1)</sup>            | 2.5            |  |
|                          | [Ukraine] * <sup>2)</sup>           | 5              |  |
|                          | [U.S.S.R. (Europe)] * <sup>3)</sup> | 10             |  |
| 13168.5<br><br>(cont'd.) | Australia (West)                    | 0.13           |  |
|                          | Brazil                              | 3              |  |
|                          | Cuba                                | 3              |  |
|                          | Finland                             | 3              |  |

\* See note on page 28.

| Fre-<br>quency<br>in kc/s<br>(1) | Country<br>(2)   | Power<br>in kW<br>(3) | Remarks<br>(4)  |
|----------------------------------|--|-----------------------|---|
| 13168.5<br>(cont'd.)             | Iceland <sup>1)</sup>  | 1                     | <sup>1)</sup> Iceland requires two 40-minute periods per day.<br><br><sup>2)</sup> Coast stations of the U.S.S.R. shall not cause harmful interference to Italian coast stations nor to ships in the Mediterranean, the Indian Ocean and the Pacific. |
|                                  | Italy  | 10                    |   |
|                                  | Philippines  | 0.4                   |   |
|                                  | U.S.S.R. (Southern Asia)<br>(Directional antenna<br>azimuth 80°) <sup>2)</sup> | 3                     |   |
| 13175.5                          | Angola <sup>1)</sup>   | 1                     | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, S. Tomé and Príncipe, Portuguese Guinea and Cape Verde Islands, on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other.                                  |
|                                  | Netherlands Antilles <sup>1)</sup>   | 1                     |   |
|                                  | Canada (East)  | 12                    |   |
|                                  | Cape Verde <sup>1)</sup>   | 0.1                   |   |
|                                  | Portuguese Guinea <sup>1)</sup>  | 0.1                   |   |
|                                  | Hawaii   | 3                     |   |
|                                  | Hongkong   | 3                     |   |
|                                  | India (South)  | 5                     |   |
|                                  | Netherlands <sup>1)</sup>  | 10                    |   |
|                                  | Portugal <sup>1)</sup>   | 5                     |   |
|                                  | S. Tomé and Príncipe <sup>1)</sup>   | 0.5                   |   |
|                                  | Surinam <sup>1)</sup>  | 0.35                  |   |
|                                  |  |                       |   |

| Fre-<br>quency<br>in kc/s | Country                   | Power<br>in kW | Remarks   |
|---------------------------|---------------------------|----------------|---|
| (1)                       | (2)                       | (3)            | (4)   |
| 13182.5                   | Germany                   | 6              | 1) The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries. |
|                           | Argentina (North)         | 10             |   |
|                           | Denmark <sup>1)</sup>     | 5              |   |
|                           | United States (West)      | 20             | 2) Second frequency for France.   |
|                           | France <sup>2)</sup>      | 10             | 3) Second frequency for Italy.  |
|                           | India (North)             | 5              | 4) Second frequency for Japan.  |
|                           | Italy <sup>3)</sup>       | 10             | 5) Second frequency for the Netherlands.  |
|                           | Japan <sup>4)</sup>       | 0.2            |   |
|                           | Norway <sup>1)</sup>      | 5              |   |
|                           | Netherlands <sup>5)</sup> | 10             |   |
|                           | Poland                    | 5              |   |
|                           | Sweden <sup>1)</sup>      | 5              |   |
|                           | Yugoslavia                | 5              |   |
| 13189.5                   | South Africa              | 3              | 1) Time sharing with the United Kingdom, if necessary.  |
|                           | Belgium <sup>1)</sup>     | 3              |   |
|                           | China (Central)           | 3              |   |
|                           | Belgian Congo             | 1              |   |
|                           | Greece                    | 3.5            |   |
|                           | Israel                    | 3.5            |   |
| (cont'd.)                 |                           |                |   |

| Fre-<br>quency<br>in kc/s<br>(1) | Country<br>(2)  | Power<br>in kW<br>(3) | Remarks<br>(4)   |
|----------------------------------|---|-----------------------|--|
| <b>13189.5</b><br>(cont'd.)      | Mexico  | 2.5                   | <sup>2)</sup> Second frequency for the United Kingdom.           |
|                                  | New Zealand   | 5                     |  |
|                                  | United Kingdom <sup>2)</sup>                                    | 15                    |  |
|                                  | Turkey  | 3.5                   |  |
| <b>13196.5</b>                   | Germany <sup>1)</sup>   | 6                     | <sup>1)</sup> Second frequency for Germany.                      |
|                                  | Canaries  | 5                     | <sup>2)</sup> Second frequency for the United States (East).     |
|                                  | Chile   | 0.1                   | <sup>3)</sup> Second frequency for the U.S.S.R. (Northern Asia). |
|                                  | Egypt   | 3                     | <sup>4)</sup> Third frequency for the U.S.S.R. (Far East).       |
|                                  | Spain   | 5                     |  |
|                                  | Unites States (East) <sup>2)</sup>                              | 20                    | <sup>5)</sup> Second frequency for the U.S.S.R. (North West).    |
|                                  | Gambia  | 0.7                   |  |
|                                  | Indonesia   | 3                     |  |
|                                  | U.S.S.R. (Northern Asia),<br>East of Meridian 6°E <sup>3)</sup> | 10                    |  |
|                                  | U.S.S.R. (Far East) <sup>4)</sup>                               | 10                    |  |
|                                  | U.S.S.R. (North West) * <sup>5)</sup>                           | 5                     |  |
|                                  | Uruguay   | 5                     |  |

\* See note on page 28.



| Fre-<br>quency<br>in kc/s | Country                                | Power<br>in kW | Remarks   |
|---------------------------|--|----------------|---|
| (1)                       | (2)                                    | (3)            | (4)   |
| <b>17293.5</b>            | Brazil                                 | 3              |   |
|                           | Ukraine                                | 15             |   |
|                           | U.S.S.R. (Europe)                      | 15             |   |
|                           | U.S.S.R. (North Est)                   | 15             |   |
|                           | Viet-Nam                               | 2              |   |
| <b>17300.5</b>            | Australia (East)                       | 1              | <sup>1)</sup> Second frequency for the<br>U.S.S.R. (Northern Asia).   |
|                           | United Kingdom                         | 20             |   |
|                           | U.S.S.R. (Northern Asia) <sup>1)</sup> | 5              |   |
|                           | U.S.S.R. (Far East)                    | 5              |   |
| <b>17307.5</b>            | Argentina (North)                      | 5              | <sup>1)</sup> The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement. |
|                           | Denmark <sup>1)</sup>                  | 5              |   |
|                           | Hawaii                                 | 3              |   |
|                           | India (North)                          | 5              |   |
|                           | Norway <sup>1)</sup>                   | 5              |   |
|                           | Sweden <sup>1)</sup>                   | 5              |   |
| <b>17314.5</b>            | Brazil                                 | 3              |   |
|                           | France                                 | 20             |   |
|                           | Japan                                  | 2.5            |   |
| (cont'd.)                 |  |                |   |

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                 | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)  |
|--------------------------------------|------------------------------------|---------------------------|---|
| 17314.5<br>(cont'd.)                 | Morocco                            | 1                         |   |
|                                      | Martinique                         | 2                         |   |
| 17321.5                              | China (Central)                    | 3                         | <sup>1)</sup> Second frequency for Poland.<br><sup>2)</sup> Second frequency for Ukraine.<br><sup>3)</sup> Third frequency for the U.S.S.R. (Europe).   |
|                                      | United States (East)               | 20                        |   |
|                                      | Philippines                        | 1                         |   |
|                                      | [Poland] * <sup>1)</sup>           | 2.5                       |   |
|                                      | Ukraine <sup>2)</sup>              | 5                         |   |
|                                      | U.S.S.R. (Europe) <sup>3)</sup>    | 10                        |   |
| 17328.5                              | Cuba                               | 3                         | <sup>1)</sup> Iceland requires two 40-minute periods per day.   |
|                                      | Finland                            | 3                         |   |
|                                      | Iceland <sup>1)</sup>              | 1                         |   |
|                                      | Italy                              | 10                        |   |
|                                      | New Zealand                        | 5                         |   |
| 17335.5<br><br>(cont'd.)             | Angola <sup>1)</sup>               | 1                         | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, Cape Verde Islands, Portuguese Guinea, S. Tomé and Príncipe, on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                                      | Netherlands Antilles <sup>1)</sup> | 1                         |   |
|                                      | Canada (East)                      | 12                        |   |
|                                      | Cape Verde <sup>1)</sup>           | 0.1                       |   |

\* See note on page 28.

| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks   |
|---------------------------|------------------------------------|----------------|---|
| (1)                       | (2)                                | (3)            | (4)   |
| 17335.5<br>(cont'd.)      | Chile                              | 0.1            | <sup>1)</sup> Time sharing, if necessary, be-<br>tween Portugal, Angola, Cape<br>Verde Islands, Portuguese<br>Guinea, S. Tomé and Príncipe,<br>on the one hand, and Nether-<br>lands, Surinam and Netherlands<br>Antilles on the other.<br><br><sup>2)</sup> Second frequency for the<br>U.S.S.R. (Far East). |
|                           | Portuguese Guinea <sup>1)</sup>    | 0.1            |   |
|                           | India (South)                      | 5              |   |
|                           | Macao                              | 0.15           |   |
|                           | Mozambique                         | 0.5            |   |
|                           | Netherlands <sup>1)</sup>          | 10             |   |
|                           | Poland                             | 5              |   |
|                           | Portugal <sup>1)</sup>             | 5              |   |
|                           | S. Tomé and Príncipe <sup>1)</sup> | 0.5            |   |
|                           | Surinam <sup>1)</sup>              | 0.35           |   |
|                           | Portuguese Timor                   | 0.5            |   |
|                           | U.S.S.R. (Far East) <sup>2)</sup>  | 5              |   |
| 17342.5<br><br>(cont'd.)  | South Africa                       | 3              | <sup>1)</sup> The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement. Se-<br>cond frequency for these three<br>countries.<br><br><sup>2)</sup> Second frequency for France.<br><br><sup>3)</sup> Second frequency for Italy.          |
|                           | Germany                            | 6              |   |
|                           | Denmark <sup>1)</sup>              | 5              |   |
|                           | United States (West)               | 20             |   |
|                           | France <sup>2)</sup>               | 20             |   |
|                           | Italy <sup>3)</sup>                | 10             |   |
|                           | Norway <sup>1)</sup>               | 5              |   |
|                           |                                    |                |   |

| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks   |
|---------------------------|------------------------------------|----------------|---|
| (1)                       | (2)                                | (3)            | (4)   |
| 17342.5<br>(cont'd.)      | Pakistan                           | 1              | <sup>4)</sup> Second frequency for the Netherlands.<br><sup>5)</sup> Second frequency for the U.S.S.R. (Europe).            |
|                           | Netherlands <sup>4)</sup>          | 10             |   |
|                           | Sweden <sup>1)</sup>               | 5              |   |
|                           | U.S.S.R. (Europe) <sup>5)</sup>    | 2              |   |
| 17349.5                   | Belgium <sup>1)</sup>              | 3              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary.<br><sup>2)</sup> Second frequency for the United Kingdom. |
|                           | China (East)                       | 15             |   |
|                           | Greece                             | 3.5            |   |
|                           | Israel                             | 3.5            |   |
|                           | United Kingdom <sup>2)</sup>       | 15             |   |
|                           | Turkey                             | 3.5            |   |
|                           | Venezuela                          | 2.5            |   |
|                           | Yugoslavia                         | 5              |   |
| 17356.5<br><br>(cont'd.)  | Germany <sup>1)</sup>              | 6              | <sup>1)</sup> Second frequency for Germany.<br><sup>2)</sup> Second frequency for the United States (East).                 |
|                           | Canaries                           | 5              |   |
|                           | Egypt                              | 3              |   |
|                           | Spain                              | 5              |   |
|                           | United States (East) <sup>2)</sup> | 20             |   |
|                           | Indonesia                          | 3              |   |
|                           |                                    |                |   |

| Fre-<br>quency<br>in kc/s | Country  | Power<br>in kW | Remarks  |
|---------------------------|--|----------------|--|
| (1)                       | (2)  | (3)            | (4)  |
| 17356·5<br>(cont'd.)      | U.S.S.R. (Northern Asia),<br>East of Meridian 60°E | 15             | 3) Second frequency for the<br>U.S.S.R. (North West).  |
|                           | U.S.S.R. (North West)* 3)                          | 5              |  |
|                           | Uruguay  | 3              |  |
| 22653·5                   | Chile  | 0·2            |  |
|                           | Ukraine  | 15             |  |
|                           | U.S.S.R. (North West)                              | 15             |  |
|                           | Viet-Nam   | 2              |  |
| 22660·5                   | Pakistan   | 1              |  |
|                           | United Kingdom                                     | 20             |  |
|                           | U.S.S.R. (Far East)                                | 15             |  |
| 22667·5                   | Australia (East)                                   | 1              | 1) The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement.<br>2) Second frequency for Japan. |
|                           | Denmark 1)   | 5              |  |
|                           | Finland  | 3              |  |
|                           | Japan * 2)   | 0·2            |  |
|                           | Norway 1)  | 5              |  |
|                           | Sweden 1)  | 5              |  |
|                           | Venezuela  | 2·5            |  |

\* See note on page 28.

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                  | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)  |
|--------------------------------------|-------------------------------------|---------------------------|---|
| 22674·5                              | France                              | 10                        |   |
|                                      | Philippines                         | 1                         |   |
| 22681·5                              | China (Central)                     | 3                         | <sup>1)</sup> Second frequency for the<br>U.S.S.R. (North West).  |
|                                      | United States (East)                | 20                        |   |
|                                      | U.S.S.R. (Europe)                   | 10                        |   |
|                                      | U.S.S.R. (North West) <sup>1)</sup> | 5                         |   |
| 22688·5                              | South Africa                        | 3                         | <sup>1)</sup> Second frequency for Poland.  |
|                                      | Italy                               | 10                        |   |
|                                      | Japan                               | 2·5                       |   |
|                                      | Poland * <sup>1)</sup>              | 2·5                       |   |
| 22695·5                              | United States (West)                | 20                        |   |
|                                      | Netherlands                         | 10                        |   |
|                                      | Portugal                            | 5                         |   |
| 22702·5<br><br>(cont'd.)             | Germany                             | 6                         | <sup>1)</sup> The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement. Se-<br>cond frequency for these three<br>countries. |
|                                      | Argentina (North)                   | 10                        |   |
|                                      | Denmark <sup>1)</sup>               | 5                         |   |

| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks  |
|---------------------------|------------------------------------|----------------|--|
| (1)                       | (2)                                | (3)            | (4)  |
| 22702.5<br>(cont'd.)      | France <sup>2)</sup>               | 10             | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries. |
|                           | India (South)                      | 5              |  |
|                           | Italy <sup>3)</sup>                | 10             |  |
|                           | Norway <sup>1)</sup>               | 5              | <sup>2)</sup> Second frequency for France.   |
|                           | Sweden <sup>1)</sup>               | 5              | <sup>3)</sup> Second frequency for Italy.  |
| 22709.5                   | Belgium <sup>1)</sup>              | 3              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary.<br><br><sup>2)</sup> Second frequency for the United Kingdom.  |
|                           | China (North)                      | 10             |  |
|                           | Poland                             | 5              |  |
|                           | United Kingdom <sup>2)</sup>       | 15             |  |
| 22716.5                   | Germany <sup>1)</sup>              | 6              | <sup>1)</sup> Second frequency for Germany.<br><br><sup>2)</sup> Second frequency for the United States (East).  |
|                           | Canaries                           | 5              |  |
|                           | Spain                              | 5              |  |
|                           | United States (East) <sup>2)</sup> | 20             |  |
|                           | India (North)                      | 10             |  |

**Section II :**

Frequencies for which the date of 4 December, 1951, shall be inserted in Column 2b of the Master International Frequency Register.

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)         | Power<br>in kW<br><br>(3) | Remarks<br><br>(4) |
|--------------------------------------|----------------------------|---------------------------|--------------------|
| 4377·4                               | Argentina                  | 0·5                       |                    |
| 4383·8                               | Chile                      | 0·2                       |                    |
| 4403                                 | Argentina<br>Belgian Congo | 0·5<br>0·25               |                    |
| 4415·8                               | Argentina                  | 0·5                       |                    |
| 4422·2                               | Brazil                     | 3                         |                    |
| 4428·6                               | Yugoslavia                 | 2                         |                    |
| 8760·8                               | Argentina                  | 0·5                       |                    |
| 8767·2                               | Argentina                  | 0·5                       |                    |
| 8773·6                               | Chile                      | 0·2                       |                    |
| 8780                                 | Chile<br>Belgian Congo     | 0·1<br>0·25               |                    |



| Fre-<br>quency<br>in kc/s<br>(1) | Country<br>(2)       | Power<br>in kW<br>(3) | Remarks<br>(4)   |
|----------------------------------|----------------------|-----------------------|--|
| 8786·4                           | Netherlands Antilles | 1 (HN)                |  |
|                                  | Chile                | 0·1                   |  |
|                                  | Surinam              | 0·35<br>(HN)          |  |
| 8792·8                           | Chile                | 0·1                   |  |
| 8799·2                           | Argentina            | 0·5                   | 1) Notification secondary to that<br>of Argentina on this frequency. |
|                                  | Brazil 1)            | 3                     |  |
| 13140·5                          | Chile                | 0·1                   |  |
| 13154·5                          | Chile                | 0·2                   |  |
| 13168·5                          | Chile                | 0·2                   |  |
| 13175·5                          | Argentina            | 0·5                   |  |
| 13189·5                          | Brazil               | 3                     |  |
| 17321·5                          | Iran                 | 1                     |  |
| 22681·5                          | Iran                 | 1                     |  |

ADD

APPENDIX 12b  
(See Article 34)

**Table of Transmitting Frequencies for the Bands 156 to 174 Mc/s  
for Radiotelephony in the International Maritime Mobile Service \***

| Channel<br>designators | Transmit Frequencies<br>Mc/s      |                          | Intership          | Port Operations     |                  | Public<br>Corres-<br>pondence |
|------------------------|-----------------------------------|--------------------------|--------------------|---------------------|------------------|-------------------------------|
|                        | Ship<br>ations                    | Coast<br>Stations        |                    | Single<br>Frequency | Two<br>Frequency |                               |
| 1                      | 156-05**                          | 160-65                   |                    |                     | 10               | 8                             |
| 2                      | 156-10                            | 160-70                   |                    |                     | 8                | 10                            |
| 3                      | 156-15**                          | 160-75                   |                    |                     | 9                | 9                             |
| 4                      | 156-20                            | 160-80                   |                    |                     | 11               | 7                             |
| 5                      | 156-25                            | 160-85                   |                    |                     | 6                | 12                            |
| 6                      | 156-30                            |                          | 1                  |                     |                  |                               |
| 7                      | 156-35                            | 160-95                   |                    |                     | 7                | 11                            |
| 8                      | 156-40                            |                          | 2                  |                     |                  |                               |
| 9                      | 156-45                            | 156-45                   | 5                  | 5                   |                  |                               |
| 10                     | 156-50                            |                          | 3                  | ***                 |                  |                               |
| 11                     | 156-55                            | 156-55                   |                    | 3                   |                  |                               |
| 12                     | 156-60                            | 156-60                   |                    | 1                   |                  |                               |
| 13                     | 156-65                            | 156-65                   | 4                  | 4                   |                  |                               |
| 14                     | 156-70                            | 156-70                   |                    | 2                   |                  |                               |
| 15                     | Guard band 156-725 - 156-775 Mc/s |                          |                    |                     |                  |                               |
| 16                     | 156-80                            | 156-80                   | CALLING AND SAFETY |                     |                  |                               |
| 17                     | Guard band 156-825 - 156-875 Mc/s |                          |                    |                     |                  |                               |
| 18                     | 156-90                            | 161-50                   |                    |                     | 3                |                               |
| 19                     | 156-95                            | 161-55                   |                    |                     | 4                |                               |
| 20                     | 157-00                            | 161-60                   |                    |                     | 1                |                               |
| 21                     | 157-05                            | 156-05**<br>or<br>161-65 |                    |                     | 5                |                               |
| 22                     | 157-10                            | 161-70                   |                    |                     | 2                |                               |
| 23                     | 157-15                            | 156-15**<br>or<br>161-75 |                    |                     |                  | 5                             |
| 24                     | 157-20                            | 161-80                   |                    |                     |                  | 4                             |
| 25                     | 157-25                            | 161-85                   |                    |                     |                  | 3                             |
| 26                     | 157-30                            | 161-90                   |                    |                     |                  | 1                             |
| 27                     | 157-35                            | 161-95                   |                    |                     |                  | 2                             |
| 28                     | 157-40                            | 162-00                   |                    |                     |                  | 6                             |

\* For assistance in understanding the Table, see notes a) to g) below.

\*\* See Note e). \*\*\* See Note f).

## NOTES REFERRING TO THE TABLE

- a) The figures in the column headed " Intership " indicate the normal sequence in which channels should be taken into use by mobile stations.
- b) The figures in the columns headed " Port Operations " and " Public Correspondence " indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
- c) During ice seasons, ship stations shall avoid harmful interference to communications on 156·30 Mc/s (Channel 6) between icebreakers and assisted ships.
- d) Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures underlined in the Table can obtain a reasonably adequate use of available services.
- e) The frequencies 156·05 and 156·15 Mc/s marked \*\* are used as ship station frequencies in Channels 1 and 3 respectively and as coast station frequencies in Channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- f) Channel 10 marked \*\*\* is also available for port operations in Region 2.
- g) In the United States of America, the frequencies 156·35, 156·90, 156·95, 157·05, 157·10, 157·15 and 157·20 Mc/s are not available for use in accordance with this Table. These frequencies will be used for other functions in the maritime mobile services.

ADD

## APPENDIX 12c

**Technical Characteristics for Transmitters and Receivers  
used in the Maritime Mobile Service in the 156-174 Mc/s Band**

1. Only frequency modulation with a pre-emphasis of 6 db/octave (phase modulation) shall be used.
2. The frequency deviation corresponding to 100% modulation shall approach 15 kc/s as nearly as practicable. In no event shall the frequency deviation exceed  $\pm 15$  kc/s. However, it is recognized that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference.
3. When transmitting on any of the frequencies designated in the Table in Appendix 12b, the emission of each station shall be polarized vertically at the source.
4. The audio frequency bandwidth shall be limited to 3 000 c/s.

## APPENDIX 13

**Hours of Service for ships in the Second Category**

(See Articles 20 and 35)

**Section I. Table**

MOD

| Zones   | Western limits                         | Eastern limits   | Hours of service<br>(Greenwich mean time)<br>(G.M.T.)           |  |
|---|--|--|---|--|
|   |  |  | 8 hours<br>(H8)   | 16 hours<br>(H16)  |
| <b>A</b><br>Eastern Atlantic Ocean, Mediterranean, North Sea, Baltic.                     | Meridian of 30° W, Coast of Greenland. | Meridian of 30° E, to the South of the coast of Africa, Eastern limits of the Mediterranean, of the Black Sea, and of the Baltic, Meridian of 30° E northwards from the coastline of Norway. | from 8 h. to 10 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h. | from 0 h. to 6 h.<br>8 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h.                |
| <b>B</b><br>Western Indian Ocean, Eastern Arctic Ocean.                                   | Eastern limit of Zone A.               | Meridian of 80° E, Western Coast of Ceylon to Adam's Bridge, thence Westward round the coast of India, Meridian 80° E to northwards from the coastline of the U.S.S.R.                       | from 4 h. to 6 h.<br>8 h. 10 h.<br>12 h. 14 h.<br>16 h. 18 h.   | from 0 h. to 2 h.<br>4 h. 10 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 24 h. |
| <b>C</b><br>Eastern Indian Ocean, China Sea, Western Pacific Ocean, Eastern Arctic Ocean. | Eastern limit of Zone B.               | Meridian of 160° E, as far as the coast of Kamchatka, Meridian of 160° E northwards from the coastline of the U.S.S.R.   | from 0 h. to 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>12 h. 16 h.     | from 0 h. to 6 h.<br>8 h. 10 h.<br>12 h. 14 h.<br>16 h. 22 h.                |

| Zones   | Western limits   | Eastern limits   | Hours of service<br>(Greenwich mean time)<br>(G.M.T.)             |   |
|---|--|--|---|---|
|   |  |  | 8 hours<br>(H8)   | 16 hours<br>(H16)   |
| D<br>Central Pacific<br>Ocean.                        | Eastern limit of<br>Zone C.  | Meridian of 140°W.   | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>20 h. 22 h.    | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>12 h. 18 h.<br>20 h. 24 h. |
| E<br>Eastern Pacific<br>Ocean.                        | Eastern limit of<br>Zone D.  | Meridian of 90°W, as<br>far as the coast of<br>Central America,<br>thence Western<br>coast of Central<br>America and of<br>Northern America. | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>16 h. 18 h.<br>20 h. 22 h.   | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 14 h.<br>16 h. 22 h.                |
| F<br>Western Atlantic<br>Ocean and Gulf<br>of Mexico. | Meridian of<br>90°W; Gulf of<br>Mexico, East-<br>ern coast of<br>North Ame-<br>rica. | Meridian of 30°W,<br>coast of Greenland.   | from to<br>0 h. 2 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h. | from to<br>0 h. 2 h.<br>4 h. 10 h.<br>12 h. 18 h.<br>20 h. 22 h.              |

HEADING NOC

Table NOC

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## Section II. Diagram

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 814-E  
8 December 1959PLENARY MEETING

The Drafting Committee recommends, for adoption by the Plenary Assembly, the following Plan for the future Radio Regulations

Article No.  
used in the  
blue documents

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CHAPTER II      FREQUENCIES

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| Article 4 | Special Arrangements                                       | 4      |
| Article 5 | Table of Frequency Allocations                             | 5      |
| Article 6 | Special Rules for the Assignment<br>and Use of Frequencies | 7 (6)* |
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\* The contents of the former Articles 6 and 8 will be inserted in the appropriate place.



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INTERNATIONAL FREQUENCY REGISTRATION BOARD

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| Article 10 | Procedure for the Bands Allocated<br>Exclusively to the Broadcasting Service<br>Between 5 950 kc/s and 26 100 kc/s | 11a |
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| Article 33 | General Radiotelephone Procedure<br>in the Maritime Mobile Service                                     | 29a     |
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\* Articles 36 and 46 have been deleted.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 815-E  
9 December 1959SUB-COMMITTEE 7A

## SUMMARY RECORD

Thirty-third meeting of Sub-Committee 7A  
(General Operating Conditions)

Monday 23 November 1959, at 9 a.m.

Chairman: Mr. P. Bouchier (Belgium)  
Vice-Chairman: Mr. D. Martin Flores Cantero (Mexico)

1. The Chairman announced the Agenda, consisting of Document Nos. 590, 594, 601, 602, 603, 605, 610 and 620. Document No. DT 808 had not been distributed in time for consideration at that meeting, and would therefore be examined the next afternoon.
2. In Document No. 590, the Delegation of the U.S.S.R. suggested alterations in the description of Zone B and in the third column of Zone C. After discussion, it was agreed to harmonize the wording in Columns 1, 2 and 3 in the light of the U.S.S.R. proposals already adopted.
3. The Delegation of the United Kingdom of Great Britain and Northern Ireland asked whether discussion was going to be re-opened on the H8 hours of service. The Delegation of Belgium expressed reserves as to the new H16 hours of service, particularly for Zone A. The Delegation of the United Kingdom of Great Britain and Northern Ireland again said that it was altogether against the proposal by the Federal Republic of Germany to alter the hours of service given in Appendix 13, since the proposed alterations would disorganize traffic lists and impede the transmission of meteorological messages. New Zealand, France and the French Overseas Territories supported Belgium and the United Kingdom. The Delegation of the Federal Republic of Germany repeated its previous explanations concerning overcrowding during listening watches and emphasized the advantages of regulating such traffic to ensure a more effective use of frequencies. The United Kingdom of Great Britain and Northern Ireland wanted the status quo maintained for two hours of service. The Delegation of the Netherlands observed that only a few vessels would be affected by a change in the H16 hours of service. The Delegate of Israel pointed out that the H16 hours of service had been adopted, and wondered whether Delegates had changed their minds. The Federal Republic of Germany saw no objection to maintaining the status quo for the H 16 hours of service. When the matter was put to the vote, there were 20 in favour of modifying the H8 hours of service while retaining H16



unchanged. There were 10 votes in favour of maintaining the status quo for the two hours of service H8 and H7, and 3 abstentions. The Delegation of the United Kingdom of Great Britain and Northern Ireland felt the vote had simply made matters worse, and would return to the question in Committee 7.

4. Regarding Document No. 594, the new version of Article 24 (Operators Certificates for Ship and Aircraft Stations), some corrections were notified for Page 5, Nos. 512 and 513. The Delegation of the United States referred to the doubts it had already expressed regarding the obligation to include a photograph in the certificate. The Delegation of the U.S.S.R. recalled that it had proposed a footnote saying that the photograph would not be insisted upon for certificates issued before the new Radio Regulations came into force. The Delegation of Venezuela agreed with the Delegation of the U.S.S.R. The Delegations of Pakistan and Sweden also regretted that a photograph should have been thus insisted upon. They thought that the wording of footnote 509.1 was unclear. The Delegation of the United Kingdom suggested the substitution of "holding" for "holders of".
5. The United Kingdom of Great Britain and Northern Ireland and Sweden suggested some drafting amendments to Page 8 of Document No. 594.
6. Regarding Page 7 of Document No. 594, the Delegation of the United States recalled Document No. 421 containing its Proposal No. 5555 for the modification of No. 518a). The text read as follows: "Administrations should take whatever steps they consider necessary to ensure the continued proficiency of operators after prolonged absences from operational duties". The United Kingdom of Great Britain and Northern Ireland, Canada and Ireland spoke in favour of the proposed text, and it was adopted.
7. Pages 8, 9 and 10 of Document No. 594 gave rise to no comments.
8. The Delegation of the U.S.S.R. pointed out that the title to No. 537 had been left out on Page 11 of Document No. 594.
9. No modification was proposed to Page 12 of Document No. 594.
10. There was lengthy discussion on No. 548, on Page 13 of Document No. 594. The United States, seconded by Brazil and Pakistan, wanted the text to read: "For all aircraft radiotelephone stations satisfying and conditions laid down in No. 513a) and for ship stations where the antenna power on the carrier does not exceed 50 watts, each Administration may itself.....". The United Kingdom and Portugal opposed the amendment. A vote was taken, and it was decided by 18 to 12, with 4 abstentions, to maintain the status quo for No. 548 of Document No. 594. The Delegation of the United States reserved the right to revert to the subject in Committee 7.

11. There were no comments on Page 14 of Document No. 594.
12. At the end of discussion, the Delegation of China reserved the right to make a statement to Committee 7 concerning the amendment of No. 513 and the addition of No. 513a) to Article 24.
13. Mr. Sannier, Chairman of Document No. DT 7A4, presented Document No. 601, Article 19, Sections 00,0 and I. There was some discussion concerning the footnote on Page 3, the Delegate of China suggesting that the word "radio-determination" be replaced by some other more suitable expression and the Delegate of the International Radio Maritime Committee (C.I.R.M.) favouring "practicable" in place of "possible", Mr. Sannier opposed the idea of modifying a text which had already been adopted by Committee 6, and the Delegate of China agreed.
14. Concerning No. 411c), in reply to observations by Portugal, the United States and Australia, Mr. Sannier said that a proposal by Ireland to restore the name of the company and of the flight number in No. 431 might make it necessary to come back to No. 411c) at a later date, so that it was better to leave it pending for the moment.
15. The Delegation of China suggested the use of the term "family of frequencies" in place of "series of frequencies" for No. 416a) and for the footnote on Page 5. The Delegates of I.C.A.O., Argentina, Pakistan and Ireland agreed. The Delegate of Sweden referred to the use of the term "coast stations", which was aeronautical in origin. Mr. Blow recalled that the term "family of frequencies" had previously been used by the P.F.B. to designate the services required for the maintenance of an operating service during a solar cycle. The Delegates of Portugal and the United Kingdom of Great Britain and Northern Ireland were against using such an expression. The Delegate of China proposed that the question be referred to Committee 8 for harmonization of the various texts, since the expression "series of frequencies" was used in other numbers in the Radio Regulations.
16. Document No. 601 was adopted with the amendments noted. The remainder of the Agenda was deferred until the next meeting.
17. The meeting rose at 2 p.m.

Rapporteur  
R. Monnat

Chairman  
P. Bouchier

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 816-E  
9 December, 1959

SUB-COMMITTEE 7A

## SUMMARY RECORD

### Thirty-fourth Meeting - Sub-Committee 7A

(General Operating Conditions)

Wednesday, 25 November, 1959 at 9.0 a.m.

Chairman: Mr. P. Bouchier (Belgium)

Vice-Chairman: Mr. Martin Flores Cantero (Mexico)

1. The sub-committee examined Documents Nos. 605 and DT 808 from Working Group 7A4 which had Mr. Sannier as Chairman.

The U.S.S.R. Delegation asked that in the List of Call Signs the names of the countries Esthonia, Lithuania and Latvia should be preceded by the words "Soviet Socialist Republic of".

The Chairman, whose proposal was supported by the Delegate of the United States, suggested that the decision should be referred to Committee 7. The suggestion was adopted.

2. Indonesia and the Netherlands made a statement concerning the name of New Guinea; the statement would likewise be brought to the knowledge of Committee 7.

3. Annex 1 to Document No. DT 808 - Table of Allocation of Call Signs - was adopted with minor amendments and the allocation of the series 7ZA to 8ZZ and 9ZA to 9ZZ to Saudi Arabia.

4. With regard to Annex 3 to Document No. DT 808, the United States Delegate asked that mention should be made in No. 420 of the RR of the Resolution concerning the call signs, by stating that, in accordance with the new method, the Secretary-General could attribute new series when the old series were exhausted. The Chairman would like to see a note added at the end of the table rather than have No. 420 amended. The proposal was adopted.

5. In Document No. 605, No. 422 should be brought into line with the French text. A proposal by China to insert "survival craft" in 425b was rejected by 14 votes to 9, with 7 abstentions. The United States Delegate recalled that on 18 November he had asked that in



numbers 428, 429, 430, 432 and 433 the words "use as a call sign" be replaced by "use for identification purposes". China, Indonesia, Norway and Portugal supported that proposal, which was adopted.

6. The Chairman submitted Document No. 597 containing a proposal by Ireland which was supported by the United States of America. The United Kingdom of Great Britain and Northern Ireland was against amending No. 431 of the RR on the grounds that the maritime stations did not know the abbreviations used by the aeronautical stations. Moreover, not all I.T.U. Members were Members of I.C.A.O. too. Identification should be quick, since in distress, speed was essential. He was opposed to the proposal since he felt it was likely to cause confusion in the maritime services. The Delegate of Argentina stressed that the United Kingdom Delegate's standpoint was purely a maritime one and that communication between ships and aircraft formed but a small percentage of aircraft communication, which as such should be governed by the principles of aeronautics. A lengthy discussion ensued during which Venezuela, Norway, Sweden, Switzerland and Japan supported the Irish proposal while Indonesia, Portugal and Poland shared the views of the United Kingdom.

The Delegate of Pakistan wished to know whether or not, considering the modifications to Article 20 (Service documents), aircraft call signs would continue to be published. Since they would not, he supported the Irish proposal.

The Chairman suggested that a vote should be taken. The Delegate of Israel asked for a roll call. The Chairman recalled that for a roll call, if a delegation asked another delegation to stand proxy, the request had to be in writing.

7. While awaiting information on the procedure for roll call voting, the Chairman went on with the study of Document No. 605. Australia proposed that the words "on board ships" in No. 429 a) should be deleted. The Delegate of South Africa supported the proposal. After a brief discussion, the proposal was put to the vote and was rejected by 26 votes to 2, with 2 abstentions.
8. The Delegate of France suggested that No. 433 in Document No. 605 should have "Mobile land stations" inserted in place of the beginning of the number. Agreed.
9. Drafting amendments would be made on pages 5, 7 and 8. Document No. 605 was adopted.



10. The Chairman announced that a roll call would be taken that evening on the Irish proposal contained in Document No. 597. The Agenda would include the study of Documents Nos. 602, 603, 604, 610 and 620.
11. The meeting rose at 12.30 p.m.

Rapporteur  
R. Monnat

Chairman  
P. Bouchier

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 817-E

14 December 1959

## PLENARY MEETING

### MINUTES

#### OF THE

#### THIRTEENTH PLENARY MEETING

Saturday, 5 December, 1959, at 9 a.m.

Chairman : Mr. Charles J. Acton (Canada)

Vice-Chairmen : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M. B. Sarwate (Republic of India)

Deputy Secretary of  
the Conference : Mr. Clifford Stead

#### Subjects discussed :

1. Approval of the Minutes of the Tenth Plenary Meeting (Document No. 737)
2. Draft Recommendation based on Proposal No. 4604 (Document No. 559 - Rev. 2)
3. Eighth Series of Texts submitted by the Drafting Committee (Document No. 683)



Delegates of the following countries were present:

Afghanistan; Albania (People's Republic of); Saudi Arabia (Kingdom of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian S.S.R.; Burma (Union of); Brazil; Bulgaria (People's Republic of); Canada; China; Vatican City (State of the); Colombia (Republic of); Belgian Congo and Territory of Ruanda-Urundi; Korea; Cuba; Denmark; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Japan; Malaya (Federation of); Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Oversea Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Thailand; Tunisia; Turkey; Union of South Africa and Territory of South-West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); British East Africa (Associate Member).

Recognized Private Operating Agencies:

Companhia Portuguesa Radio Marconi

International Organizations:

E.B.U., I.B.T.O.

The Chairman announced that Dr. Metzler, Director of the C.C.I.R., had undergone a very serious operation two days before. He would convey the good wishes of the Conference to him and their hope for a speedy recovery.

1. Approval of the Minutes of the Tenth Plenary Meeting (Document No. 737)

Unanimously approved.

2. Draft Recommendation based on Proposal No. 4604 (Document No. 559-Rev. 2)

The Delegate of Morocco explained that Document No. 559 had already been discussed in Plenary, and he had been asked to prepare a revised text incorporating certain drafting changes. There had been a

difference of opinion in the small working group as to whether the text between brackets in paragraph 2 should be deleted or not. In view of the discussion that had already taken place in Plenary, he proposed that a vote be taken on the subject.

Paragraphs a), b) and c) under "considering" were unanimously approved.

Paragraph 1 under "invites the C.C.I.R." was unanimously approved.

A vote was held with regard to the text between brackets in paragraph 2, and it was decided by 25 votes to 10, with 18 abstentions, to delete "(such as... etc.)" in paragraph 2.

With the above deletion, paragraph 2 was approved.

The last paragraph was also approved.

Document No. 559-Rev. 2 was approved as a whole.

The Chairman congratulated the Delegate of Morocco on his successful efforts in connection with the Draft Recommendation contained in Document No. 559-Rev. 2.

3. Eighth Series of Texts submitted by the Drafting Committee (Document No. 683)

The Chairman of the Drafting Committee explained that Document No. 683 contained the first part of the Table of Frequency Allocations. The presentation had been improved and simplified as compared to the Atlantic City version. Different sorts of type had also been used to distinguish between primary, permitted and secondary services, and he requested the approval of the Plenary Meeting on the measures taken.

The Delegates of Brazil and the United Kingdom congratulated the Drafting Committee and in particular its Chairman on the excellent work accomplished; the Conference owed a great deal to the Chairman of the Drafting Committee.

After a discussion in which the Delegates of the United Kingdom, the F.P.R. of Yugoslavia, the Argentine, Mexico, Switzerland and Italy participated, on the different types of print used in the Table, it was decided to authorize the Chairman of the Drafting Committee to select the most suitable print for the various types of service. Should any change be made, it would be in respect of permitted services, since the latter occurred least frequently in the Table.

After some discussion on the use of shortened forms of country names in the footnotes, it was decided that the abbreviated country names would replace their official titles solely in the footnotes, on condition that the Preamble mentioned the fact.

The Chairman congratulated the Chairman of the Drafting Committee on behalf of the Plenary Meeting for the excellent work he had accomplished.

Page 8-01 - Approved.

The Delegate of the U.S.S.R. recalled that his Delegation reserved its right to revert to the question of the inclusion in the Radio Regulations of the new radiolocation service.

Page 8-02

The Delegate of the Hungarian People's Republic requested the inclusion of a reference to his country in Note 111a.

It was so decided.

The Delegates of Colombia and the Argentine Republic referred to Note 110d, and asked whether the Spanish and French texts could be brought into line with the English wording.

The Delegate of the Argentine Republic said that the same comment applied to Note 111b. Some footnotes had originally been drafted in English and Spanish because they referred to Region 2.

The Delegate of Italy pointed out that under Region 1, Note 110d referred to radionavigation and not exclusively to maritime radionavigation.

The Delegate of the United States of America felt that the fact that maritime radionavigation under Region 2 had a reference to footnote 110d was very important. He hoped that the Drafting Committee would be able to find a French text complying fully with the principle contained in the English.

The Delegate of Colombia supported the views expressed by the Delegates of the United States and Italy.

It was decided that the Chairman of the Drafting Committee would revise the French and Spanish versions of Note 110d to make them parallel with the English text, and on this condition page 8-02 was approved.

Page 8-03

The Delegate of the United States of America said that, to the best of his knowledge, the United States was the only country in Region 2 which had requested the inclusion of the Radiolocation service for the band concerned. After considerable thought on the subject, the United States Delegation proposed the deletion of that service from the Table, under Region 2, unless any other country in that Region had any objection.

The Delegate of the Argentine Republic supported the proposal by the Delegate of the United States. A note should be added covering the use of low-power equipment for that purpose.

There being no objection, it was decided to delete "Radiolocation" from the Table.

The Delegate of Switzerland referred to Note 112 and asked which authority determined the "internationally adopted" radionavigation systems mentioned and whether approval of the Note would imply the implementation of the clause relating to the priority of aeronautical radionavigation. If so, he requested clarification as to the procedure to be applied for the transfer of Fixed service assignments from that band to another part of the spectrum.

The Delegate of the United States of America favoured the text given in Document No. 683, and said that "internationally adopted" had been taken from the Atlantic City text; it had been discussed at length at that Conference.

The Delegate of Switzerland maintained that it was important to know whether the adoption of an international radionavigation system automatically implied the priority of the aeronautical radionavigation service.

The Chairman said that the matter had indeed been discussed at length at Atlantic City; there was no indication as to how it could be solved. The I.C.A.O. was also involved in the matter. He felt that there was no alternative but to continue the action taken at Atlantic City, and therefore proposed that the statement by the Delegate of Switzerland should be recorded in the Minutes. It was so decided.

With the deletion of "Radiolocation", page 8-03 was approved.

Page 8-04

A discussion took place as to whether A4 and F4 classes of emission should be deleted from Note 112b, but it was decided to retain the text contained in Document No. 683.

It was also decided, at the proposal of the Delegate of the United Kingdom, to delete the reference to Note 112a in the first column in respect of 112-115 kc/s and 126-129 kc/s, since the allocations concerned should be exclusive, and to amend the text of Note 112a accordingly with regard to the band concerned.

The Delegate of the United Kingdom referred to the frequency band 115-126 kc/s, the whole of which, as a result of a modification made in Committee 4, appeared in Document No. 683 allocated in Region 1 to the fixed, maritime mobile and radionavigation services, on the basis that those three services had equal status as primary services.

He reminded delegates that allocations between 70 and 150 kc/s had proved extremely difficult, and the proposals for the various bands had been drawn up only after lengthy discussions in Working Group 4B and in Sub-Group 4B2. The proposals made by Working Group 4B contained in Document No. 640 were based on a complete analysis of the requirements of the various services in those bands. As a result, the Working Group had agreed that in Region 1, in the frequency band 115-126 kc/s, the primary allocation in the sub-band 115-117.6 kc/s should, except in two countries, be to continuous-wave systems of radionavigation, based on the fact that there was an important system of radionavigation already using frequencies in that sub-band in Region 1. It had been decided that the allocation should appear as a footnote numbered 113a until Committee 4 took a decision on the question. At no time was there any dispute about the principle that radionavigation should have priority, except in the case of the two countries whose names appeared as an exception to the allocation in Note 113a.

It had, however, been decided in Committee 4 by a narrow majority to delete Note 113a without making alternative provision for priority for the radionavigation service in the Table. The United Kingdom Delegation believed that such a decision was based on an incomplete appreciation of the situation. In view of the importance of the radionavigation service concerned, therefore, and bearing in mind that the allocation proposed by Working Group 4B had been most carefully considered, the Delegate of the United Kingdom urged the Plenary Meeting to reconsider the decision taken by Committee 4.

He accordingly proposed that draft footnote 113a in Document No. 599 be reinstated.

The Delegate of Denmark strongly supported the comments made by the Delegate of the United Kingdom, and his proposal that Note 113a be re-inserted. It was essential for the safety of life that the radionavigation system have priority in the band concerned.

The Delegate of the U.S.S.R. had studied the 115-117.6 kc/s band most carefully and in view of the fact that the safety of aircraft was involved, had decided to review his position since the discussion in Committee 4 relating to footnote 113a. He therefore supported the proposal by the Delegate of the United Kingdom.

The Delegate of the Federal Republic of Germany also supported the proposal to re-insert Note 113a.

The Delegate of France said that the name of France was mentioned in the text of draft Note 113a in Document No. 599, and he found it difficult to agree to the United Kingdom proposal that radionavigation in the band concerned should be on a primary basis. Plans had been drawn up according to which assignments had been put into operation and if one of the three services to which the band had been allocated now became primary, the

assignments of the other two services would be in an inferior position although they were in conformity with the plan. The French Delegation therefore considered that it was essential that the three services mentioned under 115-126 kc/s in the Table should have equal status.

Furthermore, the text of Note 113a required amendment; it would be clearer to list those countries where radionavigation was a primary service rather than refer to the two countries where it had secondary status.

The Delegate of Spain warmly supported the United Kingdom proposal. The radionavigation service was vital to human safety and should be a primary service.

A vote was held on the United Kingdom proposal, and it was decided by 28 votes to 7, with 20 abstentions, that Note 113a, as it appeared in Document No. 599, would be inserted at the foot of page 8-04.

The Delegate of France, in view of the result of the vote, reserved the right to revert to the matter and requested that it be recorded in the Minutes that the Plenary Meeting, in taking such a decision, had indirectly modified the plan adopted at the E.A.R.C. in 1951 for the Fixed and Mobile services in that part of the spectrum.

The Delegate of the Federal Republic of Germany asked that it be recorded in the Minutes that his Delegation also made a reservation on the subject.

With the addition of footnote 113a, page 8-04 was approved.

Page 8-05

It was decided, at the request of the Delegate of the Hungarian People's Republic, to insert "Hungary" in the list of countries given in Note 116a.

It was also decided to replace "110-160 kc/s" in the second line of Note 114 by "90 -160 kc/s" and to amend Note 112b on page 8-04 accordingly.

The Delegate of the Ukrainian S.S.R. proposed that Notes 117 and 118 should be interchanged, and it was decided to leave the matter, and a drafting change proposed by the Delegate of Canada, to the Chairman of the Drafting Committee. On that basis, page 8-05 was approved.

Page 8-06

Approved, with the insertion of Ethiopia in the list of countries in Note 119.



Page 8-07

It was decided to delete Ukraine from the list of countries in Note 125a, and to insert Roumania and Hungary.

The Delegate of the U.S.S.R. proposed that, with regard to Note 125a, the aeronautical radionavigation service be allocated as a permitted service in the case of the U.S.S.R. only - it would remain on a secondary basis in so far as the other countries mentioned were concerned. The considerable development of that service in the U.S.S.R., and the size of the territory, meant that the aeronautical radionavigation service could not be confined to the bands specifically allocated to it. In view of the fact that safety of life was concerned, not only in respect of aircraft of the U.S.S.R. but also those of other countries flying over the territory of the U.S.S.R., he hoped that his proposal would meet with the same understanding as that received by the United Kingdom proposal in connection with Note 113a.

The Delegate of France referred to the Radiobeacon Plan drawn up at the Conference held in Paris in 1951.

The Delegate of Turkey could not agree to the U.S.S.R. proposal.

The Delegate of the United Kingdom felt that the U.S.S.R. proposal should be given sympathetic consideration, although it did present some problems. In fact the 285-315 kc/s band was allocated to maritime radionavigation but in the U.S.S.R. alternative use was being made of it. In view of the fact that the proposal concerned only the U.S.S.R., the great extent of the territory involved and the geographical separation of his country and the U.S.S.R., the United Kingdom delegation could accept it.

The Delegate of Turkey could not understand why there should be discrimination in favour of the U.S.S.R. He reminded the Delegate of the United Kingdom that Turkey was situated at approximately the same distance from the U.S.S.R. as was the United Kingdom. It was true that a vast territory was involved and for that reason he felt it was sufficient for the provisions of No. 88 of the Radio Regulations to be applied.

The Delegate of Greece thought that, if the U.S.S.R. were granted permitted service status for its aeronautical radionavigation service, the same rule should apply to all the countries listed in Note 125a.

The Delegate of the F.P.R. of Yugoslavia fully supported the statement made by the Delegate of Greece. In view of the comment by the Delegate of France, he foresaw some difficulty with regard to maritime radiobeacon frequency allocations, and felt that the aeronautical radionavigation service should remain on a secondary basis for all the countries listed in 125a. He also requested that Yugoslavia be included in Note 125a, and it was so decided.

The Delegate of Czechoslovakia favoured the retention of Note 125a as given in Document No. 683.

The Delegate of Sweden also favoured the text of 125a given in Document No. 683. He could not accept the U.S.S.R. proposal, and felt that the matter was very important since it concerned the safety of life.

The Delegate of France said that it was not a question of the distance separating countries. Radiobeacons had been operating in France for many years, in accordance with the provisions of No. 88 of the Radio Regulations, causing harmful interference to no-one. He referred to Document No. 242-Rev.2, which specified that secondary allocations should not cause harmful interference to stations of the service designated as having priority which were already in operation, or might be brought into operation at a later date. He could not favour special treatment of the U.S.S.R. allocations.

The Delegate of the U.S.S.R. pointed out that the territory of his country was vast and bordered on Regions 2 and 3; it would be seen from the Table that aeronautical radionavigation was given for Regions 2 and 3 in the same band. The status of permitted service would fully guarantee operation without interference; the U.S.S.R. was equally interested in the operation of the primary service, and would not allow harmful interference to be caused, in the interests of all countries. His country also had the provisions of No.88 of the Radio Regulations in mind.

The importance of the radionavigation service could not be compared to secondary status.

He had been surprised to hear the statements by the Delegates of Turkey and Greece in view of the guarantees furnished by the U.S.S.R. Should the interests of Turkey or Greece be infringed upon at any time, the U.S.S.R. would be quite prepared to consider the question and to safeguard the interests of all the countries concerned.

The Delegate of Greece said that his country had not yet installed any maritime radiobeacons. As far as he knew, aeronautical radionavigation was already in operation in the U.S.S.R. As the Delegate of France had pointed out, if the U.S.S.R. proposal were approved, Greece would not even have the right to install maritime radiobeacons in the future.

The Delegate of the U.S.S.R. replied that if such radiobeacons operated according to the plan they would have priority. If, on the other hand, Greece required additional frequencies for radiobeacons, and the matter depended upon the U.S.S.R. in any way, the latter would always be prepared to consider the question in such a way as to take account of the interests of both countries.

A vote was then taken on the U.S.S.R. proposal to provide for the aeronautical radionavigation service, in the case of the U.S.S.R. alone, on

a permitted basis in the 285-315 kc/s band; it was rejected by 10 votes in favour, and 20 against, with 14 abstentions.

The Delegate of the U.S.S.R. said that aeronautical radionavigation had been operating in the band concerned for many years. In connection with the result of the vote, he stated that the U.S.S.R. Administration would not be able to consider any claims of interference that would result from the secondary status of aeronautical radionavigation in the U.S.S.R.

The Delegate of the Federal Republic of Germany stated that his country, which was situated at some distance from the sea, had been operating the aeronautical radionavigation service in the band concerned, in accordance with No. 88 of the Radio Regulations. Countries in a similar position, such as Switzerland, would be operating the service on a secondary basis in accordance with Note 125a, and would thus have a certain priority over the operations of the F.R. of Germany. He therefore requested the inclusion of his country in Note 125a. It was so decided.

The Delegate of France said that it had not seemed necessary before to include France in Note 125a. In view of the inclusion of Switzerland and the F.R. of Germany, however, France would be in an unfavourable situation if her stations operated merely in accordance with No. 88 of the Radio Regulations. He therefore requested the inclusion of France in Note 125a.

In view of the number of countries requesting inclusion in Note 125a, he wondered whether it might not be preferable if the provisions applying to Regions 2 and 3 also applied to Region 1, so that the aeronautical radionavigation service would have secondary status also in Region 1.

The Delegates of the U.S.S.R. and the F.P.R. of Yugoslavia supported the proposal by the Delegate of France.

There being no objection, it was decided to delete Note 125a, and insert aeronautical radionavigation in the Table on a secondary basis under Region 1.

The Delegate of the United Kingdom referred to the fact that the situation had changed rapidly in the few minutes preceding the vote, because of the large number of countries requesting their inclusion in Note 125a. He stated that 285-315 kc/s, i.e. a mere 30 kc/s, was the only maritime radio-navigation band for radiobeacons. In the future ever-increasing use would doubtless be made of the aeronautical radionavigation service by all countries and serious difficulties would be encountered.

The Delegates of Italy, the Netherlands, Spain, Sweden, Portugal, Denmark and Israel associated themselves with the statement made by the Delegate of the United Kingdom, and expressed grave concern.

The Delegate of Sweden made the following statement:

"Sweden sees with very great regret that the small band 285-315 kc/s - allocated to the Maritime Radionavigation Service -- is according to the decision by this meeting also allocated (even only on a secondary basis) to Aeronautical Radionavigation. The Maritime Radionavigation service is of the utmost importance for the Safety of Life at Sea and this band should be exclusively allocated to the Maritime Radionavigation Service."

At the proposal of the Delegate of Italy, the Chairman announced that, in view of the number of reservations made, a vote would be taken as to whether the Table should be amended or not.

By 16 votes in favour and 13 against, with 18 abstentions, the proposal by the Delegate of France that aeronautical radionavigation be included in the Table on a secondary basis under Region 1 was upheld.

Page 8-07 was approved thus amended.

Subject to the amendments made in the course of the meeting, pages 8-01 to 8-07 inclusive of Document No. 683 were approved.

The meeting adjourned at 1 p.m.

Rapporteur :  
V. Bouladon

Deputy Secretary of the Conference :  
C. Stead

Chairman :  
Charles J. Acton

ADMINISTRATIVE  
RADIO CONFERENCEDocument No. 818-E  
9 December 1959

GENEVA, 1959

SUB-COMMITTEE 7ASUMMARY RECORDThirty-fifth meeting of Sub-Committee 7A  
(General operating conditions)

Wednesday, 25 November, 1959 at 8.30 p.m.

Chairman: Mr. P. Bouchier (Belgium)Vice-Chairman: Mr. Martin Flores Cantero (Mexico)

1. The Chairman opened the meeting by announcing that a roll-call vote would be taken on Proposal No. 5572, appearing in Irish Document No. 597.

The following countries had been asked to stand proxy for others:

The People's Republic of Bulgaria (for the People's Republic of Albania); Czechoslovakia (for the Roumanian People's Republic); France (for the States of the French Community and French Overseas Territories); the People's Republic of Poland (for the Hungarian People's Republic); the United Kingdom of Great Britain and Northern Ireland (for the Overseas Territories for the International Relations of which Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland are responsible); Venezuela (for Colombia); Uruguay (for Cuba); Brazil (for Peru); and Argentina (for Paraguay).

There was a vote by roll call, and the Irish proposal was adopted by 24 votes to 13, with 4 abstentions.

For: Argentina; Australia; Brazil; Colombia; the Belgian Congo; the Republic of Korea; Cuba; Denmark; Spain; the United States; Greece; Ireland; Japan; Mexico; Norway; Pakistan; Paraguay; Peru; Portugal; Sweden; Switzerland; United States Territories; Uruguay and Venezuela: (24)

Against: Belgium; China; the Hungarian People's Republic; Indonesia; Iran; Israel; New Zealand; the Netherlands; the People's Republic of Poland; the Federal Republic of Germany; the United Kingdom of Great Britain and Northern Ireland; the Overseas Territories for which Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland are responsible; the Union of South Africa: (13)

Abstentions: Canada; States of the French Community and French Overseas Territories; Italy and France: (4)

Fifty-one countries were revealed by the roll call vote to be unrepresented. Accordingly, Irish Proposal No. 5572 (Document No. 597) would be added to No. 431 of the Radio Regulations.

2. The Delegate of the United Kingdom of Great Britain and Northern Ireland: "I reserve the right of my Delegation to revert to this question in Committee 7. I refrained from joining further in the discussion in order that it should not be too prolonged. I have noticed that generally



speaking the aeronautical interests doubt whether confusion could arise in case of aeronautical distress. I note they are not sure. I sincerely hope that no case arises where confusion does develop, but if such a case does arise then it cannot be the fault of the maritime mobile services as we have pointed out the potential dangers."

3. The Delegate of France had abstained, having shared the misgivings felt by the Delegates of the United Kingdom of Great Britain and Northern Ireland, and Indonesia, in connection with the identification procedure just adopted. The aviation experts in the French Delegation had asked that Delegation to draw the attention of Sub-Committee 7A to the difficulties encountered by I.C.A.O. They had asked I.A.T.A to undertake an investigation, the findings of which were still not known.
4. The Delegate of Belgium shared the misgivings felt by the Delegate of the United Kingdom of Great Britain and Northern Ireland, and reserved the right to revert to the matter in Committee 7.
5. Document No. 605 was adopted, but the Chairman said that they would have to go back to Document No. 601, No. 411c, page 4. No. 411c was adopted too.
6. The Delegate of the United States reverted to No. 416a and asked that the following be included therein: "as far as possible". The Delegate of the Federal Republic of Germany seconded. The Delegates of the Union of South Africa, France, Overseas France, and the United Kingdom of Great Britain and Northern Ireland wondered whether the Sub-Committee could revert to a text already adopted. Was it necessary to include an amendment which could but weaken the force of the provision? The Chairman suggested that note be taken of the United States suggestion. Committee 7 could be left to decide thereon.
7. Documents Nos. 601 and 605 had been fully considered. Mr. John A. Russ (United States) proposed that Article 19 be thoroughly overhauled. It did not seem to him to make sense in its existing lay-out. The Delegate of Australia seconded.
8. The Chairman proposed to set up a little working party made up of the trilingual group (Messrs. Blow, Cantero and Monnat) plus Messrs. Sannier, Russ and Keith, to do the job. The proposal was adopted.
9. The Chairman submitted Documents Nos. 602, 603, and 604, which were adopted with a few little drafting changes.
10. Document No. 610 was adopted too, with a change in the title proposed by Overseas France and an addition to the end proposed by

Indonesia ("... and submit proposals to the next Administrative Radio Conference for changes to be made in Article 35, Section IV.").

11. Document No. 620 was adopted unchanged.
12. The meeting rose at a quarter past ten.

Rapporteur:

R. Monnat

(see Document No. 758)

Chairman:

F. Bouchier

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No 819-E  
9 December, 1959

SUB-COMMITTEE 7A

## SUMMARY RECORD

Thirty-Sixth Meeting of Sub-Committee 7A

Thursday, 26 November, 1959, 9a.m.

Chairman : Mr. P. Bouchier (Belgium)Vice-Chairman : Mr. Martin Flores Cantero (Mexico)

1. Mr. Ron (Chairman, Working Group 7A7) introduced Documents No. DT 740 807, 811, and 815, involved by his Group.
2. The Delegate of the United States said that in connection with the List of Radiolocation and Special Service Station, mentioned under d) on page 1 of Document DT 811, a note should be added to every page, showing that the data relative to radiolocation stations were provided for administrative purposes only and should not be used for radionavigation. There was a long discussion on the real value of the information given in the List. Portugal, the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics, Israel, Overseas France, and the Netherlands were against the note. The Delegate of the United States insisted, and after statements by the Federal Republic of Germany, Australia, China, and Mr. J.A. Kunz (Secretariat), he suggested that the following should appear at the head of the List : "This List should be used with circumspection (see Article 44)". The Delegate of the Federal Republic of Germany supported him, and the Delegate of the Union of Soviet Socialist Republics suggested the addition of : "... for navigational purposes, this List....". Mr. Ron supported the Soviet amendment. The Delegate of Australia did too. The Chairman called for a vote, whereupon the note was adopted by 21 votes to 4, with 2 abstentions.
3. The Delegate of France and of the French Overseas Territories wanted the following statement included in the minutes : "the Delegations of France and of the French Overseas Territories make every possible reservation as to the inclusion of this note in the List of Radiolocation and Special Service Stations. In their opinion, this note very considerably diminishes the value of this international document for the benefit of national publications which the under-developed Members of the Union find it exceedingly difficult to acquire. Accordingly, both Delegations reserve the right to revert to this matter in Committee 7."





4. After the tea break, Mr. Martin Flores Cantero took the Chair. The Delegate of the United States was against paragraph 4 in Document No. DT 811 (page 1). It had very good reasons for keeping the existing lay-out, in which stations were assembled according to States.
5. The Delegate of Norway reverted to No. 462 of Chapter VIII, deleted on 28 October, and wanted the paragraph to be reintroduced. Mr. Ron, backed up by Australia, was against reopening the discussion on that point, and asked Norway to revert to the matter in Committee 7.
6. The Delegate of Canada asked that the following reservation appear in the summary record of the meeting. It concerned List 11 (Document No. DT 811 page 3) : "the proposal by Working Group 7A7 to make List 11 into a list of fixed stations operating international circuits does not meet with the wishes of the Canadian Delegation. The proposed list is in effect a miniature frequency list and as such it would have very little, if any, use in so far as our Administration is concerned. United Kingdom of Great Britain and Northern Ireland Proposal 1454 "List 11 : List of Fixed Stations (alphabetical index of fixed stations, the frequencies of which are shown in List 1 arranged in order of countries)" was adopted by a vote of nineteen to twelve, and recorded in the minutes of the twenty-first meeting of this Sub-Committee. Canada supported this proposal and the publication of fixed stations with Part A deleted was quite acceptable to us. A number of delegates will no doubt agree that a list of fixed stations, to be of any value, should indicate both domestic and international circuits. While Canada would not press for a list of fixed stations above 30 Mc/s, we would oppose a list limited to international fixed circuits."

The Delegate of Portugal confirmed the previous statement by Canada and was against publication of the details mentioned in Document No. DT 811. A long discussion ensued. The Delegates of Switzerland, Australia, France, the Union of Soviet Socialist Republics, Portugal, Canada, China, and Israel all spoke, and delegates were reminded of the background to the question. It had been decided to do away with Part A and to keep five columns only, instead of thirteen. Eventually, since the discussion promised to be quite fruitless, the Delegate of Portugal proposed that the meeting be suspended. He was supported by the Delegate of France. The Delegate of Australia wanted a decision on List 11 without more ado. The Delegate of Israel was against a suspension. In accordance with Rule 13, paragraph 5, of the Rules of Procedure, the Chairman called for a vote, and it was decided, by 12 votes to 10, with 3 abstentions, to suspend the meeting.

7. The meeting rose at a quarter to one, and it was agreed that the matter would be taken up again that afternoon.

Rapporteur :

Vice-Chairman :

Chairman :

R. Monnat

Martin Flores Cantero

P. Bouchier

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 820-E  
9 December, 1959

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PLENARY MEETING

A G E N D A

Eighteenth Plenary Meeting

Wednesday, 9 December, 1959 at 8.30 p.m.

1. Fourteenth Series of Texts submitted by the Drafting Committee (Document No. 770).
2. Fourth bis Series of Texts submitted by the Drafting Committee (Document No. 764).
3. Thirteenth Series of Texts submitted by the Drafting Committee (Document No. 747).



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 821-E  
CORRIGENDUM No. 1  
18 December 1959

## PLENARY MEETING

### CORRIGENDUM

TO THE

MINUTES

OF THE

### FOURTEENTH PLENARY MEETING

Sunday, 6 December, 1959, at 9.30 a.m.

Page 5 First statement attributed to the Delegate of Mexico, amend to read:

"... 250 watts, unless harmful interference was caused to stations operated by the other services sharing the band."

Page 5 (last paragraph). Second statement attributed to the Delegate of Mexico, amend to read:

"The Delegate of Mexico said that calculations made after the decision taken by the Working Group had shown that in the 525-535 kc/s band operation with more than 100 KW was possible by day when the broadcasting station was sufficiently distant from the coast, especially if the soil was of low electrical conductivity. Night operation was possible too, with powers considerably in excess of 250 watts, if allowance be made for the technical resources available to broadcasting in that frequency order. He was willing to undertake technical discussions about the calculations made, to justify the change he was proposing."

Page 6 second paragraph, replace the statement attributed to the Delegate of Mexico by the following:

"The Delegate of Mexico deplored the outcome of the vote. His Government had been invariably opposed to any limits on the operation of its stations, of no matter what service, unless those limits were founded on technical considerations. Its attitude could not be more liberal, since, when authorizing its stations to work without such limits, it offered those which operated in other services the protection they required, applying for that purpose the technical standards adopted by the appropriate conferences or contained in the Final Acts of such bilateral or multilateral agreements as Mexico might be a party to. Hence he could but make the following statement:

" 'The Government of Mexico ..... etc.' "

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 821-E  
9 December, 1959

PLENARY MEETING

MINUTES

OF THE

FOURTEENTH PLENARY MEETING

Sunday, 6 December, 1959 at 9.30 a.m.

|   |   |  |
|---|---|--|
| <u>Chairman</u>                               | : | Mr. Charles J. Acton (Canada)  |
| <u>Vice-Chairman</u>                          | : | Mr. Juan A. Autelli (Argentine Republic)<br>Dr. M.B. Sarwate (Republic of India) |
| <u>Deputy-Secretary<br/>of the Conference</u> | : | Mr. Clifford Stead   |

Subjects discussed:

1. Eighth Series of Texts submitted by the Drafting Committee (Document No. 683) (continued)
2. Tenth Series of Texts submitted by the Drafting Committee (Document No. 705)
3. Ninth Series of Texts submitted by the Drafting Committee (Document No. 695)
4. Designation of the Member entitled "Group of the Different States and Territories represented by the French Overseas Postal and Telecommunication Agency" (Document No. 666)
5. Draft Resolution concerning the date of the next Administrative Radio Conference (Document No. 613)
6. Report by Committee C/3 - Contributions of Countries represented by Delegations having the Status of Observers (Document No. 704)



Delegates of the following countries were present:

Afghanistan; Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian S.S.R.; Bolivia; Brazil; Bulgaria (People's Republic of); Canada; China; Colombia (Republic of); Belgian Congo and Territory of Ruanda-Urundi; Korea; Cuba; Denmark; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Italy; Japan; Malaya (Federation of); Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Thailand; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay; Venezuela (Republic of).

Recognized Private Operating Agencies: Companhia Portuguesa Radio  
Marconi  
B.B.C.

International Organizations: E.B.U.,  
I.B.T.O.,  
I.C.A.O.,  
I.C.S.

The Chairman proposed that the Administrative Radio Conference should adopt the same time limit as the Plenipotentiary Conference for the presentation of statements which Delegations might wish to have included in the Final Acts. The Plenipotentiary Conference had decided that the final date for the acceptance of such statements should be 10 December at midnight.

The Delegate of France pointed out that it was unlikely that the first reading of the texts would be completed by that date.

The Delegate of the Union of Soviet Socialist Republics agreed that the final date for submitting statements should be postponed at least until 14 December.

It was agreed that a decision on the date should be postponed until a later meeting.

The Chairman urged Delegations which had submitted proposals to make sure that they had been dealt with in committee.

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The Delegate of Hungary asked that his country should be included in the list in paragraph 136a.

It was so agreed.

The Delegate of the United States of America suggested that the attention of the Drafting Committee should be invited to the position of maritime radionavigation for Region 2 in the band 405 - 415 kc/s. It did not seem that the intention of Committee 4 to give priority to maritime radionavigation in certain circumstances was correctly reflected in the table on page 8 - 08.

The Delegate of Canada supported that suggestion.

The Delegate of France, speaking as Chairman of the Drafting Committee, said that his Committee would agree to consider the question on condition that the intention was clear. There appeared to be some conflict between the position of maritime radionavigation in the table and in footnote 133.

The Delegates of the Argentine Republic and Mexico agreed that there was apparently some confusion and that the text should reflect the intention of Committee 4.

The Chairman suggested that the delegates of the countries of Region 2 should meet during the suspension of the meeting to find a solution to the problem which would then be handed to the Chairman of the Drafting Committee. The revised draft would appear in the pink documents for the second reading.

It was so agreed.

The Delegate of Switzerland suggested that footnote 138a, which appeared on page 5 of Document No. 457, should be re-inserted on page 8 - 08. The footnote was as follows: "In Albania, Austria, Belgium, Bulgaria, India, Iran, Italy, Pakistan, Philippines, Sweden, Switzerland, Czechoslovakia, Turkey, Yugoslavia and the U.S.S.R., the frequency band 415 - 490 kc/s is allocated on a secondary basis to the aeronautical radionavigation service". It should be possible to re-instate the footnote since a similar one had been added for Region 1 on page 8 - 09 (footnote 140b), for a situation which was almost identical.

The Delegates of India and Austria supported that proposal.

The Delegate of Italy opposed the proposal since it was essential that a band should be reserved for the maritime mobile service, especially in Region 1.

The Delegate of France also opposed the reinsertion of the footnote which was an attempt to introduce aeronautical radionavigation into a band which had for long contributed to the safeguarding of human life at sea because it had been exclusively reserved for that purpose.

The Delegate of the U.S.S.R. supported the proposal of Switzerland, which would help to ensure the proper regulation of frequencies used for aeronautical radionavigation.

A vote was taken on the proposal by Switzerland to re-instate footnote 138a. The proposal was rejected by 13 votes to 25 with 19 abstentions.

Page 8 - 09

The Delegate of the Federal Republic of Germany asked that the name of his country should be inserted in the list in footnote 140b.

It was so agreed.

The Delegate of Mexico asked whether there was a technical reason for the provision in footnote 140c that the carrier power of any broadcasting station in the 525 - 535 kc/s band should not exceed 250 Watts.

The Delegate of the U.S.A. said that the ad hoc group which had considered the Brazilian proposal, which was the origin of the footnote, had felt that 250 Watts should be the ceiling figure. That was one of the bases on which overall agreement on the 510 - 525 kc/s band had been reached and he urged the Delegate of Mexico not to press his proposal.

The Delegate of the Argentine Republic pointed out that an increase in power close to maritime frequencies could give rise to difficulties.

The Delegates of Canada and Brazil supported that view.

The Delegate of Venezuela said that the band 525 - 535 kc/s was very congested in the Caribbean area, and his delegation had agreed to the original proposal on condition that no interference was caused to established services. He therefore agreed with previous speakers that the footnote must be retained as it stood.

The Delegate of Colombia expressed his agreement.

The Delegate of Mexico insisted that the question should be discussed on a technical basis and not on the basis of the hypothetical need of services. The footnote should be amended to provide that higher carrier power could be used provided that no harmful interference was caused to the stations operating in the other services. The same band was being used for broadcasting in Region 1, which showed that higher power could be used.



A vote was taken on the retention of footnote 140c as it stood. It was decided by 9 votes to 1 with 3 abstentions that the footnote should remain unchanged.

The Delegate of Mexico made the following statement:

"The Government of Mexico reserves the right to assign to its broadcasting stations operating in the band 525 - 535 kc/s power to be determined by purely technical and practical considerations with a view to protecting the services of stations sharing this band".

The Delegate of the U.S.S.R. drew attention to footnote 140b, and proposed that in the table on page 8-09, aeronautical radionavigation should be included on secondary basis for Region 1 in the same way as for Region 2 and Region 3.

The Delegate of Italy preferred that the table and footnote 140b should remain unchanged since the latter included countries outside Region 1 for example, India and Pakistan.

The Delegate of the Union of South Africa supported that view.

A vote was taken on the U.S.S.R. proposal to include aeronautical radionavigation on a secondary basis for the band 510 - 525 kc/s under Region 1, with the consequential amendment to footnote 140b (the deletion of Region 1 countries). The proposal was adopted by 15 votes to 9 with 14 abstentions.

The Delegate of the U.S.S.R. said that his country had highly developed aeronautical radionavigation services in the band now being considered. In the U.S.S.R. there were fewer frequencies in use than in the western and southern parts of the Region, or in the Region 2 or 3 countries which had a common frontier with the U.S.S.R.. He proposed, therefore, that the following footnote should be added:

"In the U.S.S.R. the band 525 - 580 kc/s is also authorized for the aeronautical radionavigation service on condition that it causes no interference to the broadcasting service."

It was felt that this would help to safeguard human life and would cause no prejudice to other countries.

The Delegates of Greece and Turkey opposed the U.S.S.R. proposal.

A vote was taken on the U.S.S.R. proposal to add a new footnote. The proposal was rejected by 9 votes to 23 with 8 abstentions.

The meeting was suspended at 11 a.m. and resumed at 11.30 a.m.

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Page 8 - 10

The Delegate of France, speaking as Chairman of the Drafting Committee, said that the intention of footnote 143d and the accompanying footnote had been to avoid the duplication of identical provisions. Article 34 seemed, however, to concern only maritime mobile services, and it appeared that some clarification was needed.

The Delegate of the United Kingdom said that he understood that the question had been referred to Committee 7, which was proposing that the reference should be included in Article 9.

The Chairman asked the Delegate of Morocco whether, in view of that statement, he wished to maintain 143d and the accompanying footnote which he had originally proposed.

The Delegate of Morocco said that he did not insist on the footnote if the reference could be inserted clearly in Article 9.

The Chairman proposed that 143d and the accompanying footnote should be deleted together with the reference to 143d under Region 1 in the table.

It was so agreed.

Page 8 - 11

The Delegates of Greece and Yugoslavia asked that the names of their countries should be deleted from the list in footnote 145.

It was so agreed.

Page 8 - 13

The Delegate of Denmark asked for clarification of footnote 152a, which seemed to give rise to some doubt as to the extent to which suppression of harmonics should be carried out.

The Delegate of France, speaking as the Chairman of the Drafting Committee, said that he understood the footnote to mean that the radio astronomy service would benefit from the same protection as the services operating in other bands. That could cover harmonics or other cases, such as powerful transmitters nearby, and was an attempt to protect the radio astronomy service.

The Delegate of Denmark thanked the Chairman of the Drafting Committee for his explanation.

The Chairman pointed out that footnote 231b on page 12 - 16 of Series 12 of the blue documents contained a different wording, which might be more appropriate for footnote 152a.

Document No. 821-E  
Page 8

The Delegate of Denmark said that footnote 231b did not mention standard frequency guard-bands.

The Chairman proposed that footnote 152a should be left as it stood.

It was so agreed.

Page 8 - 12

Page 8 - 12 was approved with several minor drafting changes.

Page 8 - 14

Page 8 - 14 was approved without discussion.

Page 8 - 15

Page 8 - 15 was approved without discussion.

Page 8 - 16

The Delegate of France, speaking as Chairman of the Drafting Committee, said that it had been agreed in the Drafting Committee that the definitions in paragraph 7 of Document No. 242 (Rev. 2) should be reproduced as a preamble to the Table of Frequency Allocations. The Committee had made a first quick examination of paragraphs 7A, 7B and 7C. The examination would have to be pursued since, on completion of the study of the Table of Frequency Allocations, it was realized that certain difficulties arose in regard to applying the definitions contained in those paragraphs. Paragraph 7A defined primary and secondary services and the relation of the secondary service to the primary service. Paragraph 7B defined the main and permitted services together with the obligations of those services. Paragraph 7C defined additional or alternative services or rather, the allocation of additional or alternative services. In a number of cases it was not possible to apply those definitions in the footnotes and at the same time to satisfy the demands of delegations; for example, footnote 140b as amended, which provided that "the band 510 - 525 kc/s is also allocated on a secondary basis to the aeronautical radionavigation service". Such difficulties might lead to confusion. It was therefore suggested that the preamble to the Table of Frequency Allocations should explain clearly the role played by the footnotes. If it was explained that they indicated the replacement of an allocation in a certain country or Region by another allocation the words "alternatively" or "additionally" would not have to be used and there would be less risk of confusion. For example, if the word "alternatively" were deleted in footnote 153a, the amended text would be a clear statement of Australia's intention to use the band 3 500 - 3 700 kc/s for the amateur service and the band 3 700 - 3 900 kc/s to the fixed and mobile services.

The Delegates of Australia, the Union of South Africa and Greece together with the Chairman supported the proposal.

The Delegate of the U.S.S.R. asked that the proposal should be submitted in writing to the next Plenary Meeting so that its meaning should be quite clear.

The Chairman of the Drafting Committee agreed to submit his proposal in writing.

The Vice-Chairman of the I.F.R.B. (Mr. Gracie) said that the I.F.R.B. would have no difficulty in interpreting the status of the assignments concerned if the proposal were adopted.

The Eighth Series of texts submitted by the Drafting Committee were approved subject to the amendments and reservations noted above.

The Delegate of the United Kingdom made the following statement:

"Document No. 683 covering the band 10 - 4 000 kc/s contains the first results of the prime task which this Conference has been charged to perform, namely, the replanning of the radio spectrum to meet the needs of the future. In view of the great endeavours that have been made in this work the United Kingdom Delegation regrets that it has to comment on the results achieved for the band 70 to 130 kc/s. It will be recalled that the United Kingdom proposed allocations on a world-wide basis to meet the present and future needs of all classes of radionavigation in the bands 70 to 90 and 110 to 130 kc/s. However, in the Table the allocations in these two bands for Region 2 implicitly exclude any provisions for aeronautical radionavigation. The United Kingdom Delegation believes it to be wrong in principle to impose an artificial restriction upon the use of frequencies in a band where in practice the accepted techniques are equally applicable for ships and aircraft. In the light of these considerations the United Kingdom finds the position unsatisfactory, the more so because the decisions reached could be construed as restricting the eventual selection of a long-range aid."

The Meeting was suspended at 12.15 p.m. and resumed at 3 p.m.

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2. Tenth series of texts submitted by the Drafting Committee (Document No. 705

Document No. 705 was examined page by page.

Pages 10 - 00 and 10 - 01

The Delegate of the U.S.S.R. asked for number 154 of the Atlantic City Radio Regulations to be restored.

After a discussion between the Delegates of Norway, France, Denmark, Sweden, the United Kingdom, Australia and the U.S.S.R., the Chairman put the U.S.S.R. proposal to restore number 154 of the Atlantic City Regulations to the vote by a show of hands.

There were 10 votes in favour, 6 against and 17 abstentions.

In accordance with paragraph 3 of Rule 15 of the Rules of Procedure, the question was referred to a later plenary meeting.

Page 10 - 02

Approved.

Page 10 - 03

Approved, with the word "exceptionally" inserted between "may" and "be" in the note 157.

Page 10 - 04

Approved.

Page 10 - 05

The Delegate of Denmark asked for the words "on a secondary basis" to be included in note 161a. He was supported by the Delegate of Norway.

Agreed.

Pages 10 - 06 and 10 - 07

Approved.

Page 10 - 08

The Delegate of Denmark having pointed out that number 161a already provided for space and earth-space services, it was agreed that the Drafting Committee would study the matter.

Document No. 705 as a whole was approved, subject to drafting changes and subsequent discussion of numbers 154 and 155.

3. Ninth Series of Texts submitted by the Drafting Committee (Document No. 695)

Document No. 695 was examined page by page and was approved with drafting amendments, to be forwarded to the Drafting Committee.

Other amendments approved were:

On page 9 - 01, number 605: amend the first line to read:  
"2. The use of the Morse code signals given in the Telegraph Regulations...."

On page 9 - 02, number 618: for "between 4 000 and 23 000 kc/s", read "between 4 000 and 27 500 kc/s".

On page 9 - 07, number 656: reword the beginning as follows:  
"(4) If the transmission of a radiotelegram is to take place on a frequency and/or with a class of emission other than that used for the call, the transmission....etc."

On page 9 - 07, number 658a: read "(2) A series of numbers which has begun in radiotelegraphy should be continued for radiotelegrams sent by radiotelephony and vice versa."

On page 9 - 22, number 680db: replace the last two lines by  
"... of transmission, to the choice of frequency and to the duration and suspension of work."

It was also agreed that the Spanish text should contain a phonetic transcription of MAYDAY and SEELONCE.

4. Designation of the Member entitled "Group of the Different States and Territories Represented by the French Overseas Postal and Telecommunication Agency" (Document No. 666)

Document No. 666 was noted.

5. Draft Resolution concerning the date of the next Administrative Radio Conference (Document No. 613)

The Deputy Secretary of the Conference suggested that, in view of decisions taken by Committee F and Committee D of the Plenipotentiary Conference, the Draft Resolution in Document No. 613 had become unnecessary.

The Assembly agreed.

6. Report by Committee C/3: Contributions of countries represented by Delegations having the status of observers (Document No. 704)

The Plenary Assembly agreed that in view of the decision taken by the Plenipotentiary Conference, countries represented in the Conference by delegations having observer status should contribute to the expenses thereof.

The meeting rose at 5.15 p.m.

Rapporteurs: Deputy Secretary of the Conference:  
E. Hamilton Clifford Stead  
H. Heaton

Chairman:  
Charles J. Acton

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 822-E  
9 December 1959**

**SERIES 20**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source  | Document No.                                  | Reference                               | Page   | Remarks |
|---------|---|---|--|---------|
| Com. 7. | 582   | Appendix 8                              | 20—01  |         |
| Com. 4. | 773<br>675                                    | Recommendation<br>„                     | 20—04<br>20—07                                     |         |
| Com. 6. | 782   | Recommendation                          | 20—08  |         |
| Com. 7. | 686<br>723<br>463<br>696<br>610 Rev<br>DT 628 | Recommendation<br>„<br>„<br>„<br>„<br>„ | 20—09<br>20—11<br>20—15<br>20—17<br>20—18<br>20—20 |         |
| Com. 4. | 722   | Resolution                              | 20—21  |         |
| Com. 5. | 593<br>593                                    | Resolution<br>„                         | 20—22<br>20—24                                     |         |
| Com. 7. | 620   | Resolution                              | 20—27  |         |
|         |   |   |  |         |
|         |   |   |  |         |
|         |   |   |  |         |



## APPENDIX 8

|             |  |   |
|-------------|--|---|
| Title (MOD) | <b>Documents with which Ship and Aircraft Stations shall be provided</b><br>(See Articles 20, 22, 23, 24, 28 and Appendix 6) |   |
| Title MOD   | <b>Section I. Ships for which a Radiotelegraph Installation is required by International Agreement</b>                       |   |
|             | These stations shall be provided with :  |   |
| (MOD)       | 1st  | licence provided for by Article 22 ;  |
| NOC         | 2nd  | certificates of the operator or operators ;   |
| NOC         | 3rd  | log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence ; <ul style="list-style-type: none"> <li>a) all communications relating to distress traffic in full,</li> <li>b) urgency and safety communications,</li> <li>c) communications exchanged between the ship station and land or mobile stations,</li> <li>d) service incidents of all kinds,</li> <li>e) if the ship's rules permit, the position of the ship at least once a day ;</li> </ul> |
| MOD         | 4th  | Alphabetical List of Call Signs of Stations used in the Maritime Mobile Service ;   |
| MOD         | 5th  | List of Coast Stations ;  |
| MOD         | 6th  | List of Ship Stations ;   |
| MOD         | 7th  | List of Radiodetermination and Special Services Stations ;  |
| NOC         | 8th  | Radio Regulations and Additional Radio Regulations, also such provisions of the Convention as relate to the radiocommunication service on board ship ;  |



NOC 9th telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams ;

NOC 10th if administrations concerned consider it necessary, the Telegraph Regulations.

Title NOC

## **Section II. For other Radiotelegraph Stations on Ships**

MOD

These stations shall be provided with : the documents mentioned in items 1 to 6, 8 and 9 of Section 1.

Title ADD

## **Section IIa. For Stations on Board Ships for which a Radiotelephone Installation is Required by International Agreement**

These stations shall be provided with :

- 1st licence provided for by Article 22 ;
- 2nd certificates of the operator or operators ;
- 3rd the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence :
  - a) a summary of all communications relating to distress, urgency and safety traffic ;
  - b) a summary of communications exchanged between the ship station and land or mobile stations ;
  - c) a reference to important service incidents ;
  - d) if the ship's rules permit, the position of the ship at least once a day ;
- 4th a list of coast stations with which communications are likely to be conducted, showing watchkeeping hours, frequencies and charges ;
- 5th the provisions of the Radio Regulations and Additional Radio Regulations applicable to the maritime mobile radiotelephone service.

|       |       |   |
|-------|-------|---|
| Title | MOD   | <b>Section III. For other Radiotelephone Stations on Ships</b>  |
|       |       | These stations shall be provided with :   |
|       | MOD   | 1st the documents mentioned in items 1 and 2 of Section IIa ;   |
|       | MOD   | 2nd the documents mentioned in items 3, 4 and 5 of Section IIa, in accordance with the requirements of the administrations concerned.   |
| Title | NOC   | <b>Section IV. For Ship Stations Equipped with Multiple Installations</b>   |
|       |       | These stations shall be provided with :   |
|       | MOD   | 1st for each installation, if necessary, the documents mentioned in items 1 to 3 of Section I, or in items 1, 2 and 3 of Section IIa ;  |
|       | MOD   | 2nd for only one installation, the other documents mentioned in Sections I or IIa, as appropriate.  |
| Title | NOC   | <b>Section V. For Aircraft Stations</b>   |
|       |       | These stations shall be provided with :   |
|       | (MOD) | 1st the documents mentioned in items 1 and 2 of Section I ;   |
|       | NOC   | 2nd the log (diary of the radio service) as defined in item 3 of Section I, unless administrations have adopted other arrangements for recording all information which the log should contain ; |
|       | MOD   | 3rd the documents containing official information relating to stations which the aircraft station may use for the execution of its service.   |

Source : Committee 4

Doc. No. : 773

RECOMMENDATION No. ...

**Relating to the Radio Astronomy Service**

The Administrative Radio Conference, Geneva, 1959,  
*considering that*

- a) recognition has now been given to the radio astronomy service in the regulations, and that allocations to this service are included in the table of frequency allocations ;
- b) the radio astronomy service is devoted to the reception of extremely low-level electromagnetic radiations of extra-terrestrial origin, and needs therefore to be protected from radiations of man-made origin, to the maximum degree practicable ;
- c) the radio astronomy service must compete for spectrum space with other existing and expanding radio services ;
- d) the ability of the radio astronomy service to share frequency bands with other radio services is limited ;
- e) in the case of many radio astronomy service installations it would be very difficult, once they were established, to change the frequency bands being observed or locations to avoid harmful interference ;
- f) the radio astronomy service should be assured a reasonable degree of stability in the frequency bands allocated to it, so as to permit long-term study programmes ;
- g) the desired protection for the radio astronomy service in many of the bands allocated for its use will be difficult to obtain and can be achieved only on a long-term basis ;

- h) the provisions of the new table of frequency allocations do not meet fully the stated requirements of the radio astronomy service, particularly in Band 8 and the lower part of Band 9 ;
- i) it will assist administrations to protect the radio astronomy service if information is available showing the locations of the observatories, and those of the bands allocated in the table of frequency allocations that are in use at each observatory ;

*recommends that*

1. administrations, when preparing for the next Administrative Radio Conference, should consider further the question of frequency allocations for the radio astronomy service ;
2. the possibility of making a firm allocation in the range 37-41 Mc/s be specially considered and that, in the meantime, when assigning frequencies to stations of other services, administrations should avoid, as far as practicable, the frequencies  $38.0 \pm 0.25$  Mc/s or  $40.68 \pm 0.25$  Mc/s, which are in use, or are proposed for use for radio astronomical observations in certain countries ;
3. administrations when drawing up frequency assignment plans should leave, as far as practicable, the band 606-614 Mc/s free for radio astronomical observations or should assign frequencies to stations of other services in this band in such a way as to afford the maximum practicable protection for the radio astronomy service ;
4. administrations should notify to the Secretary General the locations of observatories in their countries, and those of the bands allocated in the frequency allocation table that are in use at each observatory ; and that the Secretary General should communicate this information to Members and Associate Members and

*draws the attention of organizations concerned with radio astronomy to the following :*

1. the relevant provisions of the radio regulations ;
2. the need to maintain close co-ordination with their national administrations on matter of frequency usage ;
3. the need to select, for observatories, sites that are as remote as possible from sources of radio interference.

Source : Committee 4  
Doc. No. : 675

RECOMMENDATION No. ...

**Concerning the Matter of Providing a Suitable Frequency  
Allocation for a Collision Avoidance System  
in the Aeronautical Radionavigation Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a)* the ever-increasing speed of modern aircraft and, taking into account that an adequate collision avoidance system providing a means of enhancing safety in the air has not been developed but is urgently required ;
- b)* that if such a collision avoidance system, when developed, requires the use of radio frequencies, it should be accommodated in one of the frequency bands allocated to the aeronautical radionavigation service ;
- c)* that it is impossible to forecast at this time whether the bands allocated to the aeronautical radionavigation service will prove to be suitable for such a system ;

*recommends*

that administrations and the International Civil Aviation Organization pay especial attention to the progress being made in developing a suitable collision avoidance system, noting that if radio frequencies are required, and if the bands allocated to the aeronautical radionavigation services are not suitable for such a system, international consideration of this matter will be necessary.

Source : Com. 6  
Doc. No. 782

RECOMMENDATION No. . . .

**Relating to the Technical Standards of the I.F.R.B.**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

that the Technical Standards of the International Frequency Registration Board (I.F.R.B.) are in daily use in the technical examination of frequency assignment notices,

*urges the C.C.I.R.*

to expedite all phases of the programme of studies which will assist the I.F.R.B. in the further refinement of its Technical Standards,

*and invites the administrations*

in their participation in the work of the C.C.I.R. and its study groups, to give special priority to those studies.

Source : Committee 7

Doc. No. : 686

RECOMMENDATION No. ...

**Relating to the Phonetic Figure Table**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that in radiotelephone communications between stations normally using different languages there are, at present, no standard phonetic expressions for figures ;
- b) that Appendix 11 to the Radio Regulations permits such figures to be expressed by means of the application of the phonetic letter equivalents, printed on the same horizontal line of the table, with the indication " as a number " spoken twice before and after such expressions ;
- c) that this system of using letters for designating figures may lead to confusion ;
- d) that in the aeronautical mobile service international civil aviation uses a phonetic figure table (see column A below) which is subject to modification as a result of speech tests still being carried out ;
- e) that it has been agreed to evaluate the efficiency of a phonetic figure table (see column B below) in the " International Radiotelephone Code for Maritime Mobile Service " which itself is the subject of Recommendation No. . . . ;

*believes*

- a) that the adoption of a standard phonetic figure table is essential for the expression of figures between stations employing radiotelephony where different languages are normally used, especially in cases where the safety of life is involved ;



- b) that the ideal solution would be a phonetic figure table comprised of words or expressions, the pronunciation of which would be more or less identical in the greatest possible number of languages and chosen to avoid any confusion with the words used in the phonetic letter table ;

*recommends*

1. that administrations study this whole question, taking into account the existing and proposed phonetic figure tables, their evaluation, and any modifications which might be made to them, also the possibilities of developing a new table likely to meet with universal appeal ;
2. that the result of their study should be communicated to the Secretary General for the information of the Members and Associate Members of the Union, well in advance of the next Administrative Radio Conference ;
3. that at the next Administrative Radio Conference consideration be given to the adoption of a standard phonetic figure table for the use of all services in radiotelephone communications where language difficulties are likely to arise.

| Figure        | Word to be used |          |
|---------------|-----------------|----------|
|               | <i>A</i>        | <i>B</i> |
| 0             | ZE-RO           | ZERO     |
| 1             | WUN             | WUN      |
| 2             | TOO             | BIS      |
| 3             | TREE            | TER      |
| 4             | FOW-ER          | QUARTO   |
| 5             | FIFE            | PENTA    |
| 6             | SIX             | SAXO     |
| 7             | SEV-EN          | SETTE    |
| 8             | AIT             | OCTO     |
| 9             | NIN-ER          | NONA     |
| Decimal point | DAY-SEE-MAL     | DECIMAL  |
| Thousand      | TOUS-AND        |          |

Source : Committee 7  
Doc. No. : 723

RECOMMENDATION No. . . .

**Relating to the Use of Single Sideband Systems  
by the Maritime Mobile Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

a) that the main advantages of single-sideband systems (SSB) compared with double sideband systems (DSB) for mobile radiotelephony are as follows :

1. reduction of bandwidth required per channel ;
2. increase in signal-to-noise ratio or, alternatively, reduction in transmitter power (and hence antenna voltage) for the same signal-to-noise ratio, improvements dependent upon the degree of carrier suppression ;
3. reduction of the type of distortion that is due to selective fading ;
4. reduction of interference, particularly that due to beat notes between carriers, dependent on the degree of carrier suppression ;
5. reduction of interference, due to cross-modulation between adjacent channel transmissions ;

b) that the disadvantages of SSB compared with DSB for mobile radiotelephony are as follows :

1. more rigorous requirements for transmitter and receiver stability ;

2. greater complexity of apparatus ;
  3. higher prices of the equipment ;
  4. higher maintenance costs for the equipment ;
  5. impracticability of conversion of existing mobile DSB equipments for SSB operation ;
  6. Doppler effects that are significant for very high speed mobile units ;
- c) that the frequencies in Band 6 used for radiotelephony in the maritime mobile service (i.e. world-wide 1 605 to 2 850 kc/s and additionally in Region 1, 3 155 to 3 800 kc/s):
1. include the international calling and distress frequency 2 182 kc/s ;
  2. are shared with the fixed service ;
  3. are used by many low-tonnage ships, some compulsorily and others voluntarily fitted exclusively with DSB Radiotelephone equipments for use in Band 6 ;
- d) that the parts of Band 7 (i.e. 4 000 kc/s to 27 500 kc/s for the maritime mobile service and 2 850 kc/s to 24 000 kc/s for the aeronautical service use) allocated to the respective services :
1. do not include any international distress frequency ;
  2. are exclusively allocated to these services ;
- e) that in the maritime mobile service the advantages of SSB operation predominate over the disadvantages to a greater extent in Band 7 than in Band 6 ;

- f) that, in the maritime mobile service, in the interests of safety of life at sea, the introduction of SSB operation should not be allowed to discourage the extension of voluntary fitting of DSB radiotelephony equipment in Band 6 ;

*recommends*

for the maritime mobile service :

1. that SSB operation be introduced as far as operationally required for radiotelephony in Band 6 and Band 7 ;
2. that coast stations be prepared to communicate with both DSB and SSB shipborne equipment ;
3. that for SSB equipment, the technical characteristics recommended by the C.C.I.R. be used as a guide ;
4. that the upper sideband be used \* ;
5. that the channel arrangements be such that two SSB channels are accommodated within each existing DSB channel and the bandwidth of the SSB emissions be kept within such limits as will permit this to be done ;
6. that the transmitter audio frequency band be 350 to 2 700 c/s with a permitted amplitude variation of 6 db ;
7. that in Band 6 ship stations employing SSB equipment be able to insert a carrier at a level sufficient to permit satisfactory reception by DSB receivers when communicating with DSB stations ;

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\* Exceptionally, in the 4-23 Mc/s bands independent sideband (ISB) may be used by special arrangement between administrations.

8. that, in the particular case of transmissions on the radiotelephony calling and distress frequency 2 182 kc/s, all transmissions be made either by DSB, or by SSB with carrier insertion sufficient to permit satisfactory reception by DSB receivers ;

9. that the attention of administrations be drawn to the fact that there would be technical and operational advantages in designating certain frequencies for international common use for ship-shore and inter-ship working.

Source : Committee 7  
Doc. No. : 463

RECOMMENDATION No. . . .

**Relating to the Possible Transfer of Certain Provisions  
of the Radio Regulations and the Provisions of the Additional  
Radio Regulations to the Telegraph Regulations**

The Administrative Radio Conference, Geneva, 1959,

*considering that*

- a) the Administration of Japan has proposed that certain provisions of the Radio Regulations, e.g., Article 39 (Indication of the Station of Origin of Radio Telegrams) and Article 41 (Accounting for Radiotelegrams) and provisions of the Additional Radio Regulations (excepting some provisions of Article 8, e.g., No. 2114, etc., which should be included in the Radio Regulations) should be entrusted hereafter to review by the International Telegraph and Telephone Administrative Conference, and be transferred to the Telegraph Regulations (Proposal No. 15 to the Administrative Radio Conference, Geneva, 1959) ;
- b) these provisions are concerned exclusively with the handling of tariffs relating to radiotelegrams and are of the same nature as those contained in the Telegraph Regulations ;
- c) there might be an advantage in discussing such provisions at the Telegraph and Telephone Administrative Conferences ;
- d) opinion is divided on whether or not the work and the duration of the Administrative Radio Conference would be reduced if the revision of the provisions concerning the handling of radiotelegrams were entrusted to the Telegraph and Telephone Administrative Conference ;

- e) in the case of such transfer, it might be necessary for experts in the maritime mobile service to attend both the Administrative Radio Conference and the Telegraph and Telephone Administrative Conference ;
- f) if such transfer took place, it might be necessary for ships to carry compulsorily the Telegraph and Telephone Regulations as well as the Radio Regulations (see Appendix 8 of the Radio Regulations) ;

*recommends that*

1. administrations should make a careful study of Proposal No. 15 submitted by Japan, prior to the convening of the next Administrative Radio Conference ; and
2. administrations should consider submitting proposals to the next Administrative Radio Conference on whether it is appropriate to retain in the Radio Regulations and the Additional Radio Regulations those Regulations referred to in Proposal No. 15. In the latter case, administrations should indicate which Regulations should be transferred to the Telegraph Regulations.

Source : Committee 7

Doc. No. : 696

RECOMMENDATION No. . . .

**Relating to Hours of Service for Ship Stations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the number of ship stations equipped to operate on frequencies in the authorized bands between 4 000 and 23 000 kc/s is increasing ;
- b) that these bands are heavily loaded during single operator watch periods ;
- c) that, in accordance with the provisions of Appendix 13, watch is maintained at the same times, on ship stations in four of the zones, thus causing peak loading of the calling and working bands during single operator watch periods ;
- d) that this uneven loading in the bands between 4 000 and 23 000 kc/s leads to prolonged calling and excessive waiting by ships ;
- e) that more efficient use could be made of these bands if the hours of watchkeeping by single operator ship stations were staggered ;

*recommends*

1. that administrations should study the problem of watchkeeping by ship stations with a view to achieving a more even traffic loading of the bands between 4 000 and 23 000 kc/s ;
2. that administrations submit proposals to the next Administrative Radio Conference.



Source : Committee 7  
Doc. No. : 610 Rev.

RECOMMENDATION No. . . .

**Relating to a Re-Classification of International  
Public Correspondence Categories of Ship Stations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that those radiotelegraph ship stations which are required, in accordance with the provisions of Nos. 844 and 847 and Appendix 13 of the Radio Regulations, to maintain a daily service of eight hours (H8) or sixteen hours (H16), are both placed in the same category (the second) for the international service of public correspondence ;
- b) that in the same service all ship stations equipped exclusively for radiotelephony are placed in a single category in accordance with the provisions of No. 851, irrespective of the daily watch they maintain and regardless of the growth of traffic and other developments ;

*recommends*

1. that administrations study the advisability of increasing
  - the number of categories of ship radiotelegraph stations to four, viz. 24 hours, 16 hours, 8 hours, and no fixed hours, of watch,

— the categories of ships equipped exclusively for radiotelephony to a number more suited to actual watch-keeping conditions ;

2. that administrations present to the next Administrative Radio Conference proposals concerning this matter, with a view to amending the Section IV, Article 35 of the Radio Regulations.

Source : Committee 7  
Doc. No. : DT 628

RECOMMENDATION No. ...

**Relating to Operator Certificates**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that Article 24 of the Radio Regulations provides that Operator Certificates for ship and aircraft stations are classified as radio-telegraph, and radiotelephone ;
- b) that with the introduction of new modes of telecommunication, including the use of automatic communication devices, it becomes increasingly difficult to categorize such modes as either radio-telegraph or radiotelephone ;
- c) that all such devices, as well as radiotelephone stations, may be operated by holders of radiotelegraph operator certificates ; and many automatic communication devices may be operated by holders of radiotelephone certificates ;
- d) that, in particular, it may be desirable to modify the present categories of operator certificates ;

*recommends*

that administrations consider this problem and submit to the next Administrative Radio Conference proposals for the amendment of Article 24 taking into account the use of such new communication techniques.

Source : Committee 4  
Doc. No. : 722

RESOLUTION No. ...

**Relative to the Convening of a Special Regional Conference**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that, according to No. 180b of the Radio Regulations a special regional conference is to be held not later than 1 May, 1960, to draw up agreements and associated plans for the bands 68-73 Mc/s and 76-87.5 Mc/s ;
- b) the desirability to hold this conference at Geneva with regard to the availability of relevant data of the International Frequency Registration Board and C.C.I.R., and the experienced staff of the Secretariat of the Union ;
- c) that this conference should be convened by the Secretary General under Article 42 of the Convention ;

*requests the Secretary General*

to take the necessary steps for convening the special regional conference, referred to in No. 180b of the Radio Regulations, at Geneva, under Article 42 of the Convention.

Source : Committee 5  
Doc. No. : 593

RESOLUTION No. . . .

**Relating to the Use of Aeronautical Mobile (R) Frequencies**

The Administrative Radio Conference at Geneva, 1959,

*considering*

- a)* that the Plan developed for the use of high frequency channels for the Aeronautical Mobile (R) Service (Appendix 16a to the Radio Regulations) has been substantially implemented ;
- b)* that air operations are subject to continuous changes ;
- c)* that these changes require attention by the administrations concerned, but
- d)* that, in seeking to satisfy new communication requirements, no decision should be taken that will prevent or handicap the co-ordinated utilization of those high frequency (R) band allotments as prescribed in the Plan ;
- e)* that the families of high frequencies allotted to the Major World Air Route Areas (MWARA), Regional and Domestic Air Route Areas (RDARA) and Sub-Areas have been chosen considering propagation conditions which allow for the selection of the most suitable frequencies for the distance involved ;
- f)* that it is essential to distribute the communication traffic load as uniformly as possible over frequencies of the same order ;
- g)* that specific steps should be taken to ensure that the correct order of frequency is used ;

*resolves*

that administrations, individually or in collaboration, take the necessary steps :

1. to make as great a use as possible of very high frequencies in order to lessen the load on the high frequency (R) bands ;
2. to make as great a use as possible of antennae of appropriate directivity and efficiency in order to minimize possibilities of mutual interference within an area or between areas ;
3. to co-ordinate the use of families of frequencies necessary for a given route segment in accordance with the technical principles in Appendix 16a and, in the light of the propagation data available, in order that the most appropriate frequencies be used with an aircraft at a given distance from the aeronautical station providing service over the route segment concerned ;
4. to improve operating techniques and procedures and to use equipment which will make it possible to attain the highest possible efficiency in handling air-ground high frequency communications ;
5. to collect precise data on the operation of their high frequency communication systems, particularly that having a bearing on technical and operating standards, so as to facilitate re-examination of this Plan ;
6. to establish, through regional agreements, the best method to provide the required communications for any new long-distance international or regional air operation which is not or cannot be accommodated within the system of MWARA and RDARA, in such a manner as not to cause harmful interference to the utilization of frequencies as prescribed in the Aeronautical Mobile (R) Frequency Plan.

Source : Committee 5  
Doc. No. : 593

RESOLUTION No. ...

**Relating to the Preparation of Revised Allotment Plans  
for the Aeronautical Mobile Service**

The Administrative Radio Conference, Geneva, 1959,  
*considering*

- a) that the Frequency Allotment Plans for the Aeronautical Mobile Service produced by the International Administrative Aeronautical Radio Conference (I.A.A.R.C.), Geneva, 1949, and adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, have been substantially adopted for inclusion in the Radio Regulations ;
- b) that since the time of the I.A.A.R.C. there have been changes in the route patterns flown by international civil airlines ;
- c) that the rates of increase of international civil air traffic have differed amongst the various Major World Air Route Areas (MWARA's) ;
- d) that there are now new requirements for frequency allotments to serve the needs of international civil aviation outside the existing MWARA's ; for example, in the area of the North Pole and in the territories of the U.S.S.R. adjacent to the existing MWARA's ;
- e) that because of the higher speeds of aircraft there are now new requirements for frequencies to meet the needs of international civil aviation for particular purposes, for example, frequencies allotted in the Plans for the purpose of providing meteorological information to aircraft in flight ;

- f) that, on the other hand, certain provisions of the I.A.A.R.C. Plans are no longer required, for example, the provision for extending the MWARA frequency families, NSA-1 and NSA-2, into the whole of the European area ;
- g) that a limited number of new provisions to meet urgent requirements have been incorporated into the Plans at this Conference ;
- h) that the Plans contain a measure of flexibility which will permit some but not all new requirements to be satisfied ;
- i) that there are new aeronautical communication techniques under study and development which have a direct bearing on channel widths and on the number of channels required to meet essential communications needs of national and international aircraft operations. These include :
  - 1. extensions of the useful communication range and increased application of very high frequencies,
  - 2. new high frequency techniques to increase the speed and quantity of communications,
  - 3. new methods for more expeditious dissemination of meteorological information,
  - 4. improved selective calling systems ;
- j) that the new frequency allotment plans should adequately reflect the communication techniques above, together with anticipated improvements in aeronautical radionavigation techniques, having a direct influence upon the nature and quantity of communications handled and having an impact on spectrum space required ;
- k) that whereas the present Plans were produced on the basis of a large amount of material relating to the operational requirements, usages and procedures of the aeronautical mobile service, it has been impracticable for this Conference to obtain and study the corresponding material essential at this time to effect a complete review of the Aeronautical Mobile Service Plans ;



- l) that many countries did not have available at this Conference the information necessary to determine the extent to which the Frequency Allotment Plans meet current requirements for national and regional air operations ;
- m) that the International Telecommunication Convention, Buenos Aires, 1952, in Article 10, paragraphs 5 and 7, provides that an Extraordinary Administrative Radio Conference may revise the provisions of the Radio Regulations ;

*is of the opinion*

that the Aeronautical Mobile Service Plans contained in Appendix 16a of the Radio Regulations will have to be reviewed and administrations should urgently study the communications requirements of their national and international air operations in order to establish when, in the best interests of aviation, such a review shall be undertaken ;

*resolves*

that, when the Administrative Council deems it appropriate and timely, an Extraordinary Administrative Radio Conference be convened under the provisions of Article 10 of the International Telecommunication Convention to review Appendix 16a and the provisions of the Radio Regulations associated therewith and to complete its work before the next Ordinary Administrative Radio Conference.

Source : Committee 7  
Doc. No. : 620

RESOLUTION No. ....

**Relating to the Publication of Service Documents**

The Administrative Radio Conference, Geneva, 1959,

*decides*

that the early implementation of the provisions of Article 20 of the Radio Regulations and Appendix 6 would be of general advantage ;

*resolves*

that the Secretary General may, at his discretion, implement these provisions in part or in whole, in advance of the effective date of the Radio Regulations.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 825-E

ADDENDUM No. 1

10 December 1959

PLENARY MEETING

DRAFT

Texts to be included in Article 5

## Special Provisions

1. Where it is indicated in these Regulations that a service may operate in a specific frequency band "on a non-interference basis", this implies that this service cannot claim protection against harmful interference caused by other services to which the band is allocated under Chapter II of these Regulations.
2. Except if otherwise specified in a footnote, the term "fixed service", when appearing in Section IV of this Article, does not include systems using ionospheric scatter propagation.
3. The term "authorised" applied to a specific service in a footnote to the Table means that this service is among the services to which the band concerned is allocated.



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 823-E

9 December, 1959

PLENARY MEETINGDRAFT

## ARTICLE 5

FREQUENCY ALLOCATIONS BETWEEN 10 kc/s AND 40 Gc/sTITLE ADD Section I. Regions and ZonesTITLE ADD Section II. Categories of Services and Allocations107c ADD Secondary services - Primary services

107d ADD Where the name of a service is printed in "italics" (example ..... ) in the Table, this is a "secondary" service in the band concerned (see No. 107g).

107e ADD Where a band is indicated in a footnote to the Table as being allocated to a service "on a secondary basis" in an area smaller than a Region or in a country, this is a "secondary" service in this area or this country (see No. 107g).

107f ADD The other service or services, the names of which are printed in "small capitals" in the Table are called "primary" services.

107g ADD Stations of a secondary service:

- a) shall not cause harmful interference to stations of a primary service which are already in use or which may be put into use at a later date;
- b) cannot claim protection from harmful interference from stations of a primary service which are already in use or which may be put into use at a later date;



- c) can claim protection, however, from harmful interference from stations of services other than the primary service or services, which may be put into use at a later date.

107h ADD Permitted services - Main services

107i ADD Where the name of a service is printed in "grotesque light" (example ..... ) in the Table, this is a "permitted" service in the band concerned on a World-wide or Regional basis (See No. 107L).

107j ADD Where a band is indicated in a footnote to the Table as being allocated to a "permitted" service in an area smaller than a Region or in a country, this is a "permitted" service in this area or this country (see No. 107L).

107k ADD The other service or services, the names of which are printed in "italics" in the Table are called "main" services.

107L ADD Stations of a permitted service:

- a) shall not cause harmful interference to stations of a main service which are already in use. In the drawing-up of frequency plans, a main service shall have prior choice of assignments and, subsequently, should simultaneous requests for a frequency occur, a main service shall have prior right to the use of this frequency;
- b) can claim protection from harmful interference from stations of a main service which may be put into use at a later date;
- c) shall not be required to afford protection from harmful interference to stations of a main service which may be put into use at a later date, and

d) can claim protection from harmful interference from other stations of the permitted service which may be put into use at a later date.

107m ADD Additional services

107n ADD Where a band is indicated in a footnote to the Table as being allocated "also" to a service in an area smaller than a Region or in a country, this is an "additional" service, i.e. a service which is added in this area or this country to the service or services which are indicated in the Table (see No. 107o).

107o ADD If the footnote does not include any restriction imposed on an additional service apart from the restriction to operate in a particular area or country, stations of this service shall have equality of right to operate with stations of the other service or services, the names of which are printed in "small capitals" in the Table.

107p ADD If restrictions are imposed to an additional service in addition to the restriction to operate in a particular area or country, this is indicated in the footnote to the Table.

107q ADD Alternative allocations

107r ADD Where a band is indicated in a footnote to the Table as being allocated to one or more services in an area smaller than a Region or in a country, this is an "alternative" allocation, i.e., an allocation which replaces, in this area or country, the allocation indicated in the Table (see No. 107s).

- 107s     ADD             If the footnote does not include any restriction imposed on stations of the service concerned, apart from the restriction to operate in a particular area or country, these stations shall have an equality of right to operate with stations of the service or services, the names of which are printed in "small capitals" in the Table, and to which the band is allocated in other areas or countries.
- 107t     ADD             If restrictions are imposed to stations of a service to which an alternative allocation is made, in addition to the restriction to operate in a particular country or area, this is indicated in the footnote to the Table.
- TITLE    ADD    Section III. Description of the Table
- 107u     ADD             The heading of the following Table includes three columns, each of which corresponds to one of the Regions (see No. 100). Where an allocation occupies the whole of the width of the Table or only one or two of the three columns, this is either a World-wide allocation or a Regional allocation, respectively.
- 107v.    ADD             The frequency band referred to in each allocation is indicated in bold type in the left-hand top corner of the box concerned. Numbers which appear in certain cases at the bottom part of the box, below the list of services to which the band is allocated, refer to the footnotes.
- 97                        Where a band is allocated, according to the following Table, to more than one service, either on a World-wide or Regional basis, such services are listed in the following order:
- a) services, the names of which are printed in "small capitals" in the Table;

- b) permitted services, the names of which are printed in  
"grotesque light" in the Table (see No. 107L);
- c) secondary services, the names of which are printed in  
"italics" in the Table (See No. 107g).

Within each of the categories a), b) and c), services are listed in alphabetical order in the French language. The order of listing does not indicate relative priority within each category.

109 MOD Section IV. Table of Frequency Allocations between 10 kc/s and 40 Gc/s



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 824-E  
10 December, 1959SUB-COMMITTEE 7ASUMMARY RECORDThirty-Seventh Meeting of Sub-Committee 7A

(General Operating Conditions)

Thursday, 26 November 1959, at 3 p.m.

Chairman : Mr. P. Bouchier (Belgium)Vice-Chairman : Mr. Martín Flores Cantero (Mexico)

1. In the absence of Mr. Bouchier, Mr. Martín Flores Cantero took the Chair.
2. Discussion of Document No. DT 811 was resumed. The Delegates of France, Canada, the Union of South Africa, the U.S.S.R., Israel, Australia, Portugal and the United Kingdom of Great Britain and Northern Ireland spoke during a lengthy discussion of No. 449 (RR). A vote was taken to decide whether List II should mention international circuits only or all circuits. It was decided by 13 to 4, with 5 abstentions, that international circuits only should be mentioned in List II.
3. The Delegate of Canada referred to his previous statement reproduced in the record of the thirty-sixth meeting. The Chairman returned to the Australian Proposal, which had been seconded by France and the U.S.S.R., to reduce the number of columns in the List to 5. It was decided by 18 votes to 0, with 5 abstentions, to reduce the number of columns.
4. The Delegation of Portugal explained that it had abstained from voting because the List would be rendered pointless by the proposed change. Mr. J. A. Kunz said which columns would have to be retained. Australia said that Column 1 should bear the name of the station, Column 2 the call sign, Column 3 the frequency, Column 4 the region with which the communication or communications were contemplated and Column 5 any remarks. Mr. Ron said that Footnote 1 would have to go into Column 1. After brief discussion, France backed the Australian proposal to put the question to the vote and the United States and the French Overseas Territories agreed. The Australian proposal was adopted by 14 votes to 0, with 6 abstentions.



5. On the resumption after the tea-break, Document No. DT 811 was adopted, subject to various amendments. It was agreed to delete the word "general" from the title of the statistics on Page 16. France and the French Overseas Territories wanted the following reservation to be included in the record of the meeting : "In accepting Document No. DT 811, the Sub-Committee explicitly stated that it did not want the new List to retain the radiolocation stations and special service stations in Sections 3 (Loran station) and 5 (Radar station) appearing in the last edition of List of Radiolocation Stations (5th edition, November, 1957). The Delegations of France and the French Overseas Territories felt that those sections might well be retained and reserved the right to revert to the matter in Committee 7."
6. There was discussion on the reservation by France and the French Overseas Territories, which was supported by Italy and China. The United Kingdom and Australia did not agree. The Chairman moved that since the majority obviously did not want to reopen discussion on sections of Document No. DT 811 which had been adopted in its entirety, France should raise the matter in Committee 7 if it so desired.
7. Document No. DT 807 was adopted in its entirety, it being stipulated that the rapporteur should bring Nos. 449 and 470 bis into line with the decisions taken regarding Document No. DT 811.
8. Documents Nos. 815 and 740 were adopted.
9. The meeting rose at 6.45 p.m.

Rapporteur :

R. Monnat

Vice-Chairman :

Martin Flores Cantero

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 825-E  
10 December, 1959SUB-COMMITTEE 7A

## SUMMARY RECORD

Thirty-eighth Meeting of Sub-Committee 7A(General Operating Conditions)

Friday, 27 November, 1959, at 5 p.m.

Chairman : Mr. P. Bouchier (Belgium)  
Vice-Chairman : Mr. Martin Flores Cantero (Mexico)

1. Mr. Bouchier was away, so Mr. Flores Cantero took the chair. Mr. William F. Bradley (United States), Chairman of Working Group 7A8, submitted Document No. DT 830, Appendix 7: symbols used in "service" documents. The document was adopted with a series of little drafting changes.
2. Mr. Monnat (Switzerland), Chairman of Working Group 7A6, introduced Document No. DT 838. There were two little drafting changes to be made in the English version of No. 488 a). The Delegate of the Union of Soviet Socialist Republics could accept the report on the first page but repeated his reservation about the new No. 488 a). A licence to operate a station ought to be delivered by the country within which the station worked; entire responsibility for the station was borne by that country. There was some little discussion, during which Mr. Monnat read out the text in Document No. DT 829 of Working Group 5A, and the Delegate of France called for a vote on the new 488 a) proposed by Working Group 7A6. The new text was adopted by fourteen votes to two, with nine abstentions.
3. The meeting rose at 6.15 p.m.

Rapporteur

R. Monnat

Vice-Chairman

Martin Flores Cantero



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 826-E

9 December, 1959

COMMITTEE 7

## SUMMARY RECORD

Sixteenth Meeting of Committee 7 (Operations Committee)

Saturday, 21 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)Agenda: Document No. DT 806

The Agenda was accepted.

1. Summary Record of Thirteenth Meeting (Document No. 586)

The Summary Record of the Thirteenth Meeting, Document No. 586, was adopted without amendment.

2. Report of Working Group 7F (Document No. 582)

Mr. de Mesquita was invited to the platform to assist in the examination of the report of his Working Group. In introducing Document No. 582 Mr. de Mesquita said that practically all of the decisions reached in his Working Group were unanimous. However, he had to point out in regard to Proposals Nos. 2661 and 2664 of Morocco that these had received no support in the Working Group but the Delegate of Morocco had not been present during the discussions and might wish to raise these Proposals again. In addition the limitations of 250 Mc/s in RR 1003 had not been agreed by the Delegate of Czechoslovakia who intended to raise the question again in a plenary meeting. Finally he said that the Delegate of France would wish to make a statement during the examination of the Document.

Mr. de Mesquita gave details of typing and editorial errors in the report and it was agreed that these should be taken note of by the Rapporteur. The Document was then considered page by page.

Page 3

There being no objection the texts on page 3 of Document No. 582 were adopted without amendment.

Page 4

The Delegate of Indonesia, referring to paragraphs 2, 7 and 11, suggested that the phrase "call sign or other identification" should be



used throughout. This Proposal was supported by the Delegates of China and France and, there being no objection, it was adopted. Subject to these amendments the texts on page 4 were adopted.

Pages 5, 6 and 7

There being no objection the texts on pages 5, 6 and 7 were adopted without amendment.

Page 8

The Delegate of the United Kingdom suggested that in RR 1003 "texts" should be replaced by "plain language and figures". However, in view of the comments of the Delegates of China and Brazil this proposal was not pressed.

There being no support for Proposals Nos. 2661 and 2664 they were not adopted. Accordingly the texts on page 8 were adopted without amendment.

Pages 9 - 17

There being no objection the texts on pages 9 - 17 of Document No. 582 were adopted without amendment.

Page 18

A proposal by the Delegate of the United Kingdom that in § 5a, (1) a) the last sentence should be amended to read "Where one or more of the observational characteristics fall into a lower class the bearing should be classified in this lower class." was supported by the Delegates of France and Indonesia. However, this amendment was not acceptable to the Delegate of the United States who felt the discretion allowed the operator would assist materially in obtaining the most accurate fixes of position. To meet this point the Delegate of the United Kingdom suggested that the whole of the last sentence should be deleted and this proposal was acceptable to the Delegate of the United States of America. However, the Delegate of China could not accept this amendment and he proposed that the texts as they appeared on page 18 should be adopted without amendment. After a short discussion this question was put to the vote and nineteen delegates preferred the amended proposal of the United Kingdom; five were against and six abstained. It was accordingly agreed that the last sentence in paragraph 5a (1) a) should be deleted and, with this amendment, the texts on page 18 were adopted.

Pages 19 - 21

The texts on pages 19 - 21 were adopted without amendment.

Page 22

Consideration of Appendix B was deferred until a later meeting.

Pages 23 - 25

The texts on pages 23 - 25 were adopted noting that Committee 8 should amend the fourth item on page 23 to be the title of the document containing the alphabetical lists of call signs used in the maritime service; that the fifth item would be two lists namely the List of Coast Stations and the List of Ship Stations; and that the sixth and seventh items would also have to be amended in accordance with the decisions taken in regard to Article 20. It was further noted that in Section 2 on page 24 a consequential amendment would be required to 5th\*.

In consideration of page 24 a proposal by the Delegate of Indonesia that the List of Ship Stations need only be carried at the discretion of Administrations was supported by the Delegate of Japan. However this proposal was not acceptable to the Delegates of the United Kingdom, France and the United States of America.

It was rejected by eighteen votes to four with eight abstentions.

Statement by the Delegate of France.

The French Delegation withdrew its Proposal No. 2675 concerning watch radar stations at a meeting of the Working Group. It did this at the end of a long discussion and admitted that the wording of the new number 1033 was more like a string of facts than a provision of the Regulations.

However, it firmly stated that in its opinion it was necessary to provide a statutory regulation for watch radar stations. The number of such stations was increasing rapidly and the French Delegation considered that such stations should appear in the List of Special Service Stations. That is why France had put forward in addition to Proposal No. 2675 Proposal No. 134 for the definition of such stations and Proposal No. 2827 for amending Appendix 7.

3. Appendix B (Document No. 577)

The Delegate of India said that it had been agreed in Committee 6 that the report from that Committee (as given in Document No. 577) did

not adequately reflect the views of Committee 6 and it was agreed that a new document would be published with an amended statement as well as the annexes containing the suggested new Article and he suggested amending Appendix B.

4. Document No. 587

The Chairman explained that Committee 6 had suggested that a Joint Ad Hoc Working Group of the two Committees be set up to examine these proposals. It was agreed that the Committee 7 representatives on the Working Group would be the Delegates of Brazil, France, the Federal Republic of Germany, Sweden, the United Kingdom and the United States of America and that the Delegate of France would act as Convener.

5. Addendum 1 to Document No. 522

Addendum 1 to Document No. 522 was adopted without amendment.

This concluded the business of the meeting.

Rapporteur:

G. F. Wilson

Acting Chairman of the Meeting:

Y. Nomura

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 827-E  
9 December, 1959COMMITTEE 7

## SUMMARY RECORD

Eighteenth Meeting of Committee 7

(Operations Committee)

Wednesday, 25 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)

- Agenda :
1. Approval of texts for Article 24 (Document No. 594)
  2. Letters from Chairman of the Conference and Chairman of Committee 6.
  3. Any other business.

1. Approval of texts for Article 24 (Document No. 594)

Mr. Bouchier, Chairman of Sub-Committee 7A was invited to the platform to assist in the examination of Document No. 594.

He explained that this Document did not contain the Table of proposals which had been a feature of the earlier reports from Sub-Committee 7A. This information had been omitted in order to expedite the work of the Conference but would be given in a later report. He pointed out that several Delegations had made reservations on certain of the Regulations in Article 24 and these would be dealt with when the relative Regulations were considered. The Document was then considered page by page.

Pages 3 and 4

The texts on pages 3 and 4 were adopted without amendment.

Page 5

The Chairman of Sub-Committee 7A announced several amendments to the Document which had been agreed when it was read in Sub-Committee 7A. However, as, apart from Editorial amendments, these concerned RR 506 which was subsequently replaced, they are not listed in this document.





RR 506

The Delegate of the United States of America recalled that his Delegation had made a reservation in regard to RR 506 in so far as the requirement for a photograph was concerned and he distributed a proposed new text for this Regulation which, if adopted, would enable his Delegation to remove their reservation. The Delegate of the United Kingdom said that provided that the first sentence of the proposal was amended to read in the same way as the present Atlantic City Regulations the proposal would be acceptable to his Delegation. The Delegate of the United States of America had no objection to this amendment. In view of previous discussion the question was put to the vote immediately and the proposal of the United States of America was adopted by 18 votes to 8, there being three abstentions. This proposal was therefore adopted and RR 506 then read : "§ 3. (1) Each Administration takes the necessary steps to prevent to the maximum extent possible the fraudulent use of certificates. For this purpose, such certificates shall bear the holder's signature and shall be authenticated by the issuing administration. Administrations may employ, if they wish, other means of identification such as photographs, fingerprints, etc."

In consequence of the adoption of the above text for RR 506, Footnote 506.0 was deleted. With these amendments the texts on page 5 were adopted.

Page 6

The Chairman of Sub-Committee 7A said that in RR 513a, third line, the word "exclusively" should be inserted before "on frequencies". However, the Delegate of the United Kingdom of Great Britain and Northern Ireland felt that the phrase should read : "on frequencies allocated exclusively to the aeronautical mobile service" and, there being no objection, this amendment was adopted. A Proposal by the Delegate of Ireland that the word "nevertheless" should be inserted at the beginning of RR 513a was adopted.

The Delegate of China said that his Delegation could not accept the decision of Sub-Committee 7A in regard to Regulations 513 and 513a and he wished the following statement to be recorded :

"The Delegate of China stated that his Delegation believed the decision made by Sub-Committee 7A to delete the power limitation for those aircraft stations operating on exclusive aeronautical mobile band in the text of existing Radio Regulation No. 513 and new Regulation No. 513a was not based on sound technical principles. Since HF and VHF transmitters rated at moderate power nowadays are capable of attaining much larger service areas and therefore interference areas, resulting from the development of high efficiency equipment, and also from the aircraft stations flying at far greater altitudes, the Delegation of China felt that any

relaxation toward the requirement on operating personnels' certification would not be in the best interests of efficient and orderly utilization of the radio spectrum. The decision of Sub-Committee 7A as regards Radio Regulations 513 and 513a did not have the approval of his Delegation."

Subject to the amendments mentioned above, the texts on page 6 were adopted.

Page 7

The Chairman of Sub-Committee 7A explained that one Regulation, RR 518a, had inadvertently been omitted. It was agreed that this should be inserted, the text being as follows :

"§ 9a. Administrations should take whatever steps they consider necessary to ensure the continued proficiency of operators after prolonged absences from operational duties."

With this amendment the texts on page 7 were adopted.

Page 8

The texts on page 8 were adopted without amendment.

Page 9    RR 527

A proposal by the Delegate of the United Kingdom of Great Britain and Northern Ireland that the first sentence of RR 527 be replaced by that of the Atlantic City text was supported by the Delegate of the U.S.S.R. The text as it appeared in Document No. 594 was supported by the Delegates of France, Belgium and Mexico.

The Proposal of the United Kingdom was rejected by 13 votes to 4 there being 4 abstentions. Accordingly the texts on page 9 were adopted without amendment.

Page 10

The texts on page 10 were adopted without amendment.

Page 11

The texts on page 11 were adopted subject to Editorial amendments indicated by the Chairman of Sub-Committee 7A.

Page 12 RR 540

A proposal by the Delegate of the United Kingdom that the words "and radio propagation" be deleted was supported by the Delegate of South Africa. This was not acceptable to the Delegate of France who said that with the increasing use of radiotelephony in the HF bands it had become necessary for radiotelephone operators to have a sufficient knowledge of the principles of radio propagation to enable them to select the optimum frequency for their communications. This view was shared by the Delegate of Belgium. However, the proposal of the United Kingdom was adopted by 14 votes to 9 there being one abstention.

With this amendment the texts on page 12 were adopted.

Page 13

The Delegate of the United States of America distributed proposed new texts for RR 548 and 548a. In introducing these proposals he said that his Delegation felt that the restriction to 50 watts was not practicable particularly in the Great lakes and in river navigation where propagation was mainly overland and higher power was needed.

These Proposals were not accepted to the Delegate of the United Kingdom and after a short discussion it was agreed to defer further consideration of this item until a later meeting to enable the interested Delegations to obtain an acceptable compromise text.

2. Letters from the Chairman of the Conference and the Chairman of Committee 6

The Chairman explained that these letters requested Committee 7 to examine the provisional list of terms and definitions in No. 326 and Addenda 1, 2 and 3 to that Document. In view of the urgency (the Chairman of Conference had asked for a report by Saturday) he proposed to set up an Ad Hoc Working Group consisting of the Chairman of the Sub-Committees which would meet at 11 a.m. on Friday and present its report to the Committee at the meeting on Saturday morning.

There being no objection the Chairman's proposal was adopted.

3. Any other business

There being no item under this heading this concluded the business of the meeting.

G.F. Wilson

Rapporteur

Y. Nomura

Acting Chairman of the Meeting

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 828-E  
9 December, 1959

COMMITTEE 7

## SUMMARY RECORD

### Nineteenth Meeting of Committee 7

(Operations Committee)

Friday, 27 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)

- Agenda:
1. Approval of Texts for Articles 6, 8, 36 and 37 (Document No. 623)
  2. Approval of Texts for Appendix 9 (Document No. 649)
  3. Appendix B (Document No. 625)
  4. Appendix 11 (Document No. 648)
  5. Any Other Business.

The above Agenda was accepted by the meeting.

#### 1. Approval of Texts contained in Document No. 623

Captain Graves, Chairman of Sub-Committee 7C, was invited to the platform to assist in examination of Document No. 623.

In introducing the proposed texts Captain Graves said there were a number of typographical amendments to be made on various pages. (As these were editorial and typographical amendments they have not been listed.) Document No. 623 was then considered page by page.

#### Page 3

The text on page 3 was adopted without amendment.

#### Page 4

It was agreed that No. 148 should be inserted in the references stated in RR 240. With this amendment the texts on page 4 were adopted.



Pages 5 and 6

The texts on pages 5 and 6 were adopted without amendment.

Page 7

The texts on page 7 were adopted subject to a minor amendment in RR 872 affecting only the French text.

Pages 8 and 9

The texts on pages 8 and 9 were adopted without amendment.

Page 10 RR 884

The Delegate of France said that there were various kinds of speedometer in use in aircraft which might give, for example, actual or estimated measurements and his Delegation felt that the actual measurement used should be quoted and he therefore proposed that this part of the text be amended to read "indicated speed (to be defined by the pilot)".

The Chairman of Sub-Committee 7C said that the Sub-Committee had decided to use this expression because the indicated air speed was the information available to the pilot in the cockpit and it was the feeling of the Sub-Committee that he should have to answer the simplest question possible. There being no support, the proposal by the Delegate of France was rejected and, accordingly, the texts on page 10, Document No. 623 were adopted without amendment.

Page 11 RR 885a

The Chairman of Sub-Committee 7C pointed out that at its last meeting his Sub-Committee had decided that the last sentence in this paragraph should be deleted.

A proposal by the Delegate of France that the words "North, South, East and West" should be expressed in the national language, was supported by the Delegate of the Argentine but this proposal was rejected by 17 votes to 7, there being 10 abstentions. A proposal by the Delegate of the United Kingdom that paragraph 885a should be deleted was supported by the Delegate of Pakistan but this proposal was rejected by 22 votes to 5, there being 6 abstentions. A proposal by the Delegate of Portugal that the words "in radiotelegraphy" be inserted after "however" was supported by the Delegate of Australia and was adopted by 28 votes to 2 with 1 abstention. Accordingly the texts on page 11, as amended, were adopted.

Page 12

The texts on page 12 were adopted without amendment.

Page 13 RR 891e

A proposal by the Delegate of the Netherlands that the words "or other identification" should be inserted after "call sign" was supported by the Delegate of the United States of America and there being no objection it was adopted. With this amendment the texts on page 13 were adopted.

Pages 14 and 15

The texts on pages 14 and 15 were adopted subject to minor amendments which affected the French text only.

Pages 16 and 17

The texts on pages 16 and 17 were adopted but it was agreed that Committee 8 would probably have to modify the wording of RR 901, 901a and 901b.

Pages 18-20

The texts on pages 18-20 were adopted without amendment.

Page 21

The texts on page 21 were adopted subject to alignment of French and English texts of Radio Regulation 915f.

Page 22

The texts on page 22 were adopted without amendment.

Page 23 RR 921a

A proposal by the Delegate of Sweden that "(See Recommendation No. 219 of C.C.I.R. 1959)" be added was supported by the Delegate of the United Kingdom. However, this proposal was rejected by 12 votes to 6, there being 15 abstentions.

The texts on page 23 were adopted noting that it would be necessary to align the French and English texts of RR 922a.

Pages 24-29

The texts on pages 24-29 were adopted subject to minor Editorial amendments.

Page 30

The Delegate of Sweden suggested that in b) the first line be amended to read ".... includes in Articles 34 and 37" and that the last line of the "recommends" be amended to read "Recommendation No. 219 and Article 34 of the Radio Regulations". This was adopted. With these amendments the texts on page 30 were adopted.

This concluded examination of Document No. 623 and the Chairman thanked Captain Graves for the excellent report which his Sub-Committee had prepared.

2. Appendix 9 (Document No. 649)

Document No. 649 was adopted subject to the following amendment.  
After "QUM" insert "QUF".

3. Appendix B (Document No. 625)

The Chairman explained that the question before the Committee was whether the information about standard time signal stations should be in the form of an Appendix or an Article. The inclusion of Annex 1 to Document No. 625 as an Article of the Radio Regulations was supported by the Delegates of the Argentine, Portugal, India and Indonesia but the Delegates of the United Kingdom and the U.S.S.R. favoured the amended Appendix given in Annex 2 of the document. On a vote the Committee decided in favour of Annex 1 (an Article) by 19 votes to 10, there being 4 abstentions. Accordingly it was agreed that Committee 8 be asked to include Appendix 1 as an Article of the Regulations.

4. Appendix 11 (Document No. 648)

The Delegate of France pointed out that it had been agreed in Sub-Committee 7B that an example of the use of the phonetic table for the transmission of figures should be included in Appendix 11 and it was agreed, subject to this amendment, to adopt Document No. 648 as a whole.

5. Any Other Business

There being no item to discuss under this heading this concluded the business of the meeting.

G.F. Wilson  
Rapporteur

Y. Nomura  
Chairman

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 829-E  
10 December, 1959COMMITTEE 7

## SUMMARY RECORD

of the Fifteenth Meeting of Committee 7 (Operations Committee)

Friday, 20 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)Agenda: Document No. DT 796 and Addendum No. 1

Although some Delegates had not received the Agenda and Addendum until the morning of the meeting it was agreed to consider the items listed therein.

1. Approval of texts for Article 45 (Document No. 574)

There being no objection, the texts in Document No. 574 (which were the same as in the existing Regulations) were adopted.

2. Approval of texts for Article 35 (Document No. 575)

Document No. 575 was examined page by page.

Page 3

Page 3 was adopted without amendment.

Page 4

It was agreed that "range" should be replaced by "service area" in conformity with the decisions taken in regard to other Regulations.

With this amendment, page 5 of Document No. 575 was adopted.

3. Document No. 335Page 24, paragraph 6 (2)

The Chairman of Sub-Committee 7D explained that in the course of the last Plenary Meeting the first "blue" documents were examined and these concerned the work of Sub-Committee 7D. The documents had been approved with the exception of two points.





The first referred to RR 956 MOD (Article 40). The Delegate of France had stated that in Sub-Committee 7B when Article 29 was examined it was the opinion of his Delegation that RR 612 included the principle of RR 956 and had requested that any decisions should be postponed. The Delegate of France confirmed that this was the case and he pointed out that RR 956 as it had been amended seemed to be adequately covered by the provisions of RR 611, 612 and 613 and he thought there was some danger in keeping RR 956 in its present form. He therefore proposed that RR 956 be deleted. The Delegate of the United Kingdom pointed out that in the Regulations there were many duplications, sometimes to meet particular conditions, and this appeared to be one such case. He thought it was most undesirable that the work of the Conference should be held up by studying this question at this stage and he proposed that RR 956 be retained. This proposal was supported by the Delegate of India and, there being no support for the proposal made by the Delegate of France, it was decided that RR 956 should remain as it appeared in the "blue" document.

Mr. Caruso, Chairman of Sub-Committee 7D, said that the second point raised in the Plenary concerned paragraph 6 (2) on page 94 of Document No. 335. Mr. Caruso explained that there was a difference between the English text as it appeared in the "blue" document and Document No. 335 in that "subject to a minimum charge of three minutes" had been added. He recalled that the original proposal also contained these words but that in discussion of Working Group 7D2 it was decided to align the text with the Telephone Regulations which do not contain this phrase. The effect of its inclusion would be that a unit charge of three minutes would have to be imposed in cases where a fault of service resulted in less than three minutes effective usage. He had confirmed that Administrations in the international service worked on the basis that less than a unit could be charged when a fault of service was involved. He therefore suggested that the phrase "subject to a minimum charge of three minutes" should be deleted. This proposal was strongly supported by the Delegates of the United Kingdom, India, Indonesia and the United States of America and, there being no objection, it was agreed to delete the phrase.

4. Document No. 585. Proposal of Working Group 7E

The Chairman of Working Group 7E explained that in its examination of the Regulations with a view to deciding on the composition of the operating manual his Working Group had come to the conclusion that because of the addition of sections dealing with radiotelephone calls it would be necessary to include in the Regulations definitions of such terms as "telephone calls", "duration of a call", etc. and in addition there were a certain number of other definitions which it was desirable to include in order to avoid the need for ships to carry the Telegraph and Telephone Regulations.

The Delegate of the United Kingdom supported the views expressed by Mr. Caruso and he pointed out that it was desirable that Committee 6 should be asked to examine these definitions before they were included in the Regulations to ensure that the wording was appropriate for use in radiocommunication services.

There being no objection, it was agreed that the Proposals in Document No. 585 should be referred to Committee 6.

This concluded the business of the meeting.

G.F. Wilson

Rapporteur

Y. Nomura

Acting Chairman of the Meeting

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 830-E  
10 December, 1959.

## COMMITTEE 7

### SUMMARY RECORD

#### of the Seventeenth Meeting of Committee 7 (Operations Committee)

Tuesday, 24 November, 1959

Acting Chairman : Mr. Y. Nomura (Japan)

- Agenda:
1. Document No. 606 (Article 33)
  2. Document No. 607 (RR 277)
  3. Document No. 608 (Appendix 9)
  4. Document No. 615 (Appendix 9)
  5. Any Other Business.

The above Agenda was accepted by the meeting.

#### 1. Approval of Texts for Article 33 (Document No. 606)

The Chairman of Sub-Committee 7B, Mr. Billington, was invited to the platform to assist in the examination of Document No. 606.

In introducing the Document, Mr. Billington pointed out the following typing errors :

Page 3, RR 743, replace "NOC" by "MOD".

Page 5, RR 714, second line, replace "of" by "by".

RR 715, replace "it" by "500 kc/s".

Page 13, RR 758a, third line, amend to read : "... and other cargo ships .... etc."

Page 23, RR 800a, second line, replace "cargo" by "low traffic".



Mr. Billington said that in Section V major changes had been introduced which had been the subject of a great deal of discussion both at Working Group and Sub-Committee level. These proposals were a compromise which did not satisfy completely the requirements of any of the Administrations, but would cater in some measure for the needs of all, and the proposals had been accepted by the Sub-Committee in that light. There was one point, however, on which agreement had not been at all unanimous, and this was in regard to the tonnage figures quoted in RR 758a.

The Chairman said he was glad to know that such a large measure of unanimity had been reached in regard to this difficult question, and he then proceeded to examine Document No. 606 page by page.

Page 3

The texts on page 3 were adopted without further amendment.

Page 4

The texts on page 4 were adopted without amendment.

Page 5

RR 714

The Delegate of the United States of America said that their proposal, which had resulted in the phrase in parenthesis reading : "exceeding 30 seconds duration" was, on further consideration, perhaps a little impracticable, and he therefore suggested that the phrase be deleted and replaced by "when practicable". This amendment was supported by the Delegate of Indonesia and after a short discussion it was adopted.

RR 715

It was agreed, to align with other Radio Regulations, that RR 715 should be amended to read "in addition, the frequency 500 kc/s may be used only ...."

Subject to the above amendments, the texts on page 5 were adopted.

Pages 6, 7, 8 and 9

The texts on pages 6 to 9 were adopted without amendment.

Page 10

RR 739

A proposal by the Delegate of Japan that the first line on page 10 be amended to read : ".... this watch on the frequency 500 kc/s by means of ...." was supported by the Delegate of the United Kingdom of Great Britain and Northern Ireland and, there being no objection, it was adopted.

Section IV

A suggestion by the Delegate of Poland that the heading of Section IV should be aligned with that adopted for similar Articles and Sections was adopted.

Subject to these amendments, the texts on page 10 were adopted.

Page 11

The texts on page 11 were adopted subject to editorial modification of RR 751 by inserting an asterisk drawing the attention of Committee 8 to the need to examine this Regulation after Article 20 had been considered.

Page 12  
RR 752b

After a short discussion it was agreed that "Class A2" should be replaced by "Type 2".

Subject to this amendment the texts on page 12 were adopted.

Page 13  
RR 758a

The Delegate of the U.S.S.R. recalled that after the examination of RR 758a in Sub-Committee 7B5 his Delegation had found it necessary to make a reservation. He pointed out that originally it was the opinion of his Delegation that the lower tonnage limit for tankers in this Regulation should be 20,000 tons. Subsequently, in an effort to reach a compromise, he had suggested that 40,000 tons should be adopted to apply from the date of implementation of the new Regulations and that the situation should be reviewed after two years to decide whether the limit could be lowered to 35,000 tons. He illustrated the basis of this approach by reference to the figures supplied by the International Chamber of Shipping. However, he said that his Delegation was most anxious to avoid having to make a reservation on this operational question and therefore in an effort to obtain an acceptable compromise, although his Delegation did not abandon the reasoning which had led to their earlier proposals, they would, in a spirit of co-operation, be willing to accept a limit of 40,000 tons for tankers. The Delegate of the United Kingdom of Great Britain and Northern Ireland said he appreciated the position of the U.S.S.R. on this question. He was not happy at the lowering of the tonnage, but he felt it was most important that the Committee should reach a unanimous decision on this question, and he was therefore prepared to support the proposal of the Delegate of the U.S.S.R. The proposal was also acceptable to the Delegates of Japan, Norway and Portugal, and, there being no objection, the figure of 40,000 tons was adopted.

Pages 14-22

Pages 14-22 were adopted without amendment.

Page 23

The texts on page 23 were adopted subject to correction of the typographical error mentioned by the Chairman of Sub-Committee 7B and in RR 801 deletion of the words "of the Union".

2. RR 277 (Document No. 607)

The Chairman pointed out that in Document No. 607 "Twenty-first" should be replaced by "Twentieth".

There being no objection, Document No. 607 was adopted.

3. Appendix 9 (Document No. 608)

After a short discussion, Document No. 608 was adopted.

4. Appendix 9 (Document No. 615)

The proposals in Document No. 615 were supported by the Delegate of Portugal and in principle by the Delegate of China. However, he suggested that "KT" should be used as in other services. The Delegate of the United States of America pointed out that some confusion might arise because KMH and MNH were call signs of United States stations, and he suggested that the standard abbreviation should be km/h and kn/h. This was supported by the Delegate of Poland. The Delegate of the United Kingdom of Great Britain and Northern Ireland said that in his view knots could best be expressed by KTS. After a vote, it was agreed that the expressions to be used should be KMH and KTS.

5. Any Other Business

There being no other item, this concluded the business of the meeting.

Rapporteur

G.F. Wilson

Chairman

Y. Nomura.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 831-E  
10 December 1959SUB-COMMITTEE 7A

## SUMMARY RECORD

Thirty-ninth meeting of Sub-Committee 7A  
(General Operating Conditions)

Tuesday, 1 December, 1959, at 3 p.m.

Chairman : Mr. P. Bouchier (Belgium)  
Vice-Chairman : Mr. Martín Flores Cantero (Mexico)

1. Mr. Bouchier was away, so Mr. Flores Cantero took the chair.
2. The Chairman said that the agenda provided for consideration of Documents Nos. 688, 689, 691, 694, 610 revised and 696.
3. Document No. 689 (Summary Record of the twenty-seventh meeting) was adopted with a change on page 2, No. 7, of the English text (Federal Republic of Germany - Proposal 5126).
4. Document No. 691 (Summary Record of the twenty-ninth meeting) was adopted unchanged.
5. Document No. 694 (Summary Record of the thirty-second meeting) was adopted unchanged.
6. Document No. 688 (Summary Record of the twenty-sixth meeting) was adopted with a change to paragraph 6 on page 2 (read: it was decided that there would be a re-edition every year).
7. Document No. 610 revised, about a new classification for ship stations, was adopted with a correction to the reference, which should, of course, be Article 35.
8. Document No. 696 (recommendation about hours of service for ship stations) was referred to Committee 7.



9. Documents Nos. 601, 605, and 808 related to Article 19. A proposal had been made for an overhaul of the sections in that article. Mr. M. Flores Cantero offered some explanations, and the Delegate of Portugal said how hard it was for the Sub-Committee to make up its mind without a document. Mr. Sannier (France) asked that the working party reviewing Article 19 be authorized to prepare a document for submission to Committee 7. The United States, the Netherlands, Portugal, and the Union of South Africa seconded. The Delegate of the United Kingdom of Great Britain and Northern Ireland said that No. 425b) could be put after No. 411 a). Mr. Flores Cantero said that the working party would be mindful of the amendments made by members of the Sub-Committee.

Rapporteur :  
R. Monnat.

Vice-Chairman  
Martin Flores Cantero



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 832-E  
10 December, 1959SUB-COMMITTEE 7A

## SUMMARY RECORD

Fortieth meeting of Sub-Committee 7A  
(General Operating Conditions)

Wednesday 2 December, 1959, at 3.30 p.m.

Chairman : Mr. P. Bouchier (Belgium)Vice-Chairman : Mr. D. Martin Flores Cantero (Mexico)

1. The Chairman read out the Agenda, consisting of Documents Nos. 524, 687, 690, 692, 693 and 697.
2. Document No. 524, the summary record of the twenty-third meeting, was adopted without modification.
3. Document No. 687, the summary record of the twenty-fifth meeting, was adopted subject to some spelling corrections.
4. Document No. 690 was adopted subject to some corrections in the wording ( = obs = instead of = ops = ). Regarding Document No. 697, the Chairman apologized for his failure to mention on page 1 the proposal by the Bielorussian S.S.R. that call signs allocated respectively to the two parts of Germany be detailed. He would draw Committee 7's attention to that point. The Delegation of the U.S.S.R. said that the Annex to Document No. 697 did not reproduce identically the points made in Document No. DT 808. The Chairman explained that, although the Sub-Committee had taken note of the views expressed on the subject, it had had to refer the final decision to Committee 7.
5. The Delegation of the United Kingdom of Great Britain and Northern Ireland wanted the United Kingdom reservation mentioned together with that by the United States of America under Item 2 on page 1. Document No. 697 was adopted subject to certain corrections requested by the United States of America, Portugal and France.
6. Document No. 698 (Service Document Symbols) was presented by the Chairman of Working Group 7A8 and adopted, subject to certain corrections.
7. There was some discussion on Document No. 133, which had previously been examined at the twenty-seventh meeting on 6 November, 1959. The Chairman pointed out that the Sub-Committee had never intended to adopt the Document and had merely taken note of it, thus enabling the Secretariat and the I.F.R.B. to make whatever alterations they deemed fit in the abbreviations.



8. The Delegation of Morocco requested the insertion in the record of the following : "The Delegation of Morocco agreed in principle to the provisions of Document No. 133, but expressly requested that the abbreviations "MRE-Morocco-Northern Zone", "MRF-Morocco-Southern Zone" be replaced by the single abbreviation "MRC-Morocco (Kingdom of )" in view of the political unification of the Kingdom of Morocco".
9. The Delegation of France would also submit modifications to the list of abbreviations.
10. Mr. Iturioz (Argentina) requested that the record include the following : "The Delegation of Argentina wished to make a reservation concerning geographical designations in Document No. 133 to which it could not agree on behalf of its country, namely where the Malvinas Islands appeared under the name of Falkland Islands and Dependencies."
11. The Delegation of the United Kingdom of Great Britain and Northern Ireland wished that the following statement go on record :

"As Delegate of the United Kingdom, I do not accept the statement of the Argentine Delegate in so far as it disputes the undoubted sovereignty of Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland over the Falkland Islands and the Falkland Islands Dependencies and I wish formally to reserve the rights of Her Majesty's Government on this question".
12. The Delegation of the United States of America requested that Document No. 133 be altered to read, under HWA, "State of Hawaii, United States of America (formerly Territory of Hawaii)".
13. The Delegation of the United Kingdom of Great Britain and Northern Ireland observed that it had been omitted to decide in the draft of the new Article 20 what would be done about List III (List of Broadcasting Stations). The Chairman explained that Committee 5 had not yet finished its work in that connection and that notes would be inserted in the Document prepared by the Sub-Committee in order to draw the attention of the Chairman of the Drafting Committee to the matter.
14. The meeting rose at 6 p.m.

Rapporteur :

R. Monnat

Chairman :

P. Bouchier

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 833-E  
10 December, 1959SUB-COMMITTEE 7A

## SUMMARY RECORD

Forty-first meeting - Sub-Committee 7A(General operating conditions)

Thursday, 3 December, 1959 - 3 p.m.

Chairman: P. Bouchier (Belgium)Vice-Chairman: Mr. Martin Flores Cantero (Mexico)

1. The Sub-Committee examined Document No. 709. With regard to No. 450 of the RR it was decided to write - comment to Committee 8: text to be drafted, taking into consideration the decisions of Committee 5: the latter should be informed of the decisions taken by Sub-Committee 7A with regard to the contents of the List of Broadcasting Stations, i.e.:
  - a) Deletion of Part A
  - b) Publication of a List on a worldwide basis of stations located on frequencies between 1 600 kc/s and 27.5 Mc/s.
2. The Norwegian Delegation announced that it would revert in Committee 7 to No. 462 of the RR, which the Sub-Committee had decided to delete.
3. Document No. 709 was adopted with some drafting amendments, a few corrections of presentation and the amendment given above.
4. The Sub-Committee turned to the examination of Document No. 708 - Appendix 6. Document No. 708 was adopted with some corrections, in particular an amendment concerning column headings relating to geographical positions in which latitudes and longitudes should be mentioned. The attention of Committee 8 should also be drawn to the fact that the document did not contain any indication with regard to List III.
5. The Chairman remarked that it was the last meeting, but that the summary records of the previous meetings and the second pages of the documents submitted to Committee 7 still had to be approved: the latter had not yet been drawn up on account of the hurried nature of the work. He proposed simply to forward the last summary records to members of the Sub-Committee and to invite them to communicate any comments to the



Rapporteur. Then a final document containing all the comments would be drawn up and distributed to members of the Sub-Committee. The Delegate of Indonesia supported the proposal, which was adopted.

6. Mr. de Mesquita (Portugal), thanked the Chairman and the Vice-Chairman in the name of the Sub-Committee and congratulated the Chairman on the impartial and understanding way in which he had conducted the discussions.
7. The Delegation of the United States joined the Portuguese Delegation by thanking the Chairman, the Vice-Chairman and also the trilingual drafting group.
8. The Chairman then expressed his gratitude to all the members of the Sub-Committee for the way in which they had all worked together. After thanking all those who collaborated directly in the work of Sub-Committee 7A, he made especial mention of those who were not often spoken of but without whom no conference work would be possible, in other words the Secretariat staff of all grades.
9. The meeting rose at 6 p.m.

R. Monnat  
Rapporteur

P. Bouchier  
Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 834-E  
10 December, 1959

## PLENARY MEETING

### A G E N D A

#### Nineteenth Plenary Meeting

Thursday, 10 December, 1959, at 20.30 hours

1. Approval of the Minutes of the Twelfth Plenary Meeting (Document No. 797)
2. Proposal No. 5574 (Document No. 807).
3. Letter addressed to the Secretary-General by the Delegation of the Kingdom of Morocco (Document No. 806).
4. Deadline for receipt of texts of declarations for inclusion in the Final Acts.
5. Fourth bis Series of Texts submitted by the Drafting Committee (Document No. 764).
6. Thirteenth Series of Texts submitted by the Drafting Committee (Document No. 747).
7. Fifteenth Series of Texts submitted by the Drafting Committee (Document No. 791)
8. Sixteenth and Sixth Series of Texts submitted by the Drafting Committee (Documents Nos. 792 and 663).
9. Miscellaneous.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 835-E  
10 December, 1959

COMMITTEE 7

## SUMMARY RECORD

### Twentieth Meeting of Committee 7 (Operations Committee)

Friday, 27 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)

- Agenda:
1. Approval of texts for Article 26 (Document No. 603)
  2. Approval of texts for Articles 24a and 25 (Document No. 604)
  3. Recommendation concerning standard forms of Licences (Document No. 602)
  4. Appendix XIII (Document No. 590 Rev.)
  5. Any Other Business

The Agenda was accepted.

1. Approval of texts for Article 26 (Document No. 603)

Subject to the correction of typing errors the texts in Document No. 603 were adopted.

2. Approval of texts for Articles 24a and 25 (Document No. 604)

Document No. 604 was considered page by page.

Page 3

RR 555a



A proposal by the Delegate of the United Kingdom of Great Britain and Northern Ireland that the words "Open for public correspondence" should be deleted was supported by the Delegates of France and Ireland and, there being no objection, the proposal was adopted.

Subject to this amendment, the texts on Page 3 were adopted.

Page 4.

RR 564

It was pointed out by the Delegate of Japan that this Regulation should be annotated "MOD".

With this amendment the texts on Page 4 were adopted and this completed the consideration of Document No. 604.

3. Recommendation concerning standard forms for Licences (Document No. 602)

Document No. 602 was considered as a whole. The Delegate of the United Kingdom pointed out that on Pages 6 and 7 the entries relating to Emergency and Lifeboat Transmitters would have to be brought into line with the definitions of Emergency and Survival Craft Stations.

Subject to this note, the texts in Document No. 602 were adopted.

4. Appendix XIII (Document No. 590 Rev.)

It was agreed that certain omissions in the Spanish texts and typing errors in the English texts should be brought to the notice of the Rapporteur. The Document was then considered in detail. The Delegate of the United Kingdom said that whilst he appreciated the reasons which had led to the submission of this proposal to Conference his Delegation had not had time since publication of the proposals to make the complete and detailed analysis which was required before such far reaching changes were introduced. He pointed out that the proposed watchkeeping arrangements divided the North Atlantic and staggered the watchkeeping by one hour. He felt that these changes would introduce serious difficulties in watchkeeping at Coast Stations and in regard to the broadcasting of navigation and similar warnings and would undoubtedly result in considerable additional signalling. He could not accept Appendix 13 in its proposed form. His Delegation recognised that there might well be justification for some change but felt that considerably more time was needed if the problem were to be adequately studied. Therefore, although he could not support the proposal, he would support a recommendation that the problem should be studied. This view was supported by the Delegate of Indonesia. The Delegate of The Federal Republic of Germany pointed out that the proposals had been before Conference for more than two months and he felt that this time should have been adequate for Delegations to reach a decision. The question had been voted on twice and on the last occasion 20 Delegations were in favour and 10 against. The small changes introduced in Appendix 13 would have great advantage in equalising the loading of the HF channels and improving calling facilities. He added that the proposals were the result of very long study carried out by his Administration and he felt that Appendix 13 as it appeared in Document No. 590 Rev should be retained. The Delegate of the United Kingdom agreed that the proposals had been before Conference for two months but he pointed out that the very fact that

the proposals resulted from a prolonged study by one Administration underlined the need to analyse the problem very carefully before reaching a final decision. His Delegation, therefore, proposed a status quo in regard to watchkeeping hours and that the need for study should be brought to the notice of Administrations by means of a recommendation. This proposal was supported by the Delegate of Japan and was adopted by 17 votes to 8 with 7 abstentions. It was agreed that the Delegate of the United Kingdom in collaboration with the Delegate of the Federal Republic of Germany would draft a suitable recommendation. The Delegates of Poland and the U.S.S.R. pointed out the need to revise the description of parts of the Arctic Ocean referred to in zones B and C and it was agreed that this question should be dealt with by the Drafting Group.

Subject to the amendments in Column 4 consequent upon the adoption of the United Kingdom proposal, the texts in Document No. 509 Rev were adopted.

5. Any Other Business

Appendix XI (Document No. 648)

The Chairman of Sub-Committee 7B said that he had examined Document No. 648 in the light of the texts which had been adopted by his Sub-Committee for Article 29a and he suggested that Document No. 648 should be reconsidered when Article 29a was examined by Committee 7. This was agreed.

This concluded the business of the meeting.

Rapporteur  
G.F. Wilson

Acting Chairman of the Meeting  
Y. Nomura



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 836-E  
10 December, 1959COMMITTEE 7

## SUMMARY RECORD

Twenty-first Meeting of Committee 7 (Operations Committee)

Saturday 28 November, 1959

Acting Chairman: Mr. Y. Nomura (Japan)

- Agenda:
1. Approval of texts for Article 29 (Document No. 638)
  2. RR 378 and 379 (Document No. 657)
  3. Approval of texts for Article 29a (Document No. 622)
  4. Report of Ad Hoc Working Group to consider Document No. 326 and Addenda 1, 2 and 3
  5. Any Other Business

1. Approval of texts for Article 29 (Document No. 638)

The Chairman of Sub-Committee 7B was invited to the platform to assist in the examination of Document No. 638. In introducing the Document Mr. Billington pointed out that Article 29 had now been restricted to radiotelegraphy and the radiotelephony provisions had been transferred to a new Article, Article 29a.

Document No. 638 was then considered page by page:

Pages 3 to 9

Pages 3 to 9 were adopted subject to minor editorial amendments and noting that in the Spanish text the use of "emission" and "transmission" would require alignment.

Page 10

The Delegate of Portugal pointed out that RR 642 which had been shown as "(MOD)" should be "MOD" and that there was a need to align the French and English texts. However, the Delegate of India pointed out that there had in fact been a change of substance because the meaning of the Q signal had been altered to "intelligibility" and it was therefore agreed that the English text should be amended accordingly.



Page 11

The texts on page 11 were adopted without amendment.

Page 12

RR 653

A proposal by the Delegate of Japan that "mobile station" should be replaced by "station of the mobile service" was adopted.

With this amendment, the texts on Page 12 were adopted.

Page 13

RR 660

The Delegate of the United States of America considered that this Regulation did not have much meaning and suggested that it should be deleted. There being no objection, this proposal was adopted.

Page 14

RR 664

A proposal by the Delegate of France that "station of the mobile service" should be replaced by "mobile station" was adopted, and with this amendment the texts on Page 14 were adopted.

Pages 15 to 17

The texts on Pages 15 to 17 were adopted without amendment.

Page 18

The Delegate of France suggested that in order to align with Article 29a an additional paragraph should be inserted to follow RR 680 to read as follows: "Any signals sent for testing must be kept to a minimum particularly on 500 kc/s". The Delegate of Portugal considered that it would be more appropriate to delete the corresponding Regulation in Article 29a which he considered to be a needless repetition. However, the proposal by the Delegate of France was adopted by 10 votes to 8 there being 16 abstentions. Accordingly, with the addition of a new paragraph to be numbered 680a containing the above text, the texts on Page 18 were adopted.

Re-adverting to Page 1 the Delegate of the United States of America suggested that an additional Appendix should be included in the Regulations to contain the Morse code and that RR 605 should be amended accordingly.

There being no objection, this proposal was adopted and it was agreed that the Appendix should immediately precede Appendix 9.

This concluded the examination of Document No. 638.

2. RR 378 and 379 (Document No. 657)

There being no objection the suggestion in Document No. 657 that RR 378 and 379 be deleted was adopted.

3. Approval of texts for Article 29a (Document No. 622)

Introducing Document No. 622 the Chairman of Sub-Committee 7B said that there had been some division of opinion in regard to Paragraphs 21 and 22 as well as 25 and 26 and the decision to include these paragraphs in their present form had been decided by a vote. Document No. 622 was then considered page by page:

Page 3

The Delegate of China pointed out that in Paragraph 4 the words "or other identification" should be inserted after "call sign". This was agreed. The Delegate of France suggested that Paragraph 2 should align with RR 604 but when the Chairman of Sub-Committee 7B explained that Paragraph 2 referred to the use of frequencies and RR 604 to procedures the Delegate of France did not press this point.

Subject to the amendments above, the texts on Page 3 were adopted

Pages 4 and 5

The texts on Pages 4 and 5 were adopted, noting that there was a need to align the French and English texts of Paragraphs 9 and 10.

Page 6

Paragraphs 21 and 22

The Delegate of Sweden recalled that the original texts proposed for these Regulations which had appeared in Document No. DT 713 were a compromise which was the result of several hours discussion in Working Group 7B7 and he proposed that the texts for Paragraphs 21 and 22 in Document No. 622 should be replaced by those appearing in Document No. DT 713. This proposal was supported by the Delegates of the Federal Republic of Germany, Norway and Finland. It was opposed by the Delegate of South Africa who said he did not wish to re-open the long discussion which had taken place both in Working Group 7B7 and in Sub-Committee 7B. His Delegation strongly believed that 2 182 kc/s should be specified in the Regulation

as a general calling frequency and that the exception applicable in Regions of heavy traffic should appear as the secondary case. This view was supported by the Delegates of Australia, New Zealand, the United States of America, Canada and Indonesia. The texts for these paragraphs as they appear in Document No. 622 were adopted by 22 votes to 8 there being 4 abstentions.

The texts on Page 6 were then adopted.

Pages 7 to 9

The texts on Pages 7 to 9 were adopted noting that the French and English texts for Paragraphs 26 and 33 should be aligned.

Page 10

A proposal by the Delegate of Sweden that in Paragraphs 48 and 49 "should" should be replaced by "shall" was supported by the Delegate of the Federal Republic of Germany. This proposal was not acceptable to the Delegate of India who pointed out that since there was an alternative "shall" could not be used. It was decided to retain the text as it appears in Document No. 622 by 10 votes to 3 there being 10 abstentions.

Page 11

The texts on Page 11 were adopted subject to the replacement of "162 Mc/s" by "174 Mc/s".

Pages 12 and 13

The texts on Pages 12 and 13 were adopted without amendment.

Page 14

A proposal by the Delegate of France that Paragraph 70 could be deleted since its provisions were included in Article 30a, was agreed.

The texts on Page 14 were then adopted.

Page 15

Paragraph 81

The Delegate of Sweden proposed that "calling" should be deleted. This proposal was supported by the Delegate of the Federal Republic of Germany and, there being no objection, it was adopted.

Page 16

The Chairman of Sub-Committee 7B suggested that Paragraph 85 could be replaced by Paragraph 1 of Appendix 9 as it appears in Document No. 648. This proposal was supported by the Delegate of Portugal and, there being no objection, it was adopted.

With this amendment the texts on Page 16 were adopted.

Page 17

Paragraph 94

The Delegate of the United States of America suggested that "Hello" should be deleted and, there being no objection, this proposal was adopted.

With this amendment, the texts on Page 17 were adopted.

Page 18

The Delegate of the United States of America suggested that in Paragraph 98 the last line should be deleted and that the reference in Paragraph 99 should be "98". There being no objection, these amendments were made and the texts on Page 18 as amended were adopted. A suggestion by the Delegate of Portugal that a paragraph similar to RR 675a should be inserted before Paragraph 97 was defeated by 19 votes to 1 there being 12 abstentions.

Page 19

Paragraph 102

The Delegate of Portugal proposed that this paragraph be deleted and he was supported by the Delegate of Malaya. However, the proposal was defeated by 20 votes to 5 there being 5 abstentions. A proposal by the Delegate of Indonesia that "or in the tropical zone of Region 3 on 6 203.5 kc/s" was supported by the Delegate of Malaya and, there being no objection, it was adopted.

With this amendment the texts on Page 19 were adopted.

This concluded the examination of Document No. 622.

4. Report of Ad Hoc Working Group to consider Document No. 326 and Addenda 1, 2 and 3.

The Chairman explained that the task of the Ad Hoc Working Group had been to examine these Documents with a view to advising Committee 6 of

of those terms and definitions which must necessarily be included in Article 1 so far as they were needed in connection with the Regulations within the work programme of Committee 7.

In order not to delay the work of Conference he proposed that the report of the Working Group should be read and, if approved, submitted direct to the Chairman of Conference. The report was then read and approved.

This concluded the business of the meeting.

Rapporteur  
G. F. Wilson

Acting Chairman of the Meeting  
(Y. NOMURA)

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 837-E  
10 December, 1959COMMITTEE 6

## SUMMARY RECORD

Sixteenth Meeting of Committee 6 (Technical)

Tuesday, 1 December, 1959, at 1500 hours - Room C

Agenda: Document No. DT 8531. Summary Record of the Fourteenth Meeting (Document No. 644)

The Summary Record of the fourteenth meeting of Committee 6, Document No. 644 was adopted.

2. Report of Working Group 6A (Document No. 634)

The Committee agreed that none of the terms listed in Document No. 634 was required in the Radio Regulations and could be deleted.

The Chairman mentioned Document No. 682, from Committee 5, which listed the terms that the committee considered unnecessary. It was agreed that, as these terms referred only to Committee 5 work, they could be deleted.

3. Definitions on Space, Antennae and E.R.P. (Document No. 706)

The Chairman of Working Group 6A introducing Document No. 706 said that the "space" definitions as published in Document No. 326 were not in line with similar definitions in other services. There was no definition of a ship or aircraft and he could not see the necessity for defining an "object in space". Further the definitions of earth and space stations should show that they were stations. The Ad Hoc Group had therefore proposed new definitions which were now submitted to the Committee for consideration.

Arising from a request from Committee 5, further consideration had been given to antenna definitions and these revised definitions were submitted for consideration.

Definitions Nos. 20a, 20b, 39a, 39b and 64d were accepted.

It was agreed to re-word No. 65 as follows:

"Gain of an Antenna (in a given direction): The ratio of the power required at the input to a reference antenna to the power supplied to the input of the given antenna to produce, in the given direction, the



same field at the same distance. When not specified otherwise, the figure expressing the gain of an antenna refers to the gain in the direction of the main lobe. In services using scattering modes of propagation the full gain of an antenna may not be realizable in practice and the apparent gain may vary with time."

It was agreed that the Ad Hoc Group should consult Committee 5 as to which (or both) of the definitions 68a and 68b were required.

4. Report of Committees 6/7 Ad Hoc Group on Emergency Transmitters (Document No. 672)

The Committee took note of Document No. 672 and accepted the change that the term "Ship's Emergency Transmitter" should replace "Emergency Ship Transmitter".

5. Definitions contained in the Convention and Telephone and Telegraph Regulations (Document No. 672)

The Committee noted that there would be a difficulty in including certain of these definitions in the Radio Regulations because some administrations were not signatories to the Telephone Regulations and did not accept the definitions therein.

"Radiotelephone Call" had been defined by Committee 6 for inclusion in Article 1 and it was suggested that the remaining definitions could be included in the Additional Radio Regulations if Committee 7 so desired.

6. Report of Chairman of Ad Hoc Group No. 1

Mr. Barajas stated that all the drafting work, except definitions had been completed and forwarded to Committee 8.

He then mentioned points referred to Committee 6 by the Plenary Meeting when considering Document No. 617 (Blue Series 4)

- (1) It was agreed that RR 385 was adequately covered in the new Article 19 and could remain deleted.
- (2) It was agreed that the suggestion by the Delegate of the Belgian Congo for the insertion of a paragraph covering test transmissions should not be considered further as the matter was adequately covered elsewhere.
- (3) It was agreed to delete RR 378/379
- (4) It was agreed to include the text of footnote 109a in the place of RR 378/379.



The Ad Hoc Group was asked to review these four decisions and to take any action which was considered necessary.

7. E.A.R.C. Resolution No. 3 and Recommendation No. 4

The Chairman of the Ad Hoc Group (Mr. Secker) reported that the Group had decided that all the points, except one were either being considered elsewhere or were out-of-date. The one point left for consideration was an overall recommendation urging the C.C.I.R. to speed the work required in the further refinement of the I.F.R.B. Technical Standards and urging administrations to give priority to work in this connection. He hoped to submit a draft recommendation to the next meeting.

Rapporteur:

C.E. Secker

Chairman

M.N. Mirza

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 838-E  
10 December 1959COMMITTEE 8NOTE FROM: THE CHAIRMAN OF COMMITTEE 5  
TO THE CHAIRMAN OF COMMITTEE 8

Committee 5 in its meeting of 2 December, 1959 decided to transfer to the new Radio Regulations the following provisions of the E.A.R.C. Agreement:

Nos. 26, 27, 28, 32, 39, 40, 41, 50 and 64.

The following is the text which should appear in Article 9 of the new Radio Regulations:

Section III

261a ADD

(1) For aeronautical radiobeacons operating in the medium frequency bands, the daylight range indicated shall be based on the following field strengths. For the protection ratio, the radiated power must be kept to the minimum required to provide the necessary field strength at the service range.

Regions 1 and 2

70 microvolts per metre for radiobeacons north of 30°N;

120 microvolts per metre for radiobeacons between 30°N and 30°S;

70 microvolts per metre for radiobeacons south of 30°S.

Region 3

70 microvolts per metre for radiobeacons north of 40°N;

120 microvolts per metre for radiobeacons between 40°N and 50°S;

70 microvolts per metre for radiobeacons south of 50°S.



261b ADD (2) The assignments of frequencies to aeronautical radiobeacons in these bands is based on a protection against interference of at least 10 db for each beacon throughout its service area.

261c ADD Section IIIa - Maritime Radionavigation Service

261d ADD (1) For maritime radiobeacons operating in the medium frequency bands, the daylight range indicated is based on the following field strengths. For the protection ratio, the radiated power must be kept to the minimum required to provide the necessary field strength at the service range:

Region 1

50 microvolts per metre, for radiobeacons north of  $43^{\circ}\text{N}$ ;  
75 microvolts per metre, for radiobeacons between  $30^{\circ}\text{N}$  and  $43^{\circ}\text{N}$ ;  
100 microvolts per metre, for radiobeacons between  $30^{\circ}\text{N}$  and  $30^{\circ}\text{S}$ ;  
75 microvolts per metre, for radiobeacons between  $30^{\circ}\text{S}$  and  $43^{\circ}\text{S}$ ;  
50 microvolts per metre, for radiobeacons south of  $43^{\circ}\text{S}$ .

Region 2

50 microvolts per metre for radiobeacons north of  $40^{\circ}\text{N}$ ;  
75 microvolts per metre for radiobeacons between  $31^{\circ}\text{N}$  and  $40^{\circ}\text{N}$ ;  
100 microvolts per metre for radiobeacons between  $31^{\circ}\text{N}$  and  $30^{\circ}\text{S}$ ;  
75 microvolts per metre for radiobeacons between  $30^{\circ}\text{S}$  and  $43^{\circ}\text{S}$ ;  
50 microvolts per metre for radiobeacons south of  $43^{\circ}\text{S}$ .

Region 3

75 microvolts per metre for radiobeacons north of  $40^{\circ}\text{N}$ ;  
100 microvolts per metre for radiobeacons between  $40^{\circ}\text{N}$  and  $50^{\circ}\text{S}$ ;  
75 microvolts per metre for radiobeacons south of  $50^{\circ}\text{S}$ .

(2) For maritime radiobeacons in these bands in Region 1, the assignment of frequencies is based on a separation of 2.3 kc/s between adjacent channels used for A2 emissions.

261e ADD For maritime radiobeacons in Region 1, the depth of modulation should be at least 70%.

261f ADD In the band 405 - 415 kc/s in Region 1, no frequency is assigned to coast stations, in order to protect the frequency 410 kc/s which is designated for the Maritime Radionavigation Service (radio direction-finding).

Section IV - Maritime Mobile Service.

261g ADD (1) In the African Area of Region 1, in the bands 415 - 490 kc/s and 510 - 525 kc/s, the separation between adjacent channels used by coast stations is, as a general rule, 3 kc/s. However, in order that the channels may coincide with those used in the European Area in these bands this spacing is reduced in certain cases.

261h ADD (2) The separation between adjacent channels used by coast stations on the one hand and ship stations on the other, is 4 kc/s.

262a ADD (1) In Region 1, frequencies assigned to stations of the Maritime Mobile Service, operating in the bands between 1 605 and 3 800 kc/s (see Article 5) should, whenever possible, be in accordance with the following sub-division:

1 605 - 1 625 kc/s:Telegraphy exclusively

1 625 - 1 670 kc/s:Low-power Telephony

1 670 - 1 950 kc/s:Coast stations

1 950 - 2 045 kc/s:Ship stations working to Coast stations.

2 065 - 2 170 kc/s:Ship stations working to Coast stations  
2 170 - 2 194 kc/s:Guard-band for the distress frequency 2 182  
kc/s.  
2 194 - 2 440 kc/s:Inter-ship working  
2 440 - 2 578 kc/s:Ship stations working to Coast stations  
2 578 - 2 850 kc/s:Coast stations  
3 155 - 3 340 kc/s:Ship stations working to Coast stations  
3 340 - 3 400 kc/s:Inter-ship working  
3 500 - 3 600 kc/s:Inter-ship working  
3 600 - 3 800 kc/s:Coast stations

262b ADD (2) As far as possible in these bands, the frequencies assigned to the  
Maritime Mobile Service are spaced by:

7 kc/s when two adjacent frequencies are used for telephony;  
3 kc/s when two adjacent frequencies are used for telegraphy;  
5 kc/s when one frequency is used for telephony and the adjacent  
frequency is used for telegraphy.

However, in the case of inter-ship bands, the spacing is reduced  
to 5 kc/s for adjacent frequencies used for telephony.

262c ADD In the bands 1 605 - 2 850 kc/s in Region 3, in addition to  
the specific frequencies prescribed for common use in certain services, the  
following frequencies are used:

2 091 kc/s: As an exclusive ship radiotelegraph calling frequency  
with a guard band 2 088.5 - 2 093.5 kc/s;  
2 638 kc/s: As an inter-ship radiotelephony working frequency with  
a guard band of 2 634 - 2 642 kc/s.

CONFÉRENCE ADMINISTRATIVE  
DES RADIOCOMMUNICATIONS

GENÈVE, 1959

Document N° 839-F  
10 décembre 1959

COMMISSION 7

COMPTE RENDU

de la

Vingt-deuxième séance de la Commission 7 (Exploitation)

Lundi 30 novembre 1959

Président : M. A.J. Ehnle (Pays-Bas)

Ordre du jour :

1. Textes en retour de la Commission 8 et de la Séance plénière
2. Approbation des textes concernant l'Article 34 (Document N° 633)
3. Approbation des amendements à l'Article 9 (Document N° 654)
4. Appendice 10 (Document N° 614)
5. Numéro 262 (Document N° 668)
6. Article 24 (Document N° 594)

L'ordre du jour ci-dessus est adopté.

1. Textes en retour de la Commission 8 et de la Séance plénière

(i) Le Président de la Sous-Commission 7B déclare que la Commission 8 demande à la Commission 7 de réexaminer le numéro 680a parce que, compte tenu des paragraphes qui précèdent, elle ne voit pas de raisons de l'inclure dans l'Article 29. Le délégué du Portugal déclare qu'il partage le point de vue de la Commission 8 et il propose de supprimer ce numéro. Cette proposition est appuyée par les délégués de l'Inde et de l'Indonésie. Aucune objection n'étant formulée, il est décidé de supprimer le numéro 680a.

(ii) Le Président de la Sous-Commission 7B déclare que la Séance plénière a renvoyé le texte relatif aux signaux "QRM" et "QRN", en raison d'une objection formulée par le délégué du Royaume-Uni qui s'est opposé à la notation adoptée pour ces signaux. L'objection fait état de ce que l'ordre de notation retenu pour ces signaux est l'inverse de ce qu'il a été pendant de nombreuses années et que son adoption ne peut manquer de créer des confusions.



Le délégué de l'U.R.S.S. fait remarquer que la notation adoptée est conforme à celle des codes SINPO et SINPFEMO. A la suite d'une discussion, le délégué du Royaume-Uni fait les propositions suivantes :

- a) que dans le code "Q", la notation soit inversée,
- b) qu'à la page 3-29 du Document N° 587, on insère les mots :  
"à utiliser sur les circuits fixes",
- c) qu'à cette page, on supprime "QRN" et "QRN".

Ces propositions sont appuyées par les délégués de la Nouvelle-Zélande, de l'Indonésie et de l'Irlande. Aucune objection n'étant formulée, ces propositions sont adoptées.

Le Président de la Sous-Commission 7B déclare que deux autres points ont été soulevés à la Séance plénière. Tout d'abord qu'il convient de séparer les codes SINPO et SINPFEMO de l'Appendice 9 afin qu'ils fassent l'objet d'un "Appendice 9a", ce qui permettrait de compléter le tableau et de supprimer la note qui figure au bas de la page 3-30 (Document N° 587). Ensuite, il convient de faire figurer une référence à l'Avis N° 251 du C.C.I.R. Ces points ont été adoptés par la Séance plénière.

## 2. Approbation des textes concernant l'Article 33 (Document N° 633)

Le Document N° 633 est présenté par le Président de la Sous-Commission 7B qui signale un certain nombre d'erreurs typographiques dont la liste sera communiquée au rapporteur. A part les amendements de cet ordre, il tient à signaler deux points qui portent sur le fond :

Numéro 825a (page 7) : Bien que cette disposition soit limitée à la Région 1, elle est applicable à tous les services et non seulement au service mobile maritime auquel se rapporte l'Article 34. Il estime donc que cette disposition devrait être transférée à l'Article 9.

Numéro 825b : Etant donné que cette disposition figure dans une section qui ne s'applique qu'à la Région 1, le texte figurant entre parenthèses pourrait être supprimé.

Le Document N° 633 est ensuite examiné page par page.

## Page 3

Numéro 804. Une proposition du délégué du Portugal tendant à supprimer les mots "dans tous les cas" est adoptée.

Numéro 805. Le délégué du Portugal suggère également que cette disposition soit supprimée. Toutefois, le Président de la Sous-Commission 7B étant d'avis que cette disposition est nécessaire, le délégué du Portugal n'insiste pas sur sa proposition.

Numéro 810. Il est décidé de remplacer à la troisième ligne :  
"téléphonie Duplex" par "radiotéléphonie Duplex".

Sous réserve des amendements susmentionnés, les textes de la page 3 sont adoptés.

Page 4

Les textes de la page 4 sont adoptés sans modification.

Page 5

Numéros 816, 816a et 816b. Le délégué du Japon propose que ces paragraphes soient remaniés comme suit :

816 § 1 La fréquence 2 182 kHz peut également être utilisée :

816a a) pour l'appel et la réponse conformément aux dispositions de l'Article 29a;

816b b) par les stations côtières pour annoncer l'émission de leurs listes d'appel sur une autre fréquence (Voir l'Article 30a, numéros 703f à 703i).

Cette proposition est appuyée par le délégué de la Suède. Aucune objection n'étant formulée, elle est adoptée.

Numéro 817. A la suite d'une courte discussion, il est décidé qu'il convient de remanier le texte de ce numéro sur le modèle du numéro 816b et d'ajouter, au début, les mots : "En outre".

Avec ces modifications, la page 5 est adoptée.

Pages 6 et 7

Les textes des pages 6 et 7 sont adoptés avec les amendements décidés précédemment.

Page 8

Les textes de la page 8 sont adoptés sous réserve de la modification du titre du texte français qui doit porter la lettre "D" et non "Da".

Page 9

Numéro 827b. Il convient, à la première ligne :



d'ajouter le mot "zone" après le mot "tropical" dans le texte anglais et de remplacer dans tous les textes la fréquence indiquée par la fréquence "6 203,5 kHz".

Le délégué de la Malaisie fait la déclaration suivante qu'il désire voir figurer dans le compte rendu de la séance:

MALAISIE

Commission 7

"Depuis que la Sous-Commission 7B est parvenue à un accord au sujet de l'utilisation de la fréquence 6 203,5 kHz comme fréquence d'appel, de réponse et de sécurité dans la zone tropicale de la Région 3, j'ai reçu de nouvelles instructions de mon administration demandant que cette fréquence soit utilisée de la même manière dans la zone tropicale des deux autres Régions. Nous savons tous que la fréquence de détresse 2 182 kHz ne convient guère dans la zone tropicale. C'est seulement à la dernière séance de notre Commission que nous avons adopté une disposition qui figurera à l'Article 28 pour marquer effectivement que nous respectons la Convention pour la Sauvegarde de la vie humaine en mer qui fixe les conditions que doivent remplir les installations radioélectriques à bord des navires. Selon le Chapitre IV, Règle 15 (c) de cette Convention :

'L'émetteur doit avoir une portée normale minimum de 150 milles, c'est-à-dire pouvoir émettre à cette distance des signaux clairement perceptibles de navire à navire, de jour et dans des conditions et des circonstances normales'.

" Nous savons tous maintenant que la fréquence 2 182 kHz ne permet pas de répondre à ces exigences. Aussi avons-nous à décider si nous sommes prêts à fermer les yeux sur cette insuffisance, surtout en sachant qu'elle peut mettre en danger la vie humaine. En toute rigueur, nous devrions envisager sérieusement, en ce qui concerne la zone tropicale, le remplacement de la fréquence 2 182 kHz par une autre fréquence de détresse. En outre, au cours des discussions aux précédentes séances, on a émis la crainte que la fréquence 6 203,5 kHz ne provoque des brouillages et en subisse elle-même. Je crois que ces craintes ne sont pas fondées. Cette fréquence provient d'un plan du service mobile maritime; si ces craintes étaient fondées, aucune communication du service mobile maritime sur ondes décamétriques n'aurait jamais été possible. Je sou mets donc les remarques ci-dessus à l'examen de la Commission. Quelques délégations n'accuseront peut-être de porter atteinte à l'affaire à traiter en bloc; je répondrai que ce n'est pas mon intention. Ma proposition est motivée par le désir de protéger la vie des personnes qui voyagent sur les mers tropicales. Nous avons longuement discuté à ce propos à diverses séances et j'espère que nous pourrons prendre une décision définitive à cette Commission."

La proposition présentée par le délégué de la Malaisie est appuyée par le délégué du Portugal, mais le délégué de la France déclare que sa délégation ne peut accepter la proposition. A son avis, la fréquence 6 203,5 kHz est nécessaire avant tout dans la Région 3, parce que dans cette région, de nombreux navires de faible tonnage effectuent de longs voyages et cette

considération s'applique spécialement à la Région 3. Si la nouvelle Convention sur la sauvegarde de la vie humaine en mer juge nécessaire d'augmenter la puissance pour porter à 150 milles la portée des émetteurs dans la zone tropicale, cette solution sera la bonne. Cette manière de voir est partagée par le délégué de la Suède. Le délégué de l'Afrique du Sud déclare que, quoique son administration n'ait aucune objection contre l'utilisation facultative de la fréquence 6 203,5 kHz dans la Région 1, elle n'a pas l'intention de la considérer comme une fréquence de remplacement de la fréquence 2 182 kHz qui restera comme fréquence générale d'appel.

La proposition du délégué de la Malaisie est rejetée par 14 voix contre 6 et 9 abstentions.

Avec les amendements mentionnés plus haut, les textes de la page 9 sont adoptés.

Numéro 830d Le délégué de la Suède propose de modifier comme suit la fin de la première phrase : "pour cet appel et pour le trafic". Mais le délégué des Etats-Unis voudrait que l'on modifie encore davantage ce texte et propose la rédaction suivante : "utilisent la fréquence 156,80 MHz pour cet appel et pour de courts messages de sécurité." Après une courte discussion, au cours de laquelle on constate que l'interprétation d'expressions comme "à des fins de sécurité" et "messages de sécurité" donne lieu à de grandes difficultés, le délégué du Portugal propose de supprimer le numéro 830d. Cette proposition est appuyée par les délégués du Canada et des Etats-Unis d'Amérique et, comme il n'y a pas d'objection, elle est adoptée.

Sous réserve de la suppression du numéro 830, les textes de la page 10 sont adoptés.

#### Page 11

Numéro 831j Le délégué des Etats-Unis d'Amérique propose que "Assignment Table" soit, dans le texte anglais, remplacé par "Allotment Table" (le texte français correspondant porte : Tableau de l'Appendice 12a). Comme il n'y a pas d'objection, cette proposition est acceptée.

Avec cet amendement, les textes de la page 11 sont adoptés.

#### Page 12

Numéro 834a Il est convenu que les mots "Dans la Région 1" doivent être ajoutés au début de ce numéro.

Avec cette modification, les textes de la page 12 sont adoptés.

#### Page 13

Le délégué des Etats-Unis d'Amérique propose que le titre soit modifié comme suit : Tableau d'allotissement des fréquences d'émission... etc." Après une courte discussion sur la question de savoir si le terme le plus approprié est "allotissement", "allocation" ou "assignation", il est convenu de laisser cette question à l'appréciation de la Commission 8.

Page 14

L'observateur de la Chambre internationale de navigation propose qu'à la note 6, on remplace "Cette voie" par "La voie 10". Le délégué du Royaume-Uni fait sienne cette proposition et, comme il n'y a pas d'objection, elle est adoptée.

Avec cet amendement, et étant entendu que la référence au "Tableau des assignations" doit être soumise à l'attention de la Commission 8, les textes de la page 14 sont adoptés.

Page 15

La Commission adopte une proposition du délégué de l'Indonésie tendant à la suppression du sous-titre "(voir l'Article 34)". L'observateur du C.I.R.M. se réfère au paragraphe 3 et suggère qu'il y a des cas où la polarisation elliptique pourrait être utile, il suggère donc qu'à la deuxième ligne, on remplace "les émissions" par "l'émission principale". Cette proposition est reprise par le délégué de la Pologne et appuyée par le délégué d'Israël, qui suggère la rédaction suivante : "polarisées principalement verticalement".

Le délégué de la France ne peut accepter cet amendement car il ne voit pas en quoi le nouveau libellé est meilleur que l'ancien. Le délégué de la République fédérale d'Allemagne préfère lui aussi le texte qui figure au Document N° 633. Par 16 voix contre 5 et 5 abstentions, la Commission décide de conserver ce texte tel quel et la page 15 est adoptée.

Ainsi prend fin l'examen du Document N° 633.

3. Amendements à l'Article 9, Section IV (Document N° 654).

Le Président de la Sous-Commission 7B explique que ces amendements sont la conséquence de l'adoption du rapport du Groupe de travail 7B5 et que, s'ils sont approuvés par la Commission 7, ils seront renvoyés à la Commission 4 pour être inclus dans les nouveaux textes de l'Article 9. On relève les fautes de frappe suivantes :

Numéro 265c Au lieu de "4146", lire "4140".

Numéro 267 Ne concerne que le texte anglais.

Page 3

Numéro 263 Après une brève discussion, il est convenu de modifier comme suit la phrase entre parenthèses : "(Voir l'Article 5, et pour l'utilisation de ces fréquences, voir les Articles 33 et 34)".

Numéro 265a Il est convenu que la phrase entre parenthèses doit être modifiée comme suit : "(bande latérale unique seulement)".

Avec ces amendements, les textes de la page 3 sont adoptés.

Page 4

Les textes de la page 4 sont adoptés sous réserve de la rectification des fautes de frappe mentionnées plus haut.

Page 5

Numéro 269 Le délégué des Etats-Unis d'Amérique déclare que les dispositions de ce numéro sont applicables tant dans la Région 3 que dans la Région 2. Après une courte discussion, il est convenu de modifier le texte en conséquence et de modifier également le titre de la Section IVa pour l'Article 33 pour y faire figurer "les Régions 2 et 3". Toutefois, il est fait observer au délégué des Etats-Unis d'Amérique que l'Article 33 a déjà été soumis à la Commission 8 et qu'il serait peut-être nécessaire que la délégation américaine propose cet amendement à la séance plénière.

Avec l'amendement au numéro 269, les textes de la page 5 sont adoptés.

Ainsi prend fin l'examen du Document N° 654.

4. Appendice 10 (Document N° 614)

Le Président de la Sous-Commission 7B appelle l'attention de la Commission sur certaines fautes de frappe et le Document N° 614 est étudié page par page.

Page 3

Le délégué des Etats-Unis d'Amérique propose que, dans la bande des 12 MHz, il y aurait une meilleure protection aux limites de cette bande si les fréquences utilisées pour les émissions à large bande étaient déplacées d'un kHz en plus. Après une courte discussion, cette proposition est adoptée.

Il est convenu qu'un astérisque sera ajouté en face de la fréquence 8 364 kHz et qu'une note expliquera son utilisation. Le délégué des Etats-Unis d'Amérique propose qu'un texte soit inséré à l'Appendice 10, Section B, pour traiter de l'utilisation des fréquences d'appel à double bande latérale et qu'un Groupe spécial soit constitué pour élaborer les textes appropriés. Cette proposition est appuyée par les délégués de la Chine, de la France, de la Suède et des Etats-Unis d'Amérique.

Tout examen du Document N° 614 est donc différé jusqu'à la prochaine séance.

5. Numéro 262 (Document N° 668)

Après une courte discussion, il est convenu à l'unanimité d'adopter les amendements proposés dans le Document N° 668.

L'ordre du jour de la réunion est épuisé.

Le Rapporteur :  
G.F. Wilson

Le Président :  
A.J. Ehrlé

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 840-E  
10 December, 1959COMMITTEE 7

## SUMMARY RECORD

Twenty-Third Meeting of Committee 7(Operations Committee)

Tuesday, 1 December, 1959

Chairman: Mr. A. J. Ehle (Netherlands)

- Agenda:
1. Summary Record of Fourteenth Meeting (Document No. 659)
  2. Approval of Texts for Article 28 (Document No. 571 Rev.)
  3. Approval of Texts for Article 24 (Document No. 594)
1. Approval of Summary Record of Fourteenth Meeting (Document No. 659)

The Summary Record of the Fourteenth Meeting (Document No. 659) was adopted with the following amendment which concerns the French text only.

Item 2, entry regarding Page 4

Amend to read "A proposal by the Delegate of Portugal that the word "hullo" should be deleted in paragraph 7 was supported by the Delegates of Canada and France. Its deletion was not acceptable to the Delegates of the United Kingdom and the Federal Republic of Germany who contended that "Hullo all stations" was in almost general use. A majority of the Delegates voted in favour of a proposal by the Delegate of the Federal Republic of Germany that the English text should be retained as it appears in Document No. 544. Page 4 was accordingly adopted without amendment."

2. Approval of Texts in Document No. 571 Rev.

The Chairman of Sub Committee 7B recalled that when Article 28 had first been approved attention had been drawn to the fact that it would be necessary to add certain paragraphs to follow RR 597 to incorporate the provisions in regard to VHF. However, the re-arrangement of Section II had been raised in Sub Committee 7B and certain proposals were adopted which made it desirable that a revised document should be



read by Committee 7 before submission to the Drafting Committee. There had been no change in substance except insofar as Section II was concerned except that it had been necessary to make additional paragraphs corresponding to RR 589b as a result of the separation of radiotelegraphy and radiotelephony. The paragraphs referred to either No. 588a for radiotelegraphy or 597e for radiotelephony. The pages involved were from page 5 to page 9 and these were considered page by page.

Page 5

RR 581

The Delegate of Norway proposed deletion of this paragraph. His proposal was supported by the Delegate of Sweden and was adopted by nine votes to eight there being eight abstentions. However, in view of questions raised by the Delegate of Indonesia, who pointed out that there were still a considerable number of installations in use that were not crystal controlled, it was agreed to reconsider this question and on a second vote it was decided to retain RR 581 by seventeen votes to three. A proposal by the Delegate of Portugal that this Regulation should be transferred to Section I was adopted. The Delegate of France then recalled that originally a proposal by his Delegation to replace "ship stations" by "mobile stations" had been adopted but this decision was subsequently reversed because RR 581 appeared in a Section which was applicable only to ship stations. In view of its transfer to Section I he now proposed that "mobile stations" should again replace "ship stations". This proposal was supported by the Delegate of Portugal. However, it was not acceptable to the Delegate of Norway and on a vote it was rejected by twelve votes to six, there being five abstentions. The Delegate of Portugal then proposed that the words "and aircraft stations" should be added after "ship stations". This was supported by the Delegate of France but it was rejected by nine votes to seven, there being seven abstentions. Subject to the agreed amendment to RR 581, the texts on page 5 were adopted.

Page 6

RR 588a

A proposal by the Delegate of the United States of America that the second line be amended to read "... distress, urgency and safety purposes." was adopted.

RR 588b

It was agreed that the last line of this Regulation should be amended to read "This provision is applicable in Regions 2 and 3 only."

Subject to the above amendments the texts on page 6 were adopted.

Page 7

The texts on page 7 were adopted without amendment.

Page 8RR 597e

It was agreed that this Regulation be amended to align with RR 588a.

RR 597f

A proposal by the Delegate of Denmark that the text be amended to read as follows "all ship stations equipped with radio-telephony to work in the bands designated for the International Maritime Mobile Radiotelephone Service (see No. 198 and Appendix 12A) must be able to ..... etc." was adopted.

With these amendments the texts on page 8 were adopted.

Proposal No. 4140 (Page 425 R1)

The Delegate of the United States of America recalled that this proposal had been raised in Sub-Committee 7 during the previous week and it had been agreed that it would be better to have it considered in a Plenary meeting of Committee 7. He explained that the original proposal referred to a definite frequency for navigational purposes but the question of a frequency had not been accepted by Sub-Committee 7B and his proposal was now amended to obtain a permissive arrangement. The proposal was supported by the Delegate of China but it was not acceptable to the Delegate of Portugal who did not consider **the proposal essential**. The Delegate of the United Kingdom said that in his view since Sub-Committee 7 had rejected the proposal for a specific frequency it seemed that this proposal should fall automatically. The Observer of the International Chamber of Shipping said that the basic implication of the proposal was that the availability of 500 kc/s and its working channels, or 2 182 kc/s and its working channels, would offset the disadvantages of having only a single channel in the VHF band. He thought this question required careful examination and was



strictly an operational matter. Since there is no VHF distress frequency and in any case the multi-channel requirement is not based on distress considerations the question of distress was obviously not affected. It appeared therefore that the usefulness of either MF telegraphy or telephony lay only in its ability to provide an initial contact by means of which subsequent VHF contact could be established. In radiotelegraphy this object could not be achieved during hours when H8 and H16 ships were not on watch. So far as radiotelephony was concerned there was also a great probability that one ship might have only radiotelegraphy available and the other only radiotelephony. In these circumstances unless a system could enable communication to be established in every relevant case and situation, that system would be either dangerous or useless, or both. He also pointed out that additional channels on VHF were needed for the same reason that they are made mandatory on 500 kc/s and 2 182 kc/s, that is, to enable signalling to be carried out by numbers of ships in range of one another in an orderly and mutually advantageous manner. Adequate control on a single channel would be extremely difficult particularly in an atmosphere of urgency or even crisis which were the very conditions that the single VHF channel was intended to deal with. He therefore did not feel that single channel equipment could be regarded as an advance towards safety. Indeed, for the purpose envisaged, its use might be a danger. Similar views were expressed by the Observer of the C.I.R.M. The Delegate of the United States of America put forward views which had already been recorded in the minutes of the meeting of Sub-Committee 7B on 19 November and after some further discussion the proposal was rejected by thirteen votes to six there being seven abstentions.

Page 9

RR 600c

The Delegate of France proposed that in the last paragraph "8266" should be replaced by "8320". The Chairman of Sub-Committee 7B saw no objection to this proposal and, there being no objection from the floor, it was adopted.

### 3. Article 24 (Document No. 594)

The Delegate of the United States of America reported that informal efforts to obtain a satisfactory text for RR 548 had not been successful and he suggested that an Ad Hoc Group should be set up to study this question. This proposal was agreed and a group was set up consisting of the Delegates of Brazil, France, Indonesia, the United Kingdom and the United States of America.

This concluded the business of the meeting.

Rapporteur:  
G.F. Wilson

Chairman:  
A.J. Ehnlc

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 841-E  
10 December, 1959

COMMITTEE 7

## SUMMARY RECORD

Twenty-Fourth Meeting of Committee 7

(Operations Committee)

Wednesday, 2 December, 1959

Chairman: Mr. A.J. Ehnle (Netherlands)

- Agenda:
1. Article 24, RR 548 (Document No. 594)
  2. Appendix 10 (Document No. 614)
  3. Recommendation concerning reclassification of Public Correspondence Categories for Ships Stations (Document No. 610 Rev.)
  4. Definitions - Report of Joint Working Group (Document No. 672)
  5. Recommendation - Hours of Service for Ships Stations (Document No. 696)
  6. Recommendations to I.M.C.O. and I.C.A.O. and concerning Phonetic Figure Table (Document No. 686)
  7. Any Other Business.

The above Agenda was accepted.

### 1. Article 24, RR 548 (Document No. 594)

The Chairman recalled that the only Regulation remaining for consideration in Document No. 594 was RR 548 and he asked the Delegate of the United States of America to report whether it had been possible to draft a text which might be acceptable to the Committee. The Delegate of the United States of America said that a yellow paper had been circulated containing texts which he thought might be acceptable to all delegations. The efforts of the Ad Hoc Group had been directed to devising a text that would satisfy all points of view and he emphasized that the proposals put forward were for a permissive Regulation; so no Administration need use it if it did not wish to do so.



The Delegate of the United Kingdom of Great Britain and Northern Ireland said that his Delegation was appreciative of the difficulties which confronted the United States of America, nevertheless they felt that the principle underlying both the existing and the proposed RR 548 were basically wrong. In discussions in Sub-Committees and the Committee about safety procedures there had been much discussion of the need for controlling interference in the 2 Mc/s radiotelephony frequencies. He felt that certificates issued under RR 548 would not assist in improving matters in this respect; and he could not agree with the view of the Delegate of the United States of America that an increase of power represented progress. It certainly would not help in reducing interference. However, in the light of the use which had been made of this Regulation and the number of certificates which had been issued as a result he felt the provision could not be deleted overnight and it was his Delegation's view that operational problems of this nature should be solved by compromise and not by vote. For this reason he did not propose to press any objection to the proposals.

The Delegate of Portugal said that his Delegation had supported the deletion of RR 548 because unlike the United States of America where operators holding certificates issued under RR 548 were all within reach of the Administration issuing the certificate, the problem was rather different in Europe where any interference problem arising from the use of these provisions by a neighbouring country might have an adverse effect on the communications of a country that did not make use of this paragraph. However, he would put forward no objection if the present proposals could effect a compromise.

The Delegate of Ireland supported the views of the Delegate of the United Kingdom of Great Britain and Northern Ireland. The Delegate of China recalled that the position of his Delegation had been made clear at the Eighteenth Meeting of Committee 7 and he wished it to be recorded that the texts proposed by the Ad Hoc Group did not meet with unanimous approval of the countries in Region 3. The Delegates of Colombia and Australia supported the texts in the yellow document which had been circulated. The Delegate of New Zealand said that his Administration had no requirements for a Regulation such as RR 548 and he agreed with the views expressed by the Delegate of the United Kingdom. He, therefore, thought that the proposed paragraph 548a should be deleted and that line 4 should be amended to read "Administrations in Region 2 may themselves fix ..... etc." After considerable discussion in which a number of amendments to the texts suggested in the yellow document were put forward the Delegate of the United Kingdom pointed out that those countries who neither used or favoured Regulation No. 548 had gone out of their way in not pressing their proposals for deletion and he felt that the Committee should either accept the paper as it stood without amendment or proceed to a vote.

Summarizing the Chairman said that all of the arguments which had been put forward at Sub-Committee level had again been advanced and he asked the meeting whether it could accept the proposal for RRs 548 and 548a as an acceptable compromise. There being no objection the following texts, which appeared in the yellow document were adopted:

"548 MOD (2) For ship radiotelephone stations where the power in the antenna of the unmodulated carrier wave does not exceed 100 watts and for aircraft radiotelephone stations operating on frequencies allocated exclusively to the aeronautical mobile service, each Administration may itself fix the conditions for obtaining a restricted radiotelephone operator's certificate, provided that the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements and the stability of the frequencies is maintained by the transmitter itself within the limits of tolerance specified in Appendix 3. However, in fixing the conditions Administrations shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 550.

"548a ADD Administrations in Region 1 will not issue certificates under No. 548."

This concluded the examination of Document No. 594.

2. Report of Ad Hoc Group (Document No. 614)

The Convener of the Ad Hoc Group, Mr. Fontaine, said that a document had been distributed in which the Ad Hoc Group proposed to cover the use of HF frequencies assigned for DSB calling, SSD working by footnotes to Appendix 10, Section B. The Delegate of the United Kingdom said that he thought these provisions would be more appropriate if they were included as Regulations in Article 34 and after a short discussion an Ad Hoc Group was set up to prepare suitable texts for inclusion in that Article. After a short recess the Ad Hoc Group proposed inclusion of the following texts in Article 34, Section 3:

"B. Watch

827c ADD § 12e Coast stations open to public correspondence may maintain watch on calling frequencies listed in 827a and those stations are indicated in the list of coast and ship stations.\* Such watch is optional.

"C. Traffic

828 SUP

829 MOD § 13 As in Document No. 633.

829a ADD (2a) The frequencies allocated in Appendix 10, Section B, for single side-band operation are intended to facilitate the use of this technique in the maritime mobile radiotelephone service.

829b ADD (2b) Administrations may assign these frequencies to any category of ship in accordance with traffic requirements.

829c ADD (2c) Equipment designed to operate in these bands should comply with the recommendations of the C.C.I.R."

The Observer of the International Chamber of Shipping suggested that 829b should be amended to read "..... assign these frequencies to ships of any category in accordance with...." and this was agreed.

RR 829c

The Delegate of the U.S.S.R. pointed out that the recommendation of the C.C.I.R. was included in the recommendations to be made by this Conference and he, therefore, thought it wrong to say that equipment should apply. He thought it would be better if the wording of these paragraphs were aligned with the phraseology used in Document No. 567 in which Committee 6 reported on the study of the C.C.I.R. recommendation and to meet this point of view it was agreed that RR 829c should be amended to read:

"The recommendations of the C.C.I.R. should be used as a guide in the design of equipment intended to work in these bands."

3. Recommendation concerning reclassification of Public Correspondence Categories for Ships Stations (Document No. 610 Rev.)

The Delegate of Indonesia pointed out that in "Recommends" No. 2 "Article 45" should be replaced by "Article 35".

The Delegate of Sweden suggested that the last phrase be amended to read "with a view to amending Article 35, Section IV". This proposal was adopted and with these amendments Document No. 610 Rev. was adopted.

4. Definitions - Report of General Working Group (Document No. 672)

Document No. 672 was introduced by the Convener of the Ad Hoc Working Group, Mr. Bès, and the document was considered as a whole. The Delegate of the United States of America could see no point in limiting a ships emergency transmitter by inclusion of the phrase "to be used exclusively on the distress frequency" and he proposed that this phrase should be deleted. The Delegate of France pointed out that unless the use were limited to the distress frequency it would be possible for these transmitters to be used for sending traffic on a working frequency although they did not comply with the tolerance necessary for ordinary traffic purposes. This view was supported by the Delegates of the United Kingdom and of Australia. However, after a short discussion the Delegate of the United States of America did not press his proposal and Document No. 672 was adopted.

5. Recommendation - Hours of Service of Ships Stations (Document No. 696)

There being no objection, Document No. 696 was adopted.

6. Recommendation to I.M.C.O. and I.C.A.O. and Concerning Phonetic Figure Table (Document No. 686)

Recommendation to I.M.C.O. and I.C.A.O.

Document No. 686 was introduced by the Chairman of Sub-Committee 7B. The Delegate of Portugal suggested that in "request" No. 2 "progressive introduction" should be replaced by "progressive study". However, after a short discussion the recommendation to I.M.C.O. and I.C.A.O. in Document No. 686 was adopted without amendment.

Recommendation - Phonetic Figure Table

The recommendations on pages 11 to 13 of Document No. 686 were adopted noting that it would be necessary to align the phonetic expressions appearing in the French and Spanish texts with I.C.A.O., Appendix 10.

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This concluded the business of the meeting.

G.F. Wilson  
Rapporteur

A.J. Ehnle  
Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 842-E  
10 December, 1959

## COMMITTEE 7

### SUMMARY RECORD

#### Twenty-fifth Meeting of Committee 7 (Operations Committee)

Friday, 4 December, 1959

Chairman : Mr. A. J. Ehnle (Netherlands)

#### Agenda:

1. Approval of Texts for Article 20 (Document No. 709)
2. Approval of Texts for Appendix 8 (Document No. 708)
3. Approval of Texts for Appendix 7 (Document No. 698)
4. Resolution - Service Documents (Document No. 620)
5. Resolution - Formation of Call Signs (Document No. DT 790)
6. Recommendation - Operator Certificates (Document No. DT 628)
7. Appendix 8a (Document No. 752)
8. Any Other Business.

The above Agenda was accepted by the meeting.

#### 1. Approval of Texts for Article 20 (Document No. 709)

Document No. 709 was introduced by Mr. Bouchier, Chairman of Sub-Committee 7A and the document was considered page by page.

#### Page 3

The Chairman of Sub-Committee 7A, referring to RR 450, said that the text for this Regulation would have to be written after taking into account the decisions reached by Committee 5. Sub-Committee 7A had decided that Part A of the list should be deleted and that only broadcasting stations working on frequencies below 27.5 Mc/s should be included in the list.



RR 449

The Delegate of Canada proposed that this No. should be deleted and his Proposal was supported by the Delegate of Indonesia. However, the Delegate of the United Kingdom suggested that the text as it appears in Document No. 709 be retained and the proposal of Canada was rejected by 17 votes to 8, there being 5 abstentions.

It was agreed that "which" be deleted and replaced by "fixed stations".

Subject to this amendment the texts on page 3 were adopted.

Page 4

Subject to minor Editorial amendments the texts on page 4 were adopted.

Page 5

RR 462

The Delegate of Norway proposed reinstatement of the provision in regard to maps of coast stations. This proposal was supported by the Delegates of Portugal, Sweden and the U.S.S.R. The Delegate of France also supported the proposal and suggested the following wording for the amended RR 462 "maps of radiotelegraph and radiotelephone coast stations open to public correspondence". The Delegate of the United Kingdom said that he also could support the proposal and suggested that "port operations services" should also be included. This Proposal was acceptable to the Delegates of France and Norway. There being no objection, the Proposal as amended was adopted. Subject to this and Editorial amendments the texts on page 5 were adopted.

Pages 6 to 8

Subject to Editorial amendments the texts on pages 6 to 8 were adopted.

This completed the examination of Document No. 709

2. Document No. 708

The Chairman of Sub-Committee 7A drew attention to Editorial and typographical errors which required correction. The Document was then considered page by page.



Page 1

The Chairman of Sub-Committee 7A pointed out that his Sub-Committee had agreed that c) should be deleted and accordingly d) should be renumbered.

Page 3

The texts on page 3 were adopted with the addition of "List III. List of Broadcasting Stations (see decisions of Committee 5)".

Page 4

The Chairman of Sub-Committee 7A pointed out that the Sub-Committee had agreed to an amended presentation of the heading of column 9 in Part B and that similar amendments should be made throughout the document. With this and minor Editorial amendments the texts on page 4 were adopted.

Page 5 - Second and Third Lines

The Delegate of France proposed deletion of the word "basic" and this proposal was supported by the Delegate of Belgium. However, the Delegates of the Federal Republic of Germany and the United Kingdom pointed out that there was a basic charge which Administrations varied according to their needs, for example, in the provision of reduced rate services. After some discussion the text as it appears in Document No. 780 was adopted by 16 votes to 6, there being seven abstentions.

The texts on page 5 were adopted subject to minor Editorial amendments.

Page 6

The Delegate of Norway said that adoption of the Tables appearing under "radiotelegraphy" and "radiotelephony" would present a considerable Administrative problem so far as licences were concerned and he suggested that re-arrangement of the lettering was necessary. However, his proposal for amendment of the Table was rejected by twenty votes to nil, there being eight abstentions.

The texts on page 6 were adopted with the addition of a Footnote referring to the band 4 000 - 23 000 kc/s to the effect that this might require modification to take account of the decisions of Committee 5 to include an additional maritime band at 25 Mc/s.

Pages 7 to 15

Subject to amendments of the "geographical position" where necessary and minor Editorial amendments the texts on pages 7 to 15 were adopted.

Page 16

The Chairman of Working Group 7A7 said that a re-arrangement of the headings had been agreed and as this did not affect the substance he would hand a copy to the rapporteur.

A Proposal by the Delegate of the United Kingdom that this Table should be completely deleted was supported by the Delegates of Canada and the United States of America. However, this proposal was not acceptable to the Delegates of Indonesia or France and it was rejected by 15 votes to 10, there being 4 abstentions. The texts on page 16 were accordingly adopted and this completed consideration of Document No. 708.

The Chairman of Sub-Committee 7A referred to a reservation made by the Delegations of France and French O.P.T.A. in regard to the deletion of Section 5. The Delegate of France proposed that this Section be reinstated and his proposal was supported by the Delegate of China. However, on a vote it was rejected by 10 votes to 5, there being 15 abstentions.

3. Approval of Texts for Appendix 7 (Document No. 698)

The Chairman of Sub-Committee 7A drew attention to certain Editorial amendments that were necessary as well as the following amendments which had been agreed in Sub-Committee 7A.

Page 4

Delete the entries in respect of AA, AG, AP.

Page 5

Insert "ADD FP port operations stations".

Page 6

Against HT replace "transmission" by "transition".

Delete the entries in regard to PX and RL.

With these amendments the texts in Document No. 698 were adopted.

4. Resolution - Service Documents (Document No. 620)

Subject to Editorial amendments the texts in Document No. 620 were adopted.

5. Recommendation - Operator Certificates (Document No. DT 628)

A proposal by the Delegate of the United Kingdom that "nomenclature of" be deleted in the title was adopted. With this amendment and noting that alignment of the English and Spanish texts was necessary, Document No. 628 was adopted and since this was a working document it appears as Annex 1 to this Record.

6. Resolution - Formation of Call Signs (Document No. DT 790)

The document was considered page by page.

Page 2

The Delegate of China proposed that in "resolve" No. 2 the letter Q should be included because of the possibility of confusion with the Q code. This proposal was supported by the Delegate of the Argentine and after a short discussion, it was agreed to include the letter "Q".

Page 3

It was agreed to amend paragraph 3.1 to read "... to avoid as far as possible further requests".

Referring to paragraph 5, the Delegate of the United States of America suggested that this be amended to read "that if, nevertheless, before the next Administrative Radio Conference, it appears that all the possibilities of the present system of forming call signs as amended by (1) and (2) above will become exhausted the General Secretariat shall issue a circular letter:". This proposal was supported by the Delegate of the United Kingdom and, there being no objection, it was adopted noting that since this was a working document it should appear as Annex 2 to this Record.

7. Appendix 8a (Document No. 752)

After a number of Delegates had pointed out that this Appendix would require further study to eliminate those signals which already appeared in Appendix 9, the Delegate of Portugal said that since the inclusion of the Morse alphabet in the Radio Regulations had not previously been necessary, he considered that this Appendix might be deleted. His proposal was supported by the Delegate of the United Kingdom and there being no objection, it was decided to delete Appendix 8a.

8. Any Other Business

Document No. 707

Document No. 707 was introduced by the Delegate of Ireland and after a short discussion it was adopted by fourteen votes to four, there being eight abstentions and it was agreed "phonetic alphabet" should be amended to read "spelling alphabet" to align with I.C.A.O. nomenclature.

This concluded the business of the Meeting.

Rapporteur:

G. F. Wilson

Chairman:

A. J. Ehnlé

Annexes: 2

A N N E X 1

RECOMMENDATION RELATING TO OPERATOR CERTIFICATES

The Administrative Radio Conference of Geneva (1959),  
considering,

1. that Article 24 of the Radio Regulations provides that Operator Certificates for ship and aircraft stations be divided into two general categories, i.e., radiotelegraph and radiotelephone;
2. that with the introduction of new modes of telecommunication, including the use of automatic communications devices, it becomes increasingly difficult to categorize such modes as either radiotelegraph or radiotelephone;
3. that all such devices, as well as radiotelephone stations, may be operated by holders of radiotelegraph operator certificates; and many automatic communication devices may be operated by holders of radiotelephone certificates;

recommends that,

Administrations consider this problem and submit to the next Administrative Radio Conference proposals for the amendment of Article 24 to recognize, particularly in the nomenclature of Operator Certificates, the use of such new communication techniques.

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A N N E X 2

DRAFT RESOLUTION ON THE FORMATION OF CALL-SIGNS

The (Administrative Radio Conference),

considering

- a) the Recommendation relating to a new method of generating call-signs (Atlantic City, 1947);
- b) the fact that no new proposal has been placed before the Administrative Radio Conference, Geneva, 1959;
- c) Document No. 456 submitted by the Republic of the Philippines;
- d) the increasing demand for call-signs justified by the increased number of countries which are Members of the International Telecommunication Union or by the increased requirements of Administrations of countries which are already Members;
- e) the information supplied by the General Secretariat as regards allocations of call-signs since 1947 and the possibilities of the current system of forming call-signs;

believing

- a) that call-signs already in use should, as far as possible, not be changed;
- b) that, however, the current system of forming call-signs may not be adequate to meet all the requirements submitted between the present time and the next Administrative Radio Conference;

resolves

1. that, should the existing call-sign series formed of three letters or a figure and two letters be exhausted, recourse may be had to series formed of a letter, a figure and a letter. In no case may the figure be 0 or 1:
2. that the method advocated in 1. above shall not be applicable to series beginning with one of the following letters: B P G I K M N Q R U W:
3. that the General Secretariat shall issue a circular letter urging the Administrations of Members of the Union:
  - 3.1. to make the maximum use of the possibilities of the series at present allocated to avoid as far as possible further requests;
  - 3.2. to review the call-sign allocations they have so far made so as to free any series that can be freed and place them at the disposal of the Union;
4. that any Administration of a Member of the Union may, if it so desires, obtain help and advice from the General Secretariat in order to meet the requirements of economy which should be the rule in the matter in question;
5. that if, nevertheless, before the next Administrative Radio Conference, it appears that all the possibilities of the present system of forming call-signs as amended by 1. and 2. above will become exhausted, the General Secretariat shall issue a circular-letter:
  - 5.1. explaining the position;
  - 5.2. urging the Administrations of Members to send in their proposals for possible solutions;
6. that, from the information thus assembled, the General Secretariat shall prepare a report, together with its own comments and suggestions, if any, for submission to the next Administrative Radio Conference.



E

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 843-E  
10 December, 1959**

**SERIES 21**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source | Document No.      | Reference  | Page  | Remarks |
|--------|-------------------|------------|-------|---------|
| Com. 5 | 680 Rev.<br>& 429 | Art. 18    | 21—01 |         |
| Com. 7 | 758               | Art. 19    | 21—04 |         |
|        | 755               | Art. 22    | 21—17 |         |
|        | DT 790            | Resolution | 21—19 |         |
|        |                   |            |       |         |



## Former reference

Chap.: VI  
Art. : 18  
Nos. : 401 to 411

## Source

Committee: 5  
Doc. Nos.: 680 Rev.  
and 429

## New reference

Chap.:  
Art.:  
Nos.:

## ARTICLE 18

**International Monitoring**

402 MOD

§ 1. Administrations agree to continue the development of monitoring facilities to assist in the implementation of these Regulations and to co-operate, to the extent practicable, in the continued development of an international monitoring system.

401 MOD

§ 2. Monitoring stations participating in the international monitoring system may be operated by an administration or by a public or private enterprise recognized by its administration or by a common monitoring service established by two or more countries or by an international organization.

403 MOD

§ 3. Administrations will, as far as they consider practicable, conduct such monitoring of both a general and a specific nature as may be requested of them by the International Frequency Registration Board or by other administrations. In requesting monitoring observations, the Board and administrations should take into account the monitoring facilities set forth in the List of International Monitoring Stations (see Article 20), and should clearly specify both the purpose for which the observations are requested, the parameters of the requested monitoring work and the appropriate schedules. The results of such monitoring forwarded to other administrations may also be sent to the Board, if appropriate.

404 MOD

§ 3a. Each administration or common monitoring service established by two or more countries, or international organization participating in the international monitoring system, shall designate a centralizing office to which all requests for monitoring information shall be addressed and through which monitoring information will be forwarded to the Board or to centralizing offices of other administrations.

- 404a ADD § 3b. Administrations agree that monitoring requests from international organizations not participating in the international monitoring system should be co-ordinated by the Board and, if appropriate, forwarded by it to administrations.
- 405 NOC § 4. However, these provisions shall not affect private monitoring arrangements made for special purposes by administrations, international organizations, or public or private enterprises.
- 406 MOD § 5. The technical standards recommended by the C.C.I.R. to be observed by monitoring stations shall be recognized by the Board as the optimum practicable technical standards for monitoring stations participating in the international monitoring system. However, to meet some needs for monitoring data, stations observing lower technical standards may participate in the international monitoring system at the discretion of their administrations.
- 407 MOD § 5a. Administrations or international organizations, having determined whether their monitoring stations meet adequate technical standards, shall notify to the Secretary General pertinent information of the centralizing office and of the stations which may participate in the international monitoring system, as prescribed in Article 20 and Appendix 6.
- 407a ADD § 5b. (1) Results of measurements forwarded to the Board or other administrations shall indicate the estimated accuracy obtained at the time the measurements were made.
- 408 SUP
- 409 MOD (2) Where the results supplied by any monitoring station appear to be doubtful or insufficient for its purposes the Board shall advise the administration or international organization concerned giving the appropriate details.
- 409a ADD § 5c. When rapid action is required communication between the Board and centralizing offices should be transmitted by the most expeditious means available.

409b ADD

§ 5d. To ensure that published monitoring data are current and world-wide in nature, administrations having jurisdiction over monitoring stations listed in the List of International Monitoring Stations (see Article 20) shall make every effort, as practicable, to arrange for monitoring observations to be made by such stations and submitted to the Board as soon as possible after the date of observation.

409c ADD

§ 5e. Centralizing offices may request the help of other centralizing offices in order to implement the provisions of this Article and of Article 14.

410 MOD

§ 6. The Board shall record the results supplied by the monitoring stations participating in the international monitoring system.

411 MOD

§ 7. The Board shall prepare periodically, for publication by the Secretary General, summaries of the useful monitoring data received by it including a list of the stations contributing the data.

**Former reference**

Chap.: VII  
 Art. : 19  
 Nos. : 411a-445

**Source**

Committee: 7  
 Doc. No. : 758

**New reference**

Chap.:  
 Art.:  
 Nos.:

**CHAPTER VII**

Title SUP

**ARTICLE 19 \***

Title MOD

**Identification of Stations**

Title MOD

**Section I. General Provisions**

411a ADD

§ 1. (1) Transmissions without identification or with false identification<sup>1</sup> are prohibited.

411b ADD

(2) However, the requirements of identification need not apply to survival craft stations when transmitting distress signals automatically.

427a ADD

§ 2. A station shall be identified either by its call sign or any other recognized means of identification such as: name of station, location of station, official registration mark, flight identification number, characteristic signal, or characteristic of emission or other clearly distinguishing features readily recognized internationally. One or more of these means of identification shall be used, as necessary for complete identification of the station.

411c ADD

§ 3. In order that stations may be readily identified, each station shall transmit its identification as frequently as practicable during the course of transmissions, including those made for tests, adjustments or experiments. During such transmissions, however, identification shall be transmitted at least hourly, preferably within the period from ten minutes before to ten minutes after the hour.

411a.1 ADD

<sup>1</sup> In the present state of the technique it is recognized, nevertheless, that the transmission of identifying signals for certain radio systems (e.g. radio determination and radio relay systems) is not always possible.

\* Committee 8 has thought it desirable to rearrange the provisions of this Article. However the numbering of Document No. 758 has been retained to permit comparison between the proposed text and this document.

(G.M.T.), unless to do so would cause unreasonable interruption of traffic. To meet these identification requirements, administrations are urged to ensure that, wherever practicable, superimposed identification methods be employed in accordance with C.C.I.R. Recommendations.

427b ADD

§ 4. (1) The identifying signal shall be transmitted by methods which, in accordance with C.C.I.R. Recommendations, do not require the use of special terminal equipment for reception.

427c ADD

(2) If superimposed identification is used, the identification shall be preceded by the signal QTT.

427d ADD

§ 5. When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on different frequencies, each station shall, as far as practicable, transmit its own identification or those of all the stations.

445 NOC

§ 6. Each country reserves the right to establish its own measures for identifying its stations used for national defence. However, it shall use, as far as possible, call signs recognizable as such, and containing the distinctive letters of its nationality.

## Section II. Allocation of International Series, and Assignment of Call Signs

412 (MOD)

§ 7. (1) All stations open to the international public correspondence service, all amateur stations, and other stations which are capable of causing harmful interference beyond the boundaries of the country to which they belong, shall have call signs from the international series assigned to each country as given in the Table of Allocation of Call Signs Series in No. 419zerob.

413 MOD

(2) However, it is not compulsory to assign call signs from the international series to stations which are easily identified by

other means (see No. 427a) and whose signals of identification or characteristics of emission are published in international documents.

419 MOD

§ 8. (1) The first character or the first two characters of the call signs given in the following table show the nationality of the stations.

419zero a  
ADD

(2) The series of call signs preceded by an asterisk indicate the international organization to which they are allocated.

419zero b  
MOD

**Table of Allocation of International Call Sign Series**

| Call Signs | Allocated to:                  | Call Signs | Allocated to:  |
|------------|--------------------------------|------------|--|
| AAA-ALZ    | United States of America       | EKA-EKZ    | Union of Soviet Socialist Republics  |
| AMA-AOZ    | Spain                          | ELA-ELZ    | Liberia  |
| APA-ASZ    | Pakistan                       | EMA-EOZ    | Union of Soviet Socialist Republics  |
| ATA-AWZ    | India (Republic of)            | EPA-EQZ    | Iran   |
| AXA-AXZ    | Australia (Commonwealth of)    | ERA-ERZ    | Union of Soviet Socialist Republics  |
| AYA-AZZ    | Argentina (Republic)           | ESA-ESZ    | Estonia  |
| BAA-BZZ    | China                          | ETA-ETZ    | Ethiopia   |
| CAA-CEZ    | Chile                          | EUA-EWZ    | Belorussian Soviet Socialist Republic  |
| CFA-CKZ    | Canada                         | EXA-EZZ    | Union of Soviet Socialist Republics  |
| CLA-CMZ    | Cuba                           | FAA-FZZ    | France and Overseas States of the French Community and French Overseas Territories |
| CNA-CNZ    | Morocco (Kingdom of)           | GAA-GZZ    | United Kingdom of Great Britain and Northern Ireland                               |
| COA-COZ    | Cuba                           | HAA-HAZ    | Hungarian People's Republic  |
| CPA-CPZ    | Bolivia                        |            |  |
| CQA-CRZ    | Portuguese Oversea Provinces   |            |  |
| CSA-CUZ    | Portugal                       |            |  |
| CVA-CXZ    | Uruguay (Oriental Republic of) |            |  |
| CYA-CZZ    | Canada                         |            |  |
| DAA-DTZ *  | Germany                        |            |  |
| DUA-DZZ    | Philippines (Republic of the)  |            |  |
| EAA-EHZ    | Spain                          |            |  |
| EIA-EJZ    | Ireland                        |            |  |

\* May possibly be amended according to decision taken by the Plenary Assembly.

| Call Signs | Allocated to:  | Call Signs | Allocated to:  |
|------------|--|------------|--|
| HBA-HBZ    | Switzerland (Confederation)  | MAA-MZZ    | United Kingdom of Great Britain and Northern Ireland                               |
| HCA-HDZ    | Ecuador  | NAA-NZZ    | United States of America   |
| HEA-HEZ    | Switzerland (Confederation)  | OAA-OCZ    | Peru   |
| HFA-HFZ    | Poland (People's Republic of)  | ODA-ODZ    | Lebanon  |
| HGA-HGZ    | Hungarian People's Republic  | OEA-OEZ    | Austria  |
| HHA-HHZ    | Haiti (Republic of)  | OFA-OJZ    | Finland  |
| HIA-HIZ    | Dominican Republic   | OKA-OMZ    | Czechoslovakia   |
| HJA-HKZ    | Colombia (Republic of)   | ONA-OTZ    | Belgium  |
| HLA-HMZ    | Korea (Republic of)  | OUA-OZZ    | Denmark  |
| HNA-HNZ    | Iraq (Republic of)   | PAA-PIZ    | Netherlands  |
| HOA-HPZ    | Panama (Republic of)   | PJA-PJZ    | Netherlands Antilles   |
| HQA-HRZ    | Honduras (Republic of)   | PKA-POZ    | Indonesia (Republic of)  |
| HSA-HSZ    | Thailand   | PPA-PYZ    | Brazil   |
| HTA-HTZ    | Nicaragua  | PZA-PZZ    | Surinam  |
| HUA-HUZ    | El Salvador (Republic of)  | QAA-QZZ    | (Service abbreviations)  |
| HVA-HVZ    | Vatican City State   | RAA-RZZ    | Union of Soviet Socialist Republics  |
| HWA-HYZ    | France and Overseas States of the French Community and French Overseas Territories | SAA-SMZ    | Sweden   |
|            |  | SNA-SRZ    | Poland (People's Republic of)  |
|            |  | SSA-SSM    | United Arab Republic (Egyptian Region)   |
| HZA-HZZ    | Saudi Arabia (Kingdom of)  | SSN-STZ    | Sudan (Republic of the)  |
|            |  | SUA-SUZ    | United Arab Republic (Egyptian Region)   |
| IAA-IZZ    | Italy and Territories under mandate of U.N.  | SVA-SZZ    | Greece   |
| JAA-JSZ    | Japan  | TAA-TCZ    | Turkey   |
| JTA-JVZ    | Mongolian People's Republic  | TDA-TDZ    | Guatemala  |
| JWA-JXZ    | Norway   | TEA-TEZ    | Costa Rica   |
| JYA-JYZ    | Jordan (Hashemite Kingdom of)  | TFA-TFZ    | Iceland  |
| JZA-JZZ    | Netherlands New Guinea   | TGA-TGZ    | Guatemala  |
| KAA-KZZ    | United States of America   | THA-THZ    | France and Overseas States of the French Community and French Overseas Territories |
| LAA-LNZ    | Norway   |            | Costa Rica   |
| LOA-LWZ    | Argentine Republic   | TIA-TIZ    | France and Overseas States of the French Community and French Overseas Territories |
| LXA-LXZ    | Luxembourg   | TJA-TRZ    |  |
| LYA-LYZ    | Lithuania  |            |  |
| LZA-LZZ    | Bulgaria (People's Republic of)  |            |  |



| Call Signs  | Allocated to:   | Call Signs   | Allocated to:   |
|---|---|--|---|
| TSA-TSM<br>TSN-TZZ  | Tunisia<br>France and Overseas<br>States of the French<br>Community and<br>French Overseas Ter-<br>ritories   | XYA-XZZ<br>YAA-YAZ<br>YBA-YHZ<br>YIA-YIZ<br>YJA-YJZ            | Burma (Union of)<br>Afghanistan<br>Indonesia (Republic of)<br>Iraq (Republic of)<br>New Hebrides (Anglo-<br>French Condominium)   |
| UAA-UQZ   | Union of Soviet Socialist<br>Republics  | YKA-YKZ  | United Arab Republic<br>(Syrian Region)   |
| URA-UTZ   | Ukrainian Soviet<br>Socialist Republic  | YLA-YLZ<br>YMA-YMZ   | Latvia<br>Turkey  |
| UUA-UZZ   | Union of Soviet Socialist<br>Republics  | YNA-YNZ<br>YOA-YRZ   | Nicaragua<br>Roumanian People's Re-<br>public   |
| VAA-VGZ<br>VHA-VNZ  | Canada<br>Australia (Common-<br>wealth of)  | YSA-YSZ<br>YTA-YUZ   | El Salvador (Republic of)<br>Yugoslavia (Federal Re-<br>public of)  |
| VOA-VOZ<br>VPA-VSZ  | Canada<br>Overseas Territories for<br>the international rela-<br>tions of which the<br>government of the<br>United Kingdom of<br>Great Britain and<br>Northern Ireland are<br>responsible | YVA-YYZ<br>YZA-YZZ<br><br>ZAA-ZAZ<br><br>ZBA-ZJZ               | Venezuela (Republic of)<br>Yugoslavia (Federal Re-<br>public of)<br>Albania (People's Re-<br>public of)<br>Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great Bri-<br>tain and Northern Ire-<br>land are responsible |
| VT A-VWZ<br>VXA-VYZ<br>VZA-VZZ  | India (Republic of)<br>Canada<br>Australia (Common-<br>wealth of)   | <br><br><br><br><br><br><br><br><br><br>ZKA-ZMZ<br>ZNA-ZOZ     | New Zealand<br>Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great Bri-<br>tain and Northern Ire-<br>land are responsible.  |
| WAA-WZZ<br>XAA-XIZ<br>XJA-XOZ<br>XPA-XPZ<br>XQA-XRZ<br>XSA-XSZ<br>XTA-XTZ | United States of America<br>Mexico<br>Canada<br>Denmark<br>Chile<br>China<br>France and Overseas<br>States of the French<br>Community and<br>French Overseas Ter-<br>ritories             | <br><br><br><br><br><br><br><br><br><br><br>ZPA-ZPZ<br>ZQA-ZQZ | Paraguay<br>Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great<br>Britain and Northern<br>Ireland are responsible  |
| XUA-XUZ<br>XVA-XVZ<br>XWA-XWZ<br>XXA-XXZ                                  | Cambodia (Kingdom of)<br>Viet-Nam (Republic of)<br>Laos (Kingdom of)<br>Portuguese Oversea Pro-<br>vinces   |  |   |

| Call Signs | Allocated to:  | Call Signs | Allocated to:  |
|------------|--|------------|--|
| ZRA-ZUZ    | Union of South Africa and Territory of South West Africa | 5RA-5VZ    | France and Overseas States of the French Community and French Overseas Territories |
| ZVA-ZZZ    | Brazil   | 5WA-5ZZ    | (Not allocated)  |
| 2AA-2ZZ    | United Kingdom of Great Britain and Northern Ireland     | 6AA-6BZ    | United Arab Republic (Egyptian Region)   |
| 3AA-3AZ    | Monaco   | 6CA-6CZ    | United Arab Republic (Syrian Region)   |
| 3BA-3FZ    | Canada   | 6DA-6JZ    | (Not allocated)  |
| 3GA-3GZ    | Chile  | 6KA-6NZ    | Korea (Republic of)  |
| 3HA-3UZ    | China  | 6OA-6OZ    | Somaliland (Italian administration)  |
| 3VA-3VZ    | Tunisia  | 6PA-6SZ    | Pakistan   |
| 3WA-3WZ    | Viet-Nam (Republic of)                                   | 6TA-6UZ    | Sudan (Republic of)  |
| 3XA-3XZ    | Guinea (Republic of)                                     | 6VA-6ZZ    | (Not allocated)  |
| 3YA-3YZ    | Norway   | 7AA-7IZ    | Indonesia (Republic of)  |
| 3ZA-3ZZ    | Poland (People's Republic of)                            | 7JA-7NZ    | Japan  |
| 4AA-4CZ    | Mexico   | 7OA-7RZ    | (Not allocated)  |
| 4DA-4IZ    | Philippines (Republic of the)                            | 7SA-7SZ    | Sweden   |
| 4JA-4LZ    | Union of Soviet Socialist Republics                      | 7TA-7YZ    | (Not allocated)  |
| 4MA-4MZ    | Venezuela (Republic of)                                  | 7ZA-7ZZ    | Saudi Arabia (Kingdom of)  |
| 4NA-4OZ    | Yugoslavia (Federal People's Republic of)                | 8AA-8IZ    | Indonesia (Republic of)  |
| 4PA-4SZ    | Ceylon   | 8JA-8NZ    | Japan  |
| 4TA-4TZ    | Peru   | 8OA-8RZ    | (Not allocated)  |
| * 4UA-4UZ  | United Nations (U.N.)                                    | 8SA-8SZ    | Sweden   |
| 4VA-4VZ    | Haiti (Republic of)                                      | 8TA-8YZ    | (Not allocated)  |
| 4WA-4WZ    | Yemen  | 8ZA-8ZZ    | Saudi Arabia (Kingdom of)  |
| 4XA-4XZ    | Israel (State of)  | 9AA-9AZ    | San Marino (Republic of)   |
| * 4YA-4YZ  | International Civil Aviation Organization (ICAO)         | 9BA-9DZ    | Iran   |
| 4ZA-4ZZ    | Israel (State of)  | 9EA-9FZ    | Ethiopia   |
| 5AA-5AZ    | Libya (United Kingdom of)                                | 9GA-9GZ    | Ghana  |
| 5BA-5BZ    | (Not allocated)  | 9HA-9JZ    | (Not allocated)  |
| 5CA-5GZ    | Morocco (Kingdom of)                                     | 9KA-9KZ    | Kuwait   |
| 5HA-5IA    | (Not allocated)  | 9LA-9LZ    | (Not allocated)  |
| 5JA-5KZ    | Colombia (Republic of)                                   | 9MA-9MZ    | Malaya (Federation of)   |
| 5LA-5MZ    | Libéria  | 9NA-9NZ    | Nepal  |
| 5NA-5OZ    | (Not allocated)  | 9OA-9UZ    | Belgian Congo and Territory of Ruanda-Urundi                                       |
| 5PA-5QZ    | Denmark  | 9VA-9ZZ    | (Not allocated)  |

- 419zeroc ADD      § 9. Should the available call sign series in this table be exhausted, new call-sign series may be allocated according to the principles set out in Resolution No. . . . relating to the Formation of Call Signs and to Allocation of New Series.
- 419a ADD      § 10. Between two administrative radio conferences, the Secretary General is authorized to deal with questions relating to changes in the allocation of series of call signs, on a provisional basis, and subject to confirmation by the following conference. (See also No. 419zeroc.)
- 417 MOD      § 11. (1) Each country shall choose the call signs of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary General the call signs which it has assigned together with the information which is to appear in Lists I to VI inclusive. These notifications do not include call signs assigned to amateur and experimental stations.
- 418 MOD      (2) The Secretary General shall ensure that the same call sign is not allotted more than once and that call signs which might be confused with distress signals, or with other signals of the same nature, are not allotted.
- 414 MOD      § 12. (1) When a *fixed station* or a *broadcasting station* uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency.
- 415 MOD      (2) When a broadcasting station uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency or by some other appropriate means, such as announcing the name of the place and frequency used.
- 416 (MOD)      (3) When a *land station* uses more than one frequency, each frequency may, if desired, be identified by a separate call sign.

416a ADD

(4) Where practicable *coast stations* should use a common call sign for each frequency series <sup>1</sup>.

Title NOC

### Section III. Formation of Call Signs

438\* NOC

§ 13. (1) The twenty-six letters of the alphabet, in the cases specified below, may be used to form call signs. Accented letters are excluded. In accordance with the Table of Allocation of Call Sign Series, the first or second letter in a particular series of letters may be replaced, in certain cases, by a digit.

439. NOC

(2) However, the following combinations may not be used as call signs :

440 NOC

a) combinations which might be confused with distress signals or with other signals of a similar nature ;

441 (MOD)

b) combinations reserved for the abbreviations to be used in the radiocommunication services (see Appendix 9) ;

443 (MOD)

c) those four-letter combinations commencing with the letter A which are used for the geographical portion of the International Code of Signals, in cases where confusion is likely to arise ;

442 NOC

d) for amateur stations, combinations commencing with a digit when the second character is the letter O or the letter I ;

416a.1 ADD

<sup>1</sup> By "frequency series" is meant a group of frequencies, each of which belongs to one of the different bands between 4000 and 23 000 kc/s that are allocated exclusively to the maritime mobile service.

\* This number includes part of N° 420 in Document 758.

420 MOD

§ 14. Call signs in the international series are formed as indicated in Nos. 421 to 427<sup>2</sup>.

*Land and fixed stations*

421 (MOD)

§ 15. (1) — three letters

*or*

— three letters followed by not more than three digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

422 MOD

(2) However, it is recommended that, as far as possible,

a) the call signs of *coast and aeronautical stations* shall consist of :

— three letters

*or*

— three letters followed by one or two digits (other than the digits 0 and 1 in cases where they immediately follow a letter) ;

b) the call signs of *fixed stations* shall consist of :

— three letters followed by two digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

*Ship stations*

423 (MOD)

§ 16. (1) — four letters.

429<sup>1</sup> (MOD)

(2) However, *ship stations* using radiotelephony may also use a call sign consisting of :

— two or three letters followed by four digits (other than the digits 0 and 1 when they immediately follow a letter).

|                        |           |  |
|------------------------|-----------|--|
|                        |           | <i>Aircraft stations</i>   |
| 424 (MOD)              | § 17.     | — five letters.  |
|                        |           | <i>Ships survival craft stations</i>   |
| 425 SUP<br>425a ADD    | § 18.     | — the call sign of the parent ship followed by two digits (other than 0 or 1).   |
|                        |           | <i>Aircraft survival craft stations</i>  |
| 425b ADD               | § 19.     | — the call sign of the parent aircraft.  |
|                        |           | <i>Mobile stations other than ship and aircraft stations</i>   |
| 426 MOD                | § 20. (1) | — four letters followed by a single digit (other than 0 or 1).   |
| 433 <sup>1</sup> MOD   | (2)       | However, mobile stations other than ship and aircraft stations and using radiotelephony may use a call sign consisting of :<br>— four letters followed by one digit other than 0 or 1<br>or<br>— two or three letters followed by four digits.   |
|                        |           | <i>Amateur and experimental stations</i>   |
| 427 <sup>1</sup> (MOD) | § 21. (1) | — one or two letters and a single digit (other than 0 or 1).   |
| 427 <sup>2</sup>       | (2)       | However, the prohibition of the use of the digits 0 and 1 does not apply to <i>amateur stations</i> .  |
|                        |           | <b>Section IV. Identification of Stations using Radiotelephony</b>   |
| 428 (MOD)              | § 22. (1) | <i>Coast stations</i> employing radiotelephony may use :<br>— a call sign established in conformity with Nos. 421 and 422 ;<br>— the geographical name of the place as it appears in the List of Coast Stations, followed preferably by the word RADIO or by any other appropriate indication. |
| 429 <sup>2</sup> MOD   | (2)       | <i>Ship stations</i> using radiotelephony may use :<br>— a call sign (see 423 and 429 <sup>1</sup> ) ;<br>— the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no   |

possible confusion with distress, urgency and safety signals.

429a ADD

(3) *Ships survival craft stations* which employ radiotelephony may use :

- a call sign ; (see No. 425a)
- a signal of identification consisting of the name of the parent ship followed by two digits.

430 MOD

(4) *Aeronautical stations* using radiotelephony shall use :

- the name of the airport or geographical name of the place followed, if necessary, by a suitable word indicating the function of the station.

431 MOD

(5) *Aircraft stations* using radiotelephony may use for identification :

- a call sign (see No. 424), which may be preceded by a word designating the owner or the type of aircraft ;
- a combination of characters corresponding to the official registration mark assigned to the aircraft ;
- a word designating the airline, followed by the flight identification number.

431a ADD

(6) In the exclusive aeronautical mobile frequency bands, *aircraft stations* using radiotelephony may use other methods of identification, after special agreement between governments, and on condition that they are internationally known.

431b ADD

(7) *Aircraft survival craft stations* which employ radiotelephony may use :

- a call sign (see No. 425b) ;

432 MOD

(8) *Base stations*, which use radiotelephony may use for identification :

- a call sign (see Nos. 421 and 422) ;
- the geographical name of the place followed, if necessary, by any other appropriate indication.

433 MOD

(9) *Land mobile stations*, which use radiotelephony, may use for identification :

- a call sign (see No. 426) ;
- the identity of the vehicle or any other appropriate indication.

#### Section V. Special provisions

434 (MOD)

§ 23. (1) In the aeronautical mobile service, after communication has been established by means of the complete call sign, the aircraft station may use, if confusion is unlikely to arise, an abbreviated call sign consisting of.:

435 NOC

- a) in radiotelegraphy, the first character and last two letters of the complete 5-letter call sign ;

436 MOD

- b) in radiotelephony :
  - the first character of the complete five-letter call sign ; *or*
  - the abbreviation of the name of the owner of the aircraft (company or individual) ;
  - *or* the type of aircraft, followed by the last two letters of the complete call sign of five letters or by the last two characters of the registration mark.



437 (MOD)

(2) The provisions of Nos. 434, 435 and 436 may be amplified or modified by agreements between administrations concerned.

444 (MOD)

§ 24. The distinguishing signals allotted to ships for visual and aural signalling shall, in general, agree with the call signs of ship stations.

## Former reference

## Source

## New reference

|                |
|----------------|
| Chap.: X       |
| Art.: 22       |
| Nos.: 488-492d |

Committee: 7  
Doc. No.: 755

|        |
|--------|
| Chap.: |
| Art.:  |
| Nos.:  |

Title NOC

**CHAPTER X**

Title NOC

**ARTICLE 22**

Title NOC

**Licences**

488 MOD

§ 1. (1) No transmitting station may be established or operated by a private person or by any enterprise without a licence issued by the government of the country to which the station in question is subject. (However, see Nos. 488a and 492b.)

488a. ADD

(1a) However, the Government of a country may conclude with the Government of a neighbouring country a special agreement concerning one or several stations of its broadcasting service or of its land mobile services, operating on frequencies above 41 Mc/s, situated in the territory of the neighbouring country and intended to improve national coverage. This arrangement, which shall be compatible with the provisions of the present Regulations as well as of those regional agreements to which the countries concerned are signatories, may allow exceptions to the provisions of No. 488 and shall be communicated to the Secretary General in order that it may be brought to the notice of administrations for their information.

489 MOD

(2) Mobile stations which are registered in a territory or group of territories which does not have full responsibility for its international relations may be considered, in so far as the issue of licences is concerned, as subject to the authority of that territory or group of territories.

490 MOD

§ 2. The holder of a licence is required to preserve the secrecy of telecommunication, as provided in Article 32 of the Convention. Moreover, the licence must provide, specifically or by reference, that if the station includes a receiver, it shall be forbidden :

- to intercept radiocommunication correspondence other than that which the station is authorized to receive ;

— to reproduce, or communicate to third parties, or use for any purpose any such communication, or even to disclose its existence.

- 491 (MOD) § 3. To facilitate the verification of licences issued to mobile stations, there shall be added, when necessary, to the text written in the national language, a translation of the text in a language widely used in international relations.
- 492 MOD § 4. (1) The government which issues a licence to a mobile station shall mention therein in clear form the particulars of the station, including its name, call sign and public correspondence category, as well as the general characteristics of the installation.
- 492a ADD (1a) For land mobile stations a clause shall be included in the licence, specifically or by reference, under which the operation of these stations shall be forbidden in countries other than the country which has issued the licence, except as may be provided by special agreement between the countries concerned.
- 492b ADD § 4a. (1) In the case of a new registration of a ship or aircraft in circumstances where delay is likely to occur in the issue of a licence by the country in which it will be registered, the administration of the country from which the mobile station wishes to make its voyage or flight may, at the request of the operating company, issue a certificate to the effect that the station complies with these Regulations. This certificate, drawn up in a form determined by the issuing Administration, shall give the particulars mentioned in No. 492 and shall be valid only for the voyage or flight to the country in which the registration of the ship or aircraft will be effected, or for a period of three months, whichever is the lesser.
- 492c ADD (2) The administration issuing the certificate shall inform the administration responsible for issuing the licence of the action taken.
- 492d ADD (3) The holder of the certificate shall comply with the provisions of these Regulations applicable to licence-holders.

Source : Committee 7

Doc. No. : DT 790

RESOLUTION No. ...

**Relating to the Formation of Call Signs and the Allocation  
of New Series**

The Administrative Radio Conference, Geneva, 1959.

*considering*

- a)* the Recommendation of the International Radio Conference, Atlantic City, 1947, relating to a new method of generating call signs ;
- b)* the fact that no new proposal has been placed before the Administrative Radio Conference, Geneva, 1959 ;
- c)* Document No. 456 submitted by the Republic of the Philippines;
- d)* the increasing demand for call signs justified by the increased number of Members and Associate Members of the International Telecommunication Union and by the increased requirements of countries which are already Members or Associate Members ;
- e)* the information supplied by the Secretary General regarding allocations of call signs since 1947 and the possibilities of the current system of forming call signs ;

*believing*

- a)* that call signs already in use should, as far as possible, not be changed ;
- b)* that, however, the current system of forming call signs may not be adequate to meet all the requirements submitted between the present time and the next Administrative Radio Conference ;

*resolves.*

1. that, should the existing call sign series formed of three letters, or a figure and two letters, be exhausted, a new series should be introduced formed of a letter, a figure and a letter ; but in no case may the figure be 0 or 1 ;
2. that the method advocated in 1 above shall not be applicable to series beginning with one of the following letters : B F G I K M N Q R U W ;
3. that the Secretary General shall, as soon as possible, issue a circular letter urging administrations :
  - 3.1. to make the maximum use of the possibilities of the series at present allocated, to avoid, as far as possible, further requests ;
  - 3.2. to review the call-sign assignments they have already made from their present allocations, with a view to releasing any series possible and place them at the disposal of the Union.
4. that the Secretary General shall, upon request, furnish advice to administrations on the means of effecting the greatest economy, which should be the rule, in the use of a series of call signs ;
5. that if, nevertheless, before the next Administrative Radio Conference, it appears that all the possibilities of the present system of forming call signs as amended by 1 and 2 above will be exhausted, the Secretary General shall issue a circular letter :
  - 5.1. explaining the position ;
  - 5.2. urging the administrations to send in their proposals for possible solutions ;
6. that, from the information thus submitted, the Secretary General shall prepare a report, together with his comments and suggestions, for submission to the next Administrative Radio Conference.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 844-E  
10 December, 1959

## PLENARY MEETING

### A G E N D A

#### Twentieth Plenary Meeting

Friday, 11 December 1959, at 9.30 a.m.

1. Draft text of Article 5 of the Radio Regulations  
(Document No. 823 and Addendum No. 1)
2. Proposal No. 5574 (Document No. 807)
3. Letter addressed to the Secretary-General by the Delegation  
of the Kingdom of Morocco (Document No. 806)
4. Miscellaneous.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 845-E  
11 December, 1959

PLENARY MEETING

A G E N D A

Twenty-first Plenary Meeting

Friday, 11 December, 1959, at 5.00 p.m.

Election of the members of the International Frequency  
Registration Board (Documents Nos. 655 - Annex, 793, 710, 711, 712,  
713, 717, 718, 719 Rev., 720, 721, 735, 736, 753, 771 and 776).



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 846-E  
11 December, 1959

## PLENARY MEETING

### A G E N D A

#### Twenty-second Plenary Meeting

Friday 11 December, 1959 at 8.30 p.m.

1. Fifteenth Series of Texts submitted by the Drafting Committee- pages 15-12 to 15-16 (Document No. 791).
2. Sixteenth and Sixth Series of Texts submitted by the Drafting Committee (Documents Nos. 792 and 663).
3. Seventeenth Series of Texts submitted by the Drafting Committee (Document No. 796).
4. Proposal No. 5574 (Document No. 807).
5. Approval of the minutes of the 14th Plenary Meeting (Document No. 821).
6. Letter addressed to the Secretary-General by the Delegation of the Kingdom of Morocco (Document No. 806).
7. Miscellaneous.





# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 847-E  
11 December, 1959

## COMMITTEE 7

### SUMMARY RECORD

#### Twenty-sixth Meeting of Committee 7 (Operations Committee)

Saturday, 5 December, 1959

Chairman: Mr. A.J. Ehnle (Netherlands)

#### Agenda

1. Approval of texts for Article 22 (Document No. 755)
2. Approval of texts for Article 19 (Document No. 758)
3. Proposal No. 5575 (Document No. 754)
4. Recommendation - Technical characteristics of S.S.B. equipment (Document No. 723)
5. HF Maritime allocations (Document No. 749)
6. Any other business.

#### 1. Approval of texts for Article 22 (Document No. 755)

Introducing Document No. 755, the Chairman of Sub-Committee 7A drew attention to the reservation which had been made by the Delegate of the U.S.S.R. in respect of RR 488a. The Document was then considered page-by-page.

#### Page 3

#### RR 488a

The Delegate of Israel proposed that the following be added at the beginning of this resolution:

"However, in order to cover its own territory with emissions of the broadcasting and land mobile services ..."



This proposal was acceptable to the Delegate of the Federal Republic of Germany, but the Delegates of France and Belgium thought the wording was too complicated. After considerable discussion the Delegate of Switzerland suggested the following text:

"488a ADD However, the government of a country may conclude with the government of a neighbouring country a special agreement for one or several stations of its broadcasting service or of its land mobile services, operating on frequencies above 41 Mc/s, situated on foreign territory and intended to complete national coverage. This arrangement which must be compatible with the provisions of the present regulations as well as those of regional agreements to which the countries concerned are signatory, may allow exceptions to the provision of No. 488 it must be communicated to the Secretary-General in order that it may be brought to the notice of administrations for their information."

The Delegate of the Netherlands said he could support this proposal if "on foreign territory" were replaced by "in the territory of the neighbouring country" and this amendment was acceptable to the Delegate of Switzerland. The proposed text, as amended, was adopted by 15 votes to 7, there being 10 abstentions.

The Delegate of the U.S.S.R. reaffirmed his opinion expressed at an earlier stage to the effect that he regarded the new number as redundant in view of the existence of Article 41 of the Buenos Aires Convention concerning special arrangements and because his Delegation felt that a country should be entirely responsible for stations established in its territory. With these amendments page 3 was adopted.

Pages 4 and 5

The texts on pages 4 and 5 were adopted subject to minor editorial amendments.

2 and 3 Approval of texts for Article 19 and Proposal in Document No. 754 (Document No. 758)

The Chairman of Sub-Committee 7A explained that Document No. 758 superseded the previous Document which had been issued containing texts for Article 19. In the course of discussion of this Article :

a) The Delegation of the U.S.S.R. asked for the following alterations to be made in the Table:-

| <u>Country</u> | <u>Call Sign</u> | <u>New designation of country</u>    |
|----------------|------------------|--------------------------------------|
| Estonia        | ESA-ESZ          | Estonian Soviet Socialist Republic   |
| Lithuania      | LYA-LYZ          | Lithuanian Soviet Socialist Republic |
| Latvia         | YLA-YLZ          | Latvian Soviet Socialist Republic    |

The Delegation of the United States stated reserves concerning this proposal.

b) The Delegate of Indonesia requested that this report mention the statement made by the Delegation of his country at the fourth Plenary Meeting regarding the inclusion of New Guinea under the title of "Netherlands" in I.T.U. documents.

c) The Delegate of the Netherlands referred the previous speaker to the reply already given by the Delegation of his country, as reproduced in the summary record of the same meeting.

It was decided that these questions were proper to be dealt with at a Plenary Meeting.

Apart from these questions the Document was considered page-by-page:

#### Page 3

#### RR 411b

A suggestion by the Observer of the International Chamber of Shipping that "which transmit" be replaced by "when transmitting" was supported by the Delegates of the Federal Republic of Germany and Sweden and there being no objection it was adopted.

#### Footnote

ADD 1) The Delegate of the United States of America suggested that this footnote should be aligned with Document No. 617, Page 4-1, No. 372.1 and in view of the comments by the Delegates of India and Norway this was agreed. Subject to these amendments the texts on Page 3 were adopted.

#### Page 4

#### RR 416a

A proposal by the Delegate of the United States of America that RR 416a be amended to read "where practicable coast stations should use a common call sign for each frequency series <sup>1)</sup>" was adopted. With this, and editorial amendments the texts on Page 4 were adopted.

Page 5

The texts on Page 5 were adopted subject to minor editorial amendments.

Pages 6 to 15

A proposal by the Delegate of Bielorussia concerning the allocation of call signs in the series DAA to DTZ was supported by the Delegate of the U.S.S.R. who stated that these allocations had been assigned to Germany by the Atlantic City Regulations but this was a completely unrealistic state of affairs because there was now no such Government as a Government of Germany. There were two separate States and he thought it was wrong not to take account of this de facto state of affairs. The Delegate of the Federal Republic of Germany said that in accordance with his statement which he had made at previous meetings his Administration was willing to agree that the series DDA to DDZ would not be used by Radio Stations of the Federal Republic of Germany. The Delegate of the United Kingdom said that irrespective of the merits of the proposals it was not appropriate for Committee 7 to discuss this question which he thought should be taken up at a Plenary Meeting and he, therefore, proposed that Pages 6 to 15 be adopted without amendment. This proposal was supported by the Delegate of the United States of America but the Delegate of Bielorussia Soviet Socialist Republic thought that this was a question that could much better be considered by Committee 7 than a Plenary Assembly. The proposal of the United Kingdom was, however, carried by twenty-five votes to three, there being four abstentions.

Document No. 754 was brought to the notice of the Meeting by the Delegate of Italy and the Delegates of Belgium and the Belgian Congo proposed a splitting of the series 90A to 90UZ to take account of the fact that the Territories of Ruanda-Urundi would become independent in the future. The Delegate of the United Kingdom said that if these changes were being made only for geographical reasons they would be acceptable but if there was a change of status of the Territories mentioned he felt the question must go to a Plenary and he was supported in this view by the Delegate of the United States of America and in view of the discussion the Delegate of the Belgian Congo said he was not opposed to the course proposed by the Delegate of the United Kingdom but he said the change was rather similar to that which had been made in regard to the groups containing "Netherlands New Guinea, etc." The Delegate of Italy pointed out that Italian Somaliland was an Associated Member of the Union and the Delegate of the United Kingdom replied that he was not opposed to any change affecting a State whose official designation was in accordance with Annex 1 of the Convention. The Pages containing the Table, Pages 6-15, were therefore adopted including the allocation to Italian Somaliland.

Text on Page 15

The Delegate of the United States of America pointed out that there was a need to align the remarks in parenthesis referring to the digits 0 and 1 and it was agreed that this should be aligned by the Rapporteur. Subject to these amendments, the texts on Page 15 were adopted.

Page 16

The Delegate of the U.S.S.R. was of the opinion that a rearrangement of RRs 425-425c was necessary. In this view he was supported by the Delegate of the United Kingdom who suggested that 425a and 425c should follow RR 430 and it was agreed that the Drafting Group should make an appropriate rearrangement. The Delegate of Norway referring to RR 425a pointed out that when the survival craft station was aboard a ship equipped only with radio-telephony the normal identification would be the name of the ship and after a short discussion it was agreed that the Drafting Group should reword RR 425a to take account of his observations.

Subject to this amendment the texts on Page 16 were adopted.

Page 17

The texts on Page 17 were adopted with minor editorial amendments.

Page 18

RR 430

The Delegate of the Argentine thought that some modification was needed to permit greater flexibility in this Regulation and after a short discussion he suggested that the end of this paragraph should be amended to read "by a suitable word indicating the function of the station".

There being no objection this amendment was adopted.

The texts on Page 18 as amended were adopted.

Page 19

RR 432

A proposal by the Delegation of the United Kingdom that "land stations other than coast aeronautical stations" should be replaced by "base stations" was supported by the Delegate of the United States of America. There being no objection, this proposal was adopted.

RR 433

The Delegate of the United States of America pointed out that in Sub-Committee 7A it had been agreed that this paragraph should be amended to read "land mobile stations which use..... etc."

With these and minor editorial amendments the texts on Page 19 were adopted.

Pages 20 and 21

Subject to minor editorial amendments the texts on Pages 20 and 21 were adopted.

4. Recommendation - Technical Characteristics of SSB equipments (Document No. 723)

Document No. 723 was introduced by Mr. Billington, Chairman of Sub-Committee 7B who said it had been prepared in accordance with the Report of Committee 6 to whom Sub-Committee 7B had referred Document No. 48 (the C.C.I.R. Recommendation) on this subject. The Delegate of the United States of America supported the Recommendation and proposed the document be adopted as a whole. A proposal by the Delegate of Malaya that paragraph 7 of Recommendation 1 (Page 4) be amended to read "MF and HF" bands was rejected by 16 votes to 2, there being 5 abstentions. A suggestion by the Delegate of Portugal that the appropriate bands be specified rather than "MF" and "HF" was accepted and Document No. 723 was adopted, subject to these amendments.

5. Maritime Mobile Allocations at 25 Mc/s (Document No. 749)

Document No. 749 was introduced by the Delegate of Belgium.

The Delegate of the United Kingdom said that the assignments in the table on the second page should all be moved 1 kc/s higher to afford equal protection at the band edges. This was acceptable to the sponsors of the proposal and, there being no objection, it was adopted.

Document No. 749 was then adopted as a whole, subject to minor editorial amendments.

6. Any other business

The Delegate of Norway referred to Document No. 708 which had been adopted at the last Meeting. He proposed that the table on Page 6 be amended as follows:

| <u>Radiotelegraphy</u> | <u>Radiotelephony</u> |
|------------------------|-----------------------|
| <u>W</u> .....         | <u>t</u> .....        |
| <u>X</u> .....         | <u>u</u> .....        |
| <u>Y</u> .....         | <u>y</u> .....        |
| <u>Z</u> .....         |                       |

This proposal was supported by the Delegates of Portugal, the Federal Republic of Germany and the Netherlands. There being no objection, this proposal was adopted.

This concluded the business of the Meeting.

Rapporteur:

G. F. Wilson

Chairman of the Meeting

A. J. Ehnlé

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 848-E  
11 December, 1959COMMITTEE 7

## SUMMARY RECORD

of the

Twenty-seventh Meeting of Committee 7  
(Operations Committee)

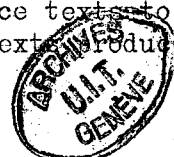
Wednesday 9 December, 1959

Chairman : Mr. A. J. Ehnle (Netherlands)Agenda : Document No. DT 871

The above Agenda was accepted.

1. Common Intership and Ship-shore Frequencies (Document No. 804)

Document No. 804 was introduced by the Chairman of Sub-Committee 7B who pointed out that it was based on the proposals contained in Document No. 772 which had not yet been formally accepted by Committee 5, but in order to ensure inclusion of the necessary Regulations it was necessary to take action in parallel with Committee 5 so that the necessary amendment could be made to the blue document already published. He suggested that a footnote should be added to the document to the effect that these provisions could only be implemented when the I.F.R.B. was able to confirm that the frequencies were available and free from interference, since there would be some changes in existing allocations to meet these requirements. The Delegate of Denmark said that the proposed footnote would only be acceptable if it was on a temporary basis. He felt it was up to Conference and not to the I.F.R.B. to assign the frequencies. Referring to RR 817a he said that he was unhappy about this Regulation because it appeared to give the impression that coast stations would keep watch on this frequency and be equipped to transmit on it. Furthermore in RR 823 he thought it would be advisable to insert the word "working" before "frequency" and to delete " in addition to the frequency 2182 kc/s". The Delegate of the United States of America said that the proposed texts were not applicable so far as Region 2 was concerned and he would like to see the word "International" deleted. He felt it would be introducing another frequency problem if all ships were required to carry and use 2638 kc/s. After a short discussion it was agreed that an Ad Hoc Working Group consisting of the Delegates of Australia, the United States of America and the United Kingdom should produce texts to incorporate the various points which had been raised. The texts produced





by this Working Group were as follows:-

To be inserted between 825a and 825b in the Additional Provisions Applying to Region 1.

825aa     § 12aa     Ships stations and coast stations may use 2 049 kc/s as a supplementary calling frequency when 2 182 kc/s is being used for distress purposes.

825ab     § 12ab (1) All stations on ships making international voyages shall be able to use:

- (i)     the ship-shore working frequency 2 049 kc/s if required by their service;
- (ii)    the intership frequency 2 056 kc/s if required by their service. This frequency may be used as an additional ship-shore frequency.

825ac     (2)     These frequencies shall not be used for working between stations of the same nationality.

Title ADD   Section Db. Additional provisions applying to Regions 2 and 3

827aa     § 12c     All stations on ships making international voyages should be able to use the intership frequency 2 638 kc/s if required by their service.

The Delegate of Denmark said that while the proposed texts covered the points made in previous discussions there was one feature about which he was still dissatisfied. He felt that at this stage the provisions of the first paragraph, 825aa, were not very desirable and he proposed that this Regulation be deleted. This proposal was supported by the Delegate of Norway and there being no objection it was agreed to delete this paragraph. It was also agreed that the number and division of the paragraph should be amended to agree with that used in the blue document. With this amendment Document No. 804 was adopted.

2. Report of Working Group 7E (Document No. 775)

In introducing the report the Chairman of Working Group 7E, Mr. Caruso, said that at times he had wondered whether it would be possible for the Working Group to complete its task before the end of the Conference. This task was a difficult one which was made even harder because the Working Group did not have the blue texts to guide them. That the work had been successfully completed was almost entirely due to the efforts of one Delegate, Mr. Råberg of Sweden. It was his indefatigable efforts in preparing proposals for the consideration of the Working Group that had in the

end made it possible to produce a blueprint for the Manual. In concluding his introduction Mr. Caruso said because of the temporary nature of Annex 1 he would suggest that this should not be included in the Radio Regulations but that an explanatory footnote should be added to the Recommendation. There being no objection, this proposal was adopted. The Chairman congratulated Mr. Caruso on the good work done by his Working Group and in particular he congratulated Mr. Råberg on his contribution to the successful fulfilment of this task and he asked the meeting whether they were willing to accept Document No. 775 in toto. There being no objection this was agreed subject to amending the first line of paragraph f on Page 4, to read: "it is therefore recognised that the final work .....etc.". The Chairman then asked for nominations for the names of experts to be included in paragraph 5 subject to the confirmation of a Plenary Meeting. The following Delegates were nominated and unanimously accepted: Mr. Caruso (Italy), Mr. Costigan (United States of America), Mr. Bes (France), Mr. Westertorp (Netherlands), Mr. Billington (United Kingdom) and Mr. Råberg (Sweden) and it was agreed that in order to leave it to Administrations to name these substitutes the first line of paragraph 5 should be amended to read "the following six persons, or the substitutes for each". This completed the consideration of Document No. 775.

### 3. Any other Business

(i) The Chairman referred to a letter which he had received from the Chairman of Committee 6 concerning Proposal No. 2732 (Page 703 RL) of India which had previously been referred to Sub-Committee 7A. It was unanimously agreed that from the operational point of view there was no need for Appendix 5 ter as proposed by India.

(ii) The Chairman read a letter which had been received from the Chairman of the Conference concerning C.C.I.R. recommendations which should be brought to the notice of the Safety of Life at Sea Conference. In view of the short time available for the inclusion of Recommendations in the new Regulations the Chairman had prepared a proposed text for a Recommendation which would take account of the C.C.I.R. Recommendations and he hoped would also be acceptable to the Delegate of Sweden as covering the general proposal in this connection made by his Administration. The proposed Recommendation was contained in Document No. 808 and was acceptable to the Delegate of Sweden. There being no objection Document No. 808 was adopted without amendment.

(iii) The Delegate of the United Kingdom drew attention to Document No. 631 in which there was a proposal that RR 270, 271 and 272 should be deleted from Article 9 and transferred to Article 34. He suggested that these Regulations should be deleted entirely and this proposal was supported by the Delegate of Portugal. There being no objection it was agreed that RR 270 - 272 should be deleted.

This concluded the business of the Meeting.

G. F. Wilson  
Rapporteur

A. J. Ehnle  
Chairman of the Meeting

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 849-E  
11 December, 1959

## COMMITTEE 6

### SUMMARY RECORD

#### Seventeenth Meeting of Committee 6 (Technical)

Friday, 4 December, 1959 at 5.00 p.m. in Room C

Agenda: There was no printed agenda:

#### 1. Summary Record of Fourteenth Meeting (Document No. 644)

The Summary Record of the Fourteenth Meeting of Committee 6, Document No. 644, was adopted.

#### 2. Summary Record of the Fifteenth Meeting (Document No. 715)

On page 3, the second paragraph should read:

"The Delegate of South Africa suggested that No. 68b should be worded the same as No. 68a with 'quarter power' in the place of 'half power'."

On page 5, item 12, the second paragraph should read:

"It was agreed that it should not form a Conference Document but that a letter be sent to the Secretary General requesting the I.T.U. Secretariat to publish a document in the form to be submitted by Mr. Glinz."

Thus amended the Summary Record of the Fifteenth Meeting of Committee 6, Document No. 715, was adopted.

#### 3. Report of Chairman of Ad Hoc Group 6A

Mr. Allen reported that the work on definitions should be completed by the scheduled time, noon on Saturday.

He reported that Document No. 724 of Committee 4 had been considered and all the points taken into account when deciding which definitions should be put in Article 1. Committee 4 had informed him that point 2 (Aeronautical (R) and (OR) Services) should be deleted.

He reported that the group had complied with the requests for deletion of the definitions listed in Document No. 682 of Committee 5.



He reported a letter from Committee 7 which gave a list of definitions not required by that committee. Some of those definitions were required by other committees, but the letter had been taken into account.

He reported a letter received from Committee F of the Plenipotentiary Conference on definitions for the Convention and he raised the following points:

1) Harmful Interference - the ad hoc group had changed this to "Any emission, radiation or induction ... "

2) Safety Service - Committee F had not defined this term, but had retained the footnote to the definition of harmful interference;

3) Telegraphy - the joint ad hoc group of the two conferences had reached a compromise solution that, in both the Convention and the Radio Regulations, the following definition should appear:

Telegraphy: A system of telecommunication which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form.

In the Convention this would be followed by:

For the purposes of the Radio Regulations, however, unless otherwise specified therein, telegraphy is defined as "A system of telecommunication for the transmission of written matter by the use of a signal code".

In the Radio Regulations would be inserted:

The foregoing definition appears in the Convention but for the purpose of these Regulations, telegraphy is defined as "A system of telecommunication for the transmission of written matter by the use of a signal code" and shall have this meaning unless otherwise specified herein.

The Delegate of the United Kingdom said that those representing in the group the views of the Plenipotentiary Conference held their views very strongly but had eventually agreed to the compromise solution which would save making changes in the Radio Regulations at this late stage and would highlight the differences in outlook which would have to be resolved at the next Administrative Radio Conference. He added that acceptance of this compromise at each conference was subject to the other conference accepting it.

4) Telegram - this should read "Written matter intended to be transmitted by telegraphy with a view to delivery to the addressee. This term also includes radiotelegrams unless otherwise specified."

A reference to the broader definition should be added.

All these points were agreed.

The Chairman of Working Group 6A then read a letter from the Chairman of Committee 7 asking for definitions of Wideband Telegraphy and Special Services. The Committee decided that these terms which are used in Article 33 were sufficiently self-explanatory not to need definition and Mr. Allen was asked to convey this to the Chairman of Committee 7.

He then referred to definitions from the Convention and the Telephone and Telegraph Regulations that Committee 7 had asked to be included in the Radio Regulations. It was agreed that these definitions could be included only if the terms were used in the Regulations but that there would be no objection to their inclusion in the Additional Radio Regulations. The ad hoc group was instructed to take any action they considered desirable.

Mr. Allen then referred to the proposed sub-division of Article 1. The ad hoc group had decided on three sections:

- I General Terms
- II Radio Systems, Services and Stations
- III Technical Characteristics and Procedures.

This met with general approval.

The Delegate for France said that in his opinion the Committee should consider the proposed deletions of definitions.

The Chairman replied that this would be a lengthy procedure and was better left to the ad hoc group.

The Delegate of South Africa formally moved that the Committee approve the changes made by the ad hoc group.

The Delegate of India seconded this and the motion was carried.

4. Report of Chairman of Ad Hoc Group 6B

Mr. Jowett read a letter from Committee 7 suggesting that special tolerances should be inserted in Appendix 3 for Wideband Emissions in the Mobile Services. His group considered that this point was already covered in the Preamble to Appendix 3 and as the blue documents had been agreed and sent to the printers for production of the pink version, it was too late to consider such alteration. This was agreed.

5. Report of Chairman of Ad Hoc Group 6C

Mr. Heilmann reported that Article 13 had been referred back by a Plenary Meeting. His group had agreed to the deletion of RR378/379 and the addition of the texts shown in Document No. 738. They recommended that footnote 109a should read "See Article 13, No. 379a". This was agreed.

He referred to a proposal in Document No. 679 for modification to Article 14. The ad hoc group approved this. It was agreed.

He then referred to a proposal in Document No. 680 (Rev. 1) for modification to Article 18. The ad hoc group approved this. It was agreed.

6. Report of Rapporteur's Ad Hoc Group

Mr. Söcker reported that his group had considered a recommendation to C.C.I.R. on I.F.R.B. Technical Standards. They had decided that all the detailed points were already covered in other recommendations, but submitted the overall recommendation in Document No. 782 for consideration, as an indication to both the C.C.I.R. and administrations of the urgency of such work.

The Delegate of India suggested adding the second and third paragraphs of Document No. 782 to the other recommendations on this subject.

The Delegate of the United Kingdom said that this recommendation did add urgency to the work and asked administrations to give priority to it. He suggested forwarding it to Committee 8 with a covering note to the effect that, if the ideas could be incorporated into the other recommendations, this need not be included in the Final Acts.

This was agreed.

7. Other Matters

The Chairman indicated his intention of winding up Committee 6 and said that the ad hoc groups should remain to clear any matters coming from other Committees or the Plenary Meeting. This was agreed.

He thanked the Vice-Chairman, Rapporteurs, Members of the I.F.R.B., Delegates and Interpreters for their help in the work of the Committee.

The Delegate of South Africa moved a vote of thanks to the Chairman for his efficient handling of Committee 6 and for his guidance of the Committee through the difficulties it had encountered. This was carried with applause.

C. E. Secker  
Rapporteur

M. N. Mirza  
Chairman

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 850-E  
18 December, 1959LIST OF DOCUMENTS PUBLISHEDBY THE CONFERENCE

Nos. 801 to 850

| No. | Origin      | Destination      | Title  |
|-----|-------------|------------------|--|
| 801 | Committee 5 | Committee 5      | Summary Record, 21st Meeting<br>2 December, 1959, 3 p.m.   |
| 802 | Presidence  | Plenary Meeting  | Agenda, 16th Plenary Meeting,<br>8 December, 1959, 2.30 p.m.   |
| 803 | Committee 8 | Plenary Assembly | Texts for the approval of the<br>Plenary Assembly  |
| 804 | Committee 7 | Committee 7      | Common "ship-to-shore" and "inter-<br>ship" frequencies for M.M. radio-<br>telephony use in the band<br>2 000 - 2 850 kc/s |
| 805 | Committee 5 | Committee 5      | Summary Record of the 22nd<br>Meeting, 4 December, 1959, 3 p.m.  |
| 806 | Secretariat | Plenary Meeting  | Kingdom of Morocco - signal<br>abbreviation  |
| 807 | Presidence  | Plenary Meeting  | Proposal No. 5574 - world-wide<br>speaking table   |
| 808 | Committee 7 | Committee 7      | Recommendation to the Safety of<br>Life at Sea Conference  |
| 809 | Committee 5 | Committee 5      | Summary Record of the 23rd<br>Meeting, 4 December, 1959, 9 p.m.  |
| 810 | Secretariat |                  | List of addresses of participants<br>after the close of the two<br>Conferences   |





| No.          | Origin           | Destination      | Title   |
|--------------|------------------|------------------|---|
| 811          | Presidence       | Plenary Meeting  | Agenda, 17th Plenary Meeting, 9 December, 1959, 11 a.m.             |
| 812          | Committee 5      | Committee 5      | Summary Record, 24th Meeting, 5 December, 1959, 3 p.m.              |
| 813          | Committee 8      | Plenary Assembly | Texts for the approval of the Plenary Assembly - Blue, 19th series  |
| 814          | Committee 8      | Plenary Meeting  | Plan for the future Radio Regulations                               |
| 815          | Sub-Committee 7A | Sub-Committee 7A | Summary Record, 33rd meeting, 23 November, 1959, 9 a.m.             |
| 816          | "                | "                | Summary Record, 34th meeting, 25 November, 1959, 9 a.m.             |
| 817          | Plenary Meeting  | Plenary Meeting, | Minutes of the 13th Plenary Meeting, 5 December, 1959, 9 a.m.       |
| <u>L</u> 818 | Sub-Committee 7A | Sub-Committee 7A | Summary Record, 35th meeting, 25 November, 1959, 8.30 p.m.          |
| 819          | "                | "                | Summary Record, 36th meeting, 26 November, 1959, 9 a.m.             |
| 820          | Presidence       | Plenary Meeting  | Agenda, 18th Plenary Meeting, 9 December, 1959, 8.30 p.m.           |
| 821          | Plenary Meeting  | Plenary Meeting  | Minutes of the 14th Plenary Meeting, 6 December, 1959, 9.30 a.m.    |
| 822          | Committee 8      | Plenary Assembly | Texts for the approval of the Plenary Assembly - Blue, 20th series. |
| 823          | Plenary Meeting  | Plenary Meeting  | Article 5 - Frequency Allocations between 10 kc/s and 40 Gc/s.      |

| No.               | Origin           | Destination      | Title  |
|-------------------|------------------|------------------|--|
| 823<br>ADD. No. 1 | Plenary Meeting  | Plenary Meeting  | Texts to be included in Article 5 - Special Provisions     |
| 824               | Sub-Committee 7A | Sub-Committee 7A | Summary Record, 37th Meeting, 26 November, 1959, 3 p.m.    |
| 825               | "                | "                | Summary Record, 38th Meeting, 27 November, 1959, 5 p.m.    |
| 826               | Committee 7      | Committee 7      | Summary Record, 38th Meeting, 21 November, 1959            |
| 827               | "                | "                | Summary Record, 18th Meeting, 25 November, 1959            |
| 828               | "                | "                | Summary Record, 19th Meeting, 27 November, 1959            |
| 829               | "                | "                | Summary Record, 15th Meeting, 20 November, 1959            |
| 830               | "                | "                | Summary Record, 17th Meeting, 24 November, 1959            |
| 831               | Sub-Committee 7A | Sub-Committee 7A | Summary Record, 39th Meeting, 1 December, 1959, 3 p.m.     |
| 832               | "                | "                | Summary Record, 40th Meeting, 2 December, 1959, 3.30 p.m.  |
| 833               | "                | "                | Summary Record, 41st Meeting, 3 December, 1959, 3 p.m.     |
| 834               | Presidence       | Plenary Meeting  | Agenda, 19th Plenary Meeting, 10 December, 1959, 8.30 p.m. |
| 835               | Committee 7      | Committee 7      | Summary Record, 20th Meeting, 27 November, 1959            |
| 836               | "                | "                | Summary Record, 21st Meeting, 28 November, 1959            |
| 837               | Committee 6      | Committee 6      | Summary Record, 16th Meeting, 1 December, 1959, 3 p.m.     |

| No. | Origin      | Destination      | Title  |
|-----|-------------|------------------|--|
| 838 | Committee 5 | Committee 8      | Note from the Chairman of Committee 5 to the Chairman of Committee 8 - Provision of the E.A.R.C. Agreement to be included in Article 9 |
| 839 | Committee 7 | Committee 7      | Summary Record, 22nd Meeting, 30 November, 1959  |
| 840 | Committee 7 | Committee 7      | Summary Record, 23rd Meeting, 1 December, 1959   |
| 841 | "           | "                | Summary Record, 24th Meeting, 2 December, 1959   |
| 842 | "           | "                | Summary Record, 25th Meeting, 4 December, 1959   |
| 843 | Committee 8 | Plenary Assembly | Texts for the approval of the Plenary Assembly - Blue, 21st series   |
| 844 | Presidence  | Plenary Meeting  | Agenda, 20th Plenary Meeting, 11 December, 1959, 9.30 a.m.   |
| 845 | "           | "                | Agenda, 21st Plenary Meeting, 11 December, 1959, 5 p.m.  |
| 846 | "           | "                | Agenda, 22nd Plenary Meeting, 11 December, 1959, 8.30 p.m.   |
| 847 | Committee 7 | Committee 7      | Summary Record, 26th Meeting, 5 December, 1959   |
| 848 | Co. "       | "                | Summary Record, 27th Meeting, 9 December, 1959   |
| 849 | Committee 6 | Committee 6      | Summary Record, 17th Meeting, 4 December, 1959, 5 p.m.   |
| 850 | Secretariat |                  | List of documents published by the Conference. Nos. 801 to 850   |

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 851-E  
11 December 1959,

PLENARY MEETING

## MEMORANDUM BY THE CHAIRMAN

The attached letter, which I have received from the Head of the Delegation of the Union of Soviet Socialist Republics, is drawn to the attention of the Conference

Charles J. Acton  
Chairman

Annexes: 2



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A N N E X    1

Geneva, 9 December 1959

Mr. Charles J. Acton  
Chairman  
Administrative Radio Conference

Dear Sir,

I have pleasure in sending you a copy of a letter I have sent to the Acting Secretary-General of the Union about shortcomings in the charts of world-wide and regional air route areas in Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951).

I would ask you to be so very good as to bring this letter to the knowledge of the delegations attending the Administrative Radio Conference.

Yours faithfully,

I. Klokov  
Head of the Delegation of the Union of  
Soviet Socialist Republics at the Administrative Radio Conference

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A N N E X    2

Geneva, 9 December 1959

Mr. Gerald C. Gross  
Acting Secretary-General

Dear Mr. Gross,

I beg to draw your attention to the charts of world-wide and regional air route areas appearing in Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951).

In the maps on which these charts were based, the western frontiers of the Union of Soviet Socialist Republics are incorrectly shown, together with the frontiers of several other European countries.

Since this is a very serious matter, involving a question of principle, I would ask you to inform the Members and Associate Members of the Union of the shortcomings of these charts in Volume VII, and to arrange for a fresh edition, in which these air route areas are drawn in accordance with up-to-date maps.

I would also ask you to arrange for a review of the other maps and charts issued by the General Secretariat.

Yours very truly,

I. Klokov  
Deputy Minister of Communications of the  
Soviet Socialist Republics



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 852-E  
CORRIGENDUM No.1  
18 December 1959PLENARY MEETING

## CORRIGENDUM

TO THE

M I N U T E S

OF THE

FIFTEENTH PLENARY MEETING

Monday, 7 November, 1959 at 9.00 hrs.

Page 19, statement attributed to the Delegate of Mexico, fourth line, expand as follows :

" ..... the Panel of Experts would be extended to all assignments between 4 and 27.5 Mc/s. The task would of course be formidable, but only thus would the action proposed to solve the problem have any sense, for which reason Mexico had submitted a draft proposing a programme of work in stages, in line with the idea of universality. In spite of all the efforts made by his Delegation, that idea had not been clearly embodied in the document.

" It would now appear that the panel would deal only with certain types of assignments, to decide on so-called 'categories of utilization'. He had misgivings about that, because the expression was so ill-defined. If the panel's consideration was to be limited to a few countries only, that would be neither logical nor convenient, since the expenses would have to be borne by all Members of the Union. In his view, although the panel should be free to reach its own conclusions and to make definite proposals, the latter would have to be based on a problem which had been clearly defined, with guidance given to the general principles on which it was to be solved.

" Nevertheless, the Mexican Delegation was still anxious to cooperate to the full. It continued to attach the greatest importance to the task. The document was worthy of high praise, and he would associate himself with the congratulations extended to the Chairman of the Ad Hoc Group for the speed with which he had drawn up the document, skilfully embodying and coordinating the various ideas expressed.

" Any future action based on Document 774, whatever it might be, would have to be credited to Mr. Pedersen (Denmark), whose proposal (Document 423) was the corner-stone on which all subsequent work had been founded."

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 852-E  
12 December, 1959

PLENARY MEETING

## MINUTES

OF THE

### FIFTEENTH PLENARY MEETING

Monday, 7 November, 1959 at 9.00 hrs.

Chairman: Mr. Charles J. Acton (Canada)

Vice-Chairmen: Mr. Juan A. Autelli (Argentine Republic)  
Mr. M.B. Sarwate (Republic of India)

Deputy Secretary of the Conference: Mr. Clifford Stead

#### Subjects discussed:

1. Tenth series of texts submitted by the Drafting Committee (continued)  
(Document No. 705, page 10-01)
2. Twelfth series of texts submitted by the Drafting Committee (Document  
No. 726)
3. Report of the Ad Hoc Group - Future Policy relating to the band 4 - 27.5  
Mcs (Document No. 774)



Delegates of the following countries were present:

Afghanistan; Albania (People's Republic of); Saudi Arabia; Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian S.S.R.; Brazil; Bulgaria (People's Republic of); Canada; Ceylon; China; Vatican City State; Colombia; Belgian Congo; Cuba; Denmark; Spain; Overseas States of the French Community and French Overseas Territories; United States; Ethiopia; Finland; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Iraq; Ireland; Iceland; Israel; Italy; Japan; Luxembourg; Malaya (Federation of); Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Philippines (Republic of the); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Socialist Soviet Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan (Republic of); Sweden; Swiss Confederation; Czechoslovakia; United States Territories; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Thailand; Tunisia; Turkey; Union of South Africa; Union of Soviet Socialist Republics; Venezuela (Republic of).

Private Operating Agencies: B.B.C. Portuguese Radio Marconi Company

Specialized Agencies: I.C.A.O., W.M.O.

International Organizations: E.B.U, International Chamber of Shipping, I.B.T.O., I.F.R.B.

Before turning to the Agenda, the Chairman pointed out that if the assembly managed to complete its Agenda in the course of the day, there would not be a plenary meeting the following day, which would give the Drafting Committee time to deal with the blue documents. He also pointed out that a mistake had slipped into the Agenda (Document No. 798) where under item 1, "pages 10 to 61" should read "page 10-01."

1. Tenth series of texts submitted by the Drafting Committee (continued)  
(Document No. 705, page 10-01).

Footnote 154

The Chairman recalled that at the previous meeting the question of keeping footnote 154 of the Atlantic City Regulations gave rise to a vote with the following result: 10 for maintaining it, 6 against with 17 abstentions. Referring to paragraph 3, Article 15 in Chapter 9 of the General Regulations, postponing until a later meeting the examination of questions for which the number of abstentions had exceeded half the total votes, he put the maintenance of the footnote to vote, pointing out that abstentions would no longer be taken into account. Moreover, he recalled that at the suggestion of the United Kingdom of Great Britain & Northern Ireland it had been

decided to add the word "exceptionally" to the second line of Footnote 157 and he thought that the same would apply to Footnote 154 Atlantic City to bring the two texts into line.

The vote on the maintenance of Footnote 154 gave the following results:

For maintaining the Footnote 12

Against: 4

It was, therefore, decided to include Atlantic City Footnote 154 in the new Regulations.

#### Footnote 155a

The Delegate of Paraguay recalled that Footnote 155a had been the subject of long discussions in Sub-Committee 40; it was of worldwide application and represented a compromise based on certain proposals (in particular that of Australia). He considered that the maintenance of Footnote 154 - which concerned one country only - had no effect on Footnote 155a which it was proposed to maintain in the form indicated in the document examined.

The proposal by Paraguay was very warmly supported by the Delegate of Brazil and also by the Delegates of Australia, Argentina, Mexico, China, and Cuba. The Delegate of Sweden considered that Footnote 155a should not apply to Region 1. He was supported by the Delegate of Turkey.

The Chairman put the Swedish proposal to exclude Region 1 from the terms of Footnote 155a to the vote, which gave the following result;

For the Swedish proposal: 20

Against: 6

Abstentions: 7

A vote was then taken on whether Footnote 155a should be kept with its drafting amended in accordance with the Swedish amendment; the result of the vote was as follows:

For the maintenance of the Footnote: 25

Against: 6

Abstentions: 10

The Chairman recalled that at the suggestion of the Delegate of the United Kingdom of Great Britain and Northern Ireland it had been decided to include the word "exceptionally" to bring the wording of Footnotes 155a and 157 into line. The wording of Footnote 155a was forwarded to the Drafting Committee for amendment.

2. Twelfth series of texts submitted by the Drafting Committee (Document No. 726) Page 12-01

Footnote 214a

The Chairman pointed out the differences between the Spanish and French texts on the one hand and the English text on the other: the latter seemed to be more logical.

The Chairman of the Drafting Committee explained that they were only slight differences; the French wording could, however, be slightly amended to bring it into line.

The Delegate of Argentina also wanted to make an amendment in the Spanish text in order to bring it into line with the other texts. The Chairman therefore, suggested that the question of the amendment of the text should be referred to the Chairman of the Drafting Committee, to whom Spanish-speaking Delegates could submit their proposals for amendments.

Footnote 218a

The Delegate of Denmark recalled that when Footnote 218a had been approved by the Committee, it referred to a single frequency band and not to 3 as in the document. He, therefore, proposed to modify the last two lines of the Footnote as follows: "only on frequencies in these bands and only when actuated by the radars also operating in these bands."

The Delegate of Cuba would make some general comments after the document had been examined. For the time being he would make some reservations with regard to the mention of the radiolocation service in the 1 300 - 1 350 Mc/s band.

With reference to the 1 250 - 1 300 Mc/s band, the Delegate of the U.S.S.R. recalled the statements made by him on several occasions in Committee 4 and the Working Groups to the effect that the amateur service had the same priority status as the radiolocation service. He, therefore, proposed that the priority of the radiolocation service should be annulled in that frequency band. The Chairman put the proposal by the Delegate of the U.S.S.R. to the vote with the following result: for 10, against 35, with 13 abstentions. The proposal by the U.S.S.R. with regard to the annulment of priority for the radiolocation service was therefore rejected.

Footnote 218c

The Delegate of Austria asked for the name of his country to be added to the list of countries appearing in the footnote. The Delegate of Switzerland made the same request with regard to his country. As there were no objections, the requests were adopted.

Page 12-02

The Delegate of the United Kingdom of Great Britain and Northern Ireland requested that in the case of space and earth-space services it should be made clear that frequency allocations were made for research purposes. His request applied to all the other pages of the document which mentioned allocations to those services. The Chairman of the Drafting Committee pointed out that a reference could be made to that effect either in the preamble to the Table or in the form of footnotes wherever allocations to those services would be mentioned. He favoured the second solution. The Delegate of the U.S.S.R. recalled that at the end of the prolonged discussions which Committee 4 and the Working Groups had had on the question, it had been decided that frequencies allocated to those services would be for research purposes only and subject to the reservation that they did not cause harmful interference to other services. He also recalled that Committee 4 had adopted a draft resolution providing for the convening of an Extraordinary Administrative Conference if necessary with the task of allocating frequencies to those services.

The Delegate of the United Kingdom of Great Britain and Northern Ireland approved the proposal of the Chairman of the Drafting Committee to add footnotes to the Table stating that allocations to space and earth-space services were made for research purposes only. The Chairman of the meeting then invited the Chairman of the Drafting Committee to submit a draft text for the footnote before the end of the meeting.

A discussion arose with regard to the 1 427 - 1 429 Mc/s band, and on the priority which should be given to space and earth-space services in the band. The Delegate of Czechoslovakia, supported by the Delegate of Bulgaria referred to the work of the Special Group and stated that the services should have the status of secondary services. The Delegate of the United States recalled that the question had been examined at length in Committee 4. Priorities and the sharing of bands should necessarily vary according to their use and the bands under consideration; in the 1 427 - 1 429 Mc/s band, the allocations figuring on page 12-02 reflected the decisions of the Committee exactly. Whilst he approved the addition of a footnote, he was opposed to any change in priority with regard to the services mentioned in that band. The Delegates of Denmark Mexico, the United Kingdom of Great Britain and Northern Ireland, Greece and China supported the opinion of the Delegate of the United States. The Delegate of Denmark, speaking in his capacity as the Chairman of Committee 4, recalled that at its 32nd meeting, the Committee had decided to allocate the frequency on a worldwide basis to the space and earth-space services, whilst stating that such an allocation was made for research purposes.

The Chairman put the proposal by the Delegate of the United States for leaving unchanged the allocations in the 1 427 - 1 429 Mc/s band in the form in which they appeared on page 12-02 of Document No. 726

to the vote, with the following result: for the proposal 46, against 11, with 4 abstentions. Thus the allocations in the 1 427-1 429 Mc/s band remained unchanged.

Page 12-03

The Delegate of the Argentine Republic asked the countries listed in footnote 218g to agree to similar drafting for that footnote to that for footnote 225a. The Delegate of the U.S.S.R. remarked that the two footnotes referred to very different frequency bands and he recalled that the Atlantic City Conference had decided that the 1 535-1 660 Mc/s band could be allocated to the fixed and mobile services. He therefore opposed any change in the text of that allocation and the corresponding footnote. The Delegate of Argentina did not insist on his proposal. With regard to footnote 218i, the Delegate of Turkey remarked that the various footnotes relating to radioastronomy were not drafted in a uniform manner. He considered that that service was just as important as the others and he proposed that the texts of all the footnotes should be rendered uniform and more flexible. The proposal was opposed by the Delegate of France who considered that the existing wording corresponded to what it was possible to achieve in practice and that if it was desired to adopt strict measures, a degree of protection going up to 1/1000 of a microvolt should be provided for. The Delegate of the U.S.S.R. also agreed to footnote 218i in its existing form: he was joined by the Delegate of the United Kingdom of Great Britain and Northern Ireland who recalled that Committee 4 had spent weeks in studying the question, that the wording proposed represented the best possible compromise, and that it was necessary to take a decision in the course of the meeting to stop the Conference for going on forever. That point of view was also held by the Delegate of the Kingdom of the Netherlands. On the insistence of the Delegate of Turkey, it was decided that the latter would submit in writing a draft wording for the footnotes relating to radioastronomy.

Page 12-04

With regard to footnote 219a, for which the text was the one given in Document No. 242, the Chairman of the Drafting Committee mentioned some difficulties that had arisen on account of the fact that the space and earth-space services had the status of primary or secondary services according to the frequency band under consideration. He proposed to amend the end of footnote 219a corresponding to the 1 700-1 710 Mc/s and 2 290-2 300 Mc/s bands in Region 1 as follows: ".....no harmful interference to the fixed and mobile services", and to delete the footnote everywhere else in the Table.

Page 12-05

The Chairman of the Drafting Committee referred to footnote 220 relating to industrial, scientific and medical purposes and pointed out that

it would be desirable to adopt uniform wording for all the footnotes dealing with the same subject when the table as a whole had been examined and before the pink documents were drawn up. Footnote 220 represented only one example amongst others.

After a break in the meeting, the Delegate of Czechoslovakia reverted to the decision taken at the beginning of the meeting not to apply footnote 155a (Page 10-01 of Document No. 705) to Region 1. Yet in its first sentence that footnote repeated Atlantic City footnote 155 applied on a world-wide basis, and many countries had made frequency allocations to their services in conformity with that text. He therefore proposed either to reinstate Atlantic City footnote 155 or else to keep the first sentence of footnote 155a and amend the second sentence as follows: ".....however, in Regions 2 and 3, such fixed stations....."

The Delegates of Sweden and Belgium opposed the Czech proposal to make an amendment. The matter was put to the vote. 12 delegations voted for the Czech proposal and 13 against, with 13 abstentions. As the results were not sufficiently decisive, the Chairman decided to proceed to a roll-call vote. The Delegate of France supported by the Delegate of China, recalled that the wording of footnote 155a represented a compromise agreed to by all after the discussions in Committee 4 and remarked that the assembly had lost precious time in trying to amend the compromise which had been arrived at in the Committee. He appealed to the Delegates of the U.S.S.R. and Czechoslovakia not to insist on new versions for footnotes 154 and 155.

The Delegate of Czechoslovakia maintained his point of view and a roll-call vote was taken which gave the following result: For the Czech proposal: 30 (Afghanistan, Albania, Australia, the Bielorussian S.S.R., Bulgaria, Canada, the United States, Ethiopia, Greece, Hungary, India, Japan, Morocco, the Kingdom of the Netherlands, Peru, the Philippines, Poland, Portugal, Portuguese Overseas Provinces, the United Arab Republic, Yugoslavia, the Ukrainian S.S.R., Roumania, the United Kingdom of Great Britain and Northern Ireland, Switzerland, Czechoslovakia, the United States Territories, the Overseas Territories of the United Kingdom, the Union of South Africa, the U.S.S.R.).

Against: 8 (Belgium, Korea, Overseas States of the French Community and French Overseas Territories, Spain, France, Italy, Mexico, Monaco)

Abstentions: 22 (Argentine Republic, Ceylon, Vatican City State, the Belgian Congo, Cuba, Denmark, Finland, Indonesia, Iran, Ireland, Israel, Luxembourg, Malaya, Norway, New Zealand, Paraguay, Federal Republic of Germany, Sweden, Thailand, Turkey, Uruguay, Venezuela)

The Czech proposal was therefore adopted.



Page 12-06 : approved without discussion.

Page 12-07

The Delegate of Paraguay thought that the wording of footnote 222a should be brought into line with that for footnote 222b as figured on Page 19 of Document No. 651 with reference to the "auxiliary meteorological service (ground radar)". The Delegate of the United States supported the suggestion, and it was decided that the Delegate of Paraguay should settle the point together with the Chairman of the Drafting Committee.

Page 12-08

The Chairman of the Drafting Committee considered it preferable to replace the words "have equal priority" in footnote 224e by "operate on an equal footing." The proposal was supported by the Delegate of Norway and was approved without objection.

Page 12-08

With reference to the 3 400-3 600 Mc/s band, the Delegate of the Kingdom of the Netherlands asked for his country to be included in footnote 224g, if the Delegate of the United Kingdom of Great Britain and Northern Ireland did not object. Similar requests were made by the Delegates of the Federal Republic of Germany, Israel and Austria. As there was no objection, it was decided to instruct the Drafting Committee to add the names of those countries.

Page 12-09 : approved without discussion.

Page 12-10

The Delegate of the Philippines requested the inclusion of the name of his country in footnote 225. The Delegate of China raised no objection. The Delegate of the U.S.S.R. considered that it was necessary to shorten the wording of footnote 225a. He asked for all the text to be deleted after "on the condition that they shall not cause harmful interference" to the end. It seemed to him to be a fairer and more just way of ensuring the use of that band under equal conditions between the services.

The Delegate of Greece made some reservations, because the footnote did not guarantee the absence of interference in countries other than those mentioned in the footnote.

On the other hand the Delegate of Bulgaria considered the U.S.S.R. proposal justified, because the countries in question used fixed services in that band which, if the wording proposed were kept, would have to stop operating if a flight was made over their territory.

The Delegate of the Argentine Republic remarked that footnotes 218g and 225a related to bands that had been recommended for use by international civil aviation. The Atlantic City Regulations already provided allocations for aeronautical radionavigation in those bands and he deplored the fact that there were discrepancies in those footnotes, especially as it was a question of security and the standardization of electronic equipment.

The Delegate of the United States shared the Argentine Delegate's views. The allocations proposed in the Table were likely to facilitate the standardization of electronic equipment in aircraft and it was therefore a pity that the bands could not be used exclusively for that purpose. He was against the U.S.S.R. proposal and suggested that footnote 225a should be amended as follows: "...the 4 200-4 400 Mc/s band is allocated on a secondary basis to the fixed and mobile services...." Footnotes 225, 225a and 225b would then constitute exceptions which, however, would all be in line.

The Delegate of the United Kingdom of Great Britain and Northern Ireland felt that footnote 225a offered an acceptable compromise, although his delegation would have preferred to have no exceptions. He was opposed to the U.S.S.R. proposal and supported that offered by the United States.

Referring to his proposal, the Delegate of the U.S.S.R. said that when countries signed bilateral agreements for flights over their territory, they specified all details relating to security, equipment on board, and so on. Consequently, it would be in the interests of the countries concerned if they themselves decided these matters, a factor which spoke in favour of the amendment proposed by the U.S.S.R.

The Delegate of the Argentine Republic supported the United States proposal. Because of the late hour, the Delegate of South Africa asked that the Assembly proceed to the vote.

The Chairman put to the vote the U.S.S.R. proposal to the effect that the end of footnote 225a should be deleted.

The U.S.S.R. proposal was rejected by 37 votes to 9, with 7 abstentions.

In view of the results of the vote, the United States Delegate withdrew his proposed amendment.

The Delegate of Bulgaria, on the argument that an aircraft when flying over a country should have that country's permission to do so, made a reservation with regard to the consequences of the vote.

Pages 12-11 and 12-12 were approved without discussion.

Page 12-13

The Delegate of Cuba asked that the words "except aeronautical mobile" should be inserted after "mobile" in the 5 925-7 000 Mc/s band. His country, together with certain other countries, operated radio relay links in that band for the transmission of television and that excluded any allocation to the aeronautical mobile service.

The Argentine Delegate did not think that the latter allocation would be incompatible with a satisfactory degree of protection for the fixed services. He asked the I.F.R.B.'s opinion on the subject.

The Vice-Chairman of the I.F.R.B. explained that the Board did not carry out any technical examinations in that band. As far as the Master Radio Frequency Record was concerned, the matter was dealt within a resolution prepared by Committee 5; however, he did not think that that resolution referred to the frequency band in question.

Since there was no support for the Cuban proposal, the Chairman suggested that the Delegate of Cuba should withdraw it.

The Delegate of France made the following statement regarding the 8 400 - 8 500 Mc/s band:

"The French Delegation considers that the allocation of the 8 400 - 8 500 Mc/s band on a secondary basis to the space and earth-to-space services should have no repercussions on the work of the International Radio Consultative Committee in connection with multi-path radio links."

The Delegate of Belgium associated himself with the statement made by the Delegate of France.

Page 12-14

The Delegate of the U.S.S.R. proposed that in the 8 750 - 8 850 Mc/s band the aeronautical radionavigation service should have priority.

The Delegate of the United States recalled that that question had given rise to discussions throughout the conference. His delegation had gone far in the spirit of compromise when it had offered a proposal to the effect that the aeronautical radionavigation service and the radiolocation service should be dealt with on an equal footing. Because of the considerable amount of work effected by Committee 4, he asked for pages 12-14 to be approved without modification. The Delegate of South Africa supported that proposal.

The United States proposal was put to the vote. There were  
39 votes in favour of the proposal,  
10 votes against the proposal, and  
2 abstentions.

Page 12-14 was thus approved without modification.

Page 12-15

The Delegate of the Federal Republic of Germany asked that a footnote, worded as follows, should be added to the Table:

"In the Federal German Republic the 10 000 - 10 250 Mc/s band is allocated additionally to the fixed and mobile services and the 10 250 - 10 5000 Mc/s band is allocated exclusively to the amateur service".

Since there were no objections, the footnote was approved.

The Delegate of Czechoslovakia made the following statement:

"Since the Atlantic City Radio Conference (1947) the 10 000 - 10 500 Mc/s band has been allocated on a world-wide basis exclusively to the amateur service."

" In our country we think highly of the work of radio amateurs, these pioneers who were not only the first to use high-frequency bands, but have also contributed much in investigating propagation conditions in the VHF, UHF, and SHF bands."

" Consequently, we propose that the amateur service should be given the same status as the other service mentioned on Page 12-15 of the blue documents (Document No. 726) in the 10 000 - 10 500 Mc/s band."

The Delegate of the United States said that in his country the activities of radio amateurs were likewise greatly appreciated. However, the conditions of their work were somewhat different in the band in question; for instance, the distances which that service was capable of covering were limited. In the United States, the sharing of the band as specified in the document was regarded as satisfactory, and in no way hampered the work of the amateurs. He was therefore against the amendment proposed by the Delegate of Czechoslovakia.

The Delegate of China shared the United States Delegate's views.

The Chairman put the Czechoslovakia proposal to the vote; it was rejected by 30 votes to 11, with 9 abstentions.

The Delegate of Cuba wished to make a statement of a general nature. He recalled that he had put a number of specific questions to the I.F.R.B. concerning, in particular, the radiolocation service. The replies he had received had not been satisfactory. For example, he could not understand why it had been decided to replace the Spanish term "radiodeterminacion de posicion" by "radiolocalizacion". He referred to an I.C.A.O. document (Montreal, August - September, 1958) from which it could be seen that a United States proposal dealing with those services had been rejected as being of no interest to international civil aviation. His delegation did not oppose the use of the most up-to-date radio services, but asked for explanations and clear definitions. However, up till then they had not been forthcoming: neither the I.F.R.B. nor the other administrations which he had consulted had supplied them. He had come to the Conference in a most co-operative frame of mind, but it seemed to him that every effort was being made to render things more incomprehensible. It was not his intention either to make multiple reservations or to propose innumerable footnotes to the Table, since they were a reflection of the divergencies existing among the administrations. In conclusion, he would request the I.F.R.B. to provide him with a definite answer to the questions he had put. If necessary, he would submit them again in writing.

The Chairman suggested that the Delegate of Cuba should submit his questions to the representative of the I.F.R.B. during the luncheon break, so that the answers might be given in the course of the second part of the session in the afternoon.

The Delegate of Cuba agreed.

The Meeting was suspended at 1 p.m.

The Meeting was resumed at 3 p.m. and the examination of Document No. 726 page by page was continued.

Page 12-15

The Delegate of Switzerland requested that his country be added to the footnote proposed by the Federal Republic of Germany, concerning the 10 000 - 10 500 Mc/s band.

This was agreed.

Page 12-16

The Chairman of the Drafting Committee explained that from this page onward, namely above 10 500 Mc/s, the term Gc/s (Gigacycles) in English and GHz (Gigahertz) in French would be used for frequency denomination, in accordance with Article 2, Section 3 of the Regulations.

The Meeting agreed with this procedure, and Page 12-16 was adopted without comment.

Page 12-17

Adopted without comment.

Page 12-18

Adopted without comment.

Page 12-19

The Delegate of Ethiopia pointed out that the words "not allocated" in the Table should be in italics. With this amendment the page was adopted.

The Chairman asked whether Document No. 726 could now be adopted in toto.

The Delegate of Turkey wished to revert to point 218i at the bottom of page 12-03. He had a question to put to those countries mentioned in the note. The bands concerned were also used for radio astronomy. Did they require protection from neighbouring countries, and if so, what degree of protection?

The Delegate of the U.S.S.R. replied that his delegation had already expressed an opinion on the matter during the morning meeting. They did not seek protection for astronomical observations, although it had been noted when the question was examined in Committee 4, that countries which bordered the countries mentioned in the footnote, should take steps to avoid interference to radioastronomy. Such a note no longer existed in the blue document, and he did not consider that such a stipulation was necessary. Only should the need for protection arise in any of those bands, would his country, and those mentioned in the text, get in touch with neighbouring countries, and ask them for the required assistance.

The Delegate of Turkey requested that his question and the answer be recorded in the Minutes.

The Delegate of the U.S.S.R. found it necessary to make a statement concerning the frequency allocation table from 960 Mc/s to 40 000 Mc/s, as set out in Document No. 726. His delegation considered that insufficient account had been taken of the needs of the U.S.S.R.. Furthermore, despite the similarity of interests, large groups of countries and their requests had not been included in the frequency allocation table, which was unwarranted and unjust. This concerned in particular the frequency band around 40 000 Mc/s, which did not exist at the time the Atlantic City frequency table was planned. There were now many decisions concerning this range which were not in keeping with Atlantic City. The great number of footnotes to this table had been examined in working groups and sub groups, and in his opinion complete agreement had not been reached.

His delegation had spoken on several occasions on the matter of frequency allocation to the so called "Radiolocation" services, both in Committee 6 and Committee 4. The Delegate for Cuba, in the morning meeting had made a request for information on these services, but none had been forthcoming.

The Delegate of the U.S.S.R. expressed surprise that a service, which appeared to be incomprehensible to many, should be included in the table, and should, indeed, be allocated nearly 25% of the total bands. He believed it was quite unjustified, especially in view of the fact that this service was even given priority in some bands over other services sharing the band.

The Delegate of Cuba had handed in some written questions to the I.F.R.B., and did not want to take a decision on Document No. 726 until he had received a reply to these questions. These concerned the Radiolocation service and were namely a request for information on 1) Power, 2) Bandwidth, 3) Type of emission, 4) Interference that could be caused, 5) Zone of service or utilisation, 6) Significance or interpretation of the term "Radiodetermination" and "Radiopositioning", 7) Different types of propagation in bands above 2 705 Mc/s.

He had gone over every part of the table in detail. Several services had been listed therein and had been given certain directives as far as their propagation systems were concerned. No such details were available on the so called Radiolocation service, and hence this was a problem which could not be classified. As he could not foresee an answer to his questions he would refer the Meeting to Article 48 of the Convention, concerning definitions, and to Annex 2, where no definition of radiopositioning or radiolocation was to be found.

He did not think it was possible to establish this type of service on a world wide basis, even in the bands above 10 000 Mc/s, and he believed that such an attempt represented the interests of only a few Administrations. In Atlantic City it had been made quite clear that there would be a possibility for other countries to establish services in these bands, and no type of priority had been established at that time. The services already existing, such as radio-navigation, television, etc., which represented a rational use of the spectrum, should be on an equal basis.

These points should be taken into account and recorded in the present Minutes.

The Chairman requested the I.F.R.B. to reply to the questions put by the Delegate of Cuba.

Mr. Gracie, Vice-Chairman of the I.F.R.B., said that, with regard to the significance of the term "Radiopositioning" those who, like himself had been privileged to attend the I.C.A.O. Meeting prior to the I.T.U. Conferences, had benefited by listening to a very adequate description of what was meant by the term. It had appeared at many points in the frequency allocation table, but it had not been considered appropriate to give a definition there, as the present meeting was not directly concerned with international civil aviation. In the definitions presented by Committee 6 there was no reference to "radiopositioning" but only to "radiolocation" and to "radiodetermination".

He did not think that the I.F.R.B. could add anything to the definition of these services which had already been given in the Report of Committee 6, and he would suggest that, should the Delegate of Cuba desire any further information, he should ask the Chairman of that Committee, rather than the I.F.R.B.

The Delegate of Cuba had asked how would each station of such services be distinguished. The Conference had naturally written down the columns of particulars which had been filled in by all Administrations when notifying any frequency requirements, and there was some distinction between the Medium and High Frequency bands as compared with the Very High Frequency bands, concerning the minimum information to be provided. Administrations were under an obligation to note the power, band width and type of emission concerned; usually the band width was very narrow. This was a matter entirely for the Administrations to handle, and naturally these requests must be entirely in accordance with the Radio Regulations, when the Radio Conference had decided what frequencies were to be assigned.

As far as the question of interference was concerned, with respect to the bands under discussion, namely 960 Mc/s to 40 Gc/s, the I.F.R.B. was not charged with making technical examinations of assignments in that part of the spectrum. In what way were existing assignments to be protected in the case of interference? Here, again, no conference had laid down any stipulations, unless the service was restricted by some footnote attached to it, such as "on a secondary basis" or "on a non-interference basis". Should interference arise between two services on a basis of equality, this would be between the Administrations concerned. Were the I.F.R.B. asked to intervene, they would send the relevant notes concerning dates of registration and any other information which could prove helpful.



He concluded by saying that he would be glad to have a private discussion with the Delegate of Cuba and see if there were any further points on which he could clarify the position.

The Delegate of Cuba explained that he had addressed his questions to the I.F.R.B. because his delegation had full confidence in that body as constituted by the Union. He believed that the Board was in a position to assist and advise all Administrations and that this was one of their most useful duties. His delegation knew perfectly well that if the I.F.R.B. were in a position to give an explanation, they would do so.

He referred to the original proposals in the Yellow Book, and namely No. 193.13, which was a continuation of Article 5 and which proposed the term "Radiolocation" for that given in Atlantic City as "Radiopositioning". There was a very subtle difference here, which was not in accordance with Atlantic City.

The I.F.R.B. had given him the assurance that each time services on a basis of equality referred to the Board, the latter would do all in its power to solve the problem. Atlantic City had established no priorities in the bands above 20 Mc/s; however the new Geneva Regulations would appear to make no provision for equality. His delegation had no objection to the allocation of frequencies to aeronautical navigation, or to ionospheric scatter propagation, though he did not consider that sufficient data had been collected on such services, and they should receive special treatment. However, he could not see the reason for allocating such a large portion of the frequency spectrum to a service which no one seemed to understand.

His delegation wished to show every good will towards the solution of this question. He would ask, nevertheless, that a decision on Document No. 726 be postponed until some more information on frequency allocation above 27.5 Mc/s was forthcoming. Meanwhile his delegation wished to reserve its views on the radiolocation services.

The Delegate of the United States Territories thought that a decision should be taken immediately with regard to Document No. 726.

The Delegate of Czechoslovakia pointed out that his delegation had made a reservation in Committee 4 on all allocations to radiolocation.

The Delegate of the United Kingdom of Great Britain and Northern Ireland said that he had listened with interest to the contribution made by the Delegate of Cuba, but reminded the meeting that the issue raised had been discussed at very great length in the various committees, sub-groups, ad hoc meetings, etc. and as time was getting very short he would urge that a decision be reached that afternoon.

The Chairman then put Document No. 726 to the vote.

As a result of the vote Document No. 726 was adopted, with the modifications agreed upon, with 52 in favour, none opposed, and 10 abstentions.

The Delegate of Bulgaria explained that his delegation had abstained during the vote as, whilst he would not repeat all the arguments they had used in the various meetings of the sub-groups of Committee 4, he believed that a full explanation concerning the so-called radiolocation service was required. Until such time his delegation wished to reserve its opinion on the document.

The Chairman of the Drafting Committee referred once more to the allocations to Space and Earth-Space services, and said that the wording "for research purposes" should appear, either in brackets in the table or as a footnote, each time these services were referred to in any part of the spectrum.

The Delegate of the U.S.S.R. said he could agree to this if it applied to all bands where these services were mentioned.

The Chairman requested the Chairman of the Drafting Committee to proceed in this manner, which was agreed.

The Chairman of the Drafting Committee then raised three points:

1. The expression "Secretary-General" should be favoured over any other wording;
2. According to the occasion either the expression "Members and Associate Members" or "Administrations" should be used;
3. With reference to nomenclature, instead of printing an asterisk and a footnote referring to a subsequent fixture of the nomenclature, this should be given at the time mention was made.

These three proposals were accepted and the Chairman authorized the Chairman of the Drafting Committee to proceed on that basis.

3. Report of the Ad Hoc Group: Future Policy Relating to the Radio Frequency Spectrum 4 - 27.5 Mc/s (Document No. 774)

The Chairman called upon Mr. Tedros (Ethiopia), Chairman of the Ad Hoc Group to introduce the document, and warmly congratulated him and the members of his group for the excellent results obtained in such a short time.

The Chairman of the ad hoc Group explained that the Group had been asked to consider what steps should be taken to set up a panel of experts, and had completed their task after four meetings. He would like to take the opportunity to thank all the members of his Group who had honoured his delegation by inviting him to act as Chairman, and who had given such full cooperation.

During discussion in the Group, the Delegate of Mexico had stated that he would have preferred a more detailed guidance to be given to the panel of experts, but after some exchange of views it had been decided that the working out of specific projects was the prerogative of Administrations, who would cover the widest possible geographical distribution.

The following steps should be taken:

The I.F.R.B., in collaboration with the other organs of the Union, should prepare in concise form from their records, or from any other source, all appropriate information which it considered necessary to be submitted to the Panel. Once it had completed its task the I.F.R.B. would report to the Administrative Council, who would then convene the Panel of Experts. After considering the problem from every angle the Panel would then submit its final report to the Council. The Report would give indications of policy and also economic implications, and the Council, after consideration of it, would decide whether or not to call an Administrative Conference. The latter, on the basis of recommendations by the Panel, would denote the procedure to be followed to relieve pressure on the use of the HF part of the frequency spectrum.

The Chairman of the ad hoc Group drew attention to Document No. 664, Annex 3 of which contained two Recommendations, which would still have to be dealt with by the Radio Conference.

The Delegate of Denmark paid tribute to the ad hoc Group and its Chairman for the great improvement in the Report. It was quite clear that this was an important and delicate question. The radio frequency spectrum had always been considered as a facility for all purposes, on condition that certain general provisions were respected as given in the Allocation Table and the Regulations. It was clear that this philosophy could no longer be followed. Needs had increased and space was limited, and the HF bands must be allocated as an international commodity only to be used in special cases. This would necessitate not only a change in future technique, but, what was more important, a change in mentality, which would be a slow process. The process should get started, and every new step taken should be reviewed with care.

This would enable use to be made of experience gained, and in his view would be much safer than to set up at the present time a detailed schedule of work during the coming years. This step-by-step method had been borne in mind from the very start of the idea, and was to some extent included in the proposal as presented by Committee 4. But the changes now proposed by the ad hoc group - that the preparatory work should be a separate phase carried out by the I.F.R.B. and the other permanent organs of the Union - only improved the procedure in this respect. It also represented a more economical solution, and for these reasons the Danish Delegation fully supported the proposals in Document No. 774.

The Chairman said that since the matter was similar to that covered by the Buenos Aires Resolution No. 33, the new Resolution would be for adoption by the Plenipotentiary Conference.

The Delegate of the United Kingdom considered the document to be a really excellent compromise. He was confident that the Panel, with the co-operation of the I.F.R.B. would do a first-class job, and his delegation was willing to accept the document.

Mr. Autelli (Argentine), Vice-Chairman, suggested that throughout the document reference should be made to 7 members of the Panel, with the addition of the Heads of the permanent organs, and not to "not more than eleven" as mentioned on page 3 of Document No. 774. This was agreed.

The Delegate of Mexico said that his delegation had taken an enthusiastic part in this work and had cooperated where possible. They had submitted a document which had to a great extent been incorporated in the text of Document No. 774. However, the former document had perhaps gone too far, as Mexico had believed that the work of the Panel of Experts would be extended to all regions and all countries. The only way in which a full list of categories and utilisers can be drawn up is stated in the original document. The job is an enormous one. For this reason Mexico had submitted the draft proposing a working schedule in stages consistent with the idea of universality. Despite repeated efforts on the part of his delegation, this idea had not been made quite clear.

It would appear now that the Panel would deal only with certain types of allocation, and this still left some doubts in his mind. If the allocations were to be made to a certain number of countries only, this would be neither logical nor desirable. He believed it should be left to the Group of experts to determine a fair and equitable distribution, and one could only await the decisions of this Group. Meanwhile the Mexican Delegation remained willing to extend all possible cooperation. He considered that the document had great merits and wished to associate himself with the congratulations which had been extended to the Chairman of the Ad Hoc Group for the fair and speedy way he had attended to the needs of the various delegations.

He reminded the Meeting that any future action based on the document should be credited to Mr. Pedersen (Denmark), whose original document (Document No. 423) was the cornerstone upon which all subsequent work had been founded.

He had a few amendments to make to the Spanish text, and some suggestions of detail. Upon the request of the Chairman, who had promised to vacate the Meeting Room at 4.30 p.m., to enable the elections to take place, the Delegate of Mexico agreed to submit his proposals to the Chairman of the Drafting Committee.

The Delegate of Pakistan said that he had participated in the work of the Ad Hoc Group and felt that the document laid down a definite programme for achieving relief of pressure on the radio spectrum. He strongly felt that the work which had been started should apply to all countries both great and small. With this end in view he supported the document, and associated himself in hearty congratulations to Mr. Pedersen and to Mr. Tedros.

The Delegate of India believed that a Resolution was both timely and appropriate. However two points must be borne in mind. The first, that any study to be undertaken by the Panel of Experts must be carefully planned in order to limit unnecessary expenditure. The second, that it should be realized that the pressure in the HF spectrum was both real and artificial; the real pressure could be relieved by rationalization, by technical planning, and a carefully controlled system of spectrum utilizers, the second, artificial pressure, could only be achieved by international goodwill.

The Meeting rose at 4.30 p.m.

Rapporteurs :

Deputy-Secretary :

Chairman :

M. Brodsky  
J. Unberg

C. Stead

Charles J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 853-E  
12 December, 1959

PLENARY MEETING

## MINUTES

OF THE

### SIXTEENTH PLENARY MEETING

Tuesday, 8 December, 1959, at 2.30 p.m.

Chairman: Mr. Charles J. Acton (Canada)

Vice-Chairman: Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)

Deputy-Secretary  
of the Conference: Mr. Clifford Stead

#### Subjects discussed:

Report of the Ad Hoc Group - Future policy relating to the  
radio frequency spectrum 4 - 27.5 Mc/s - Discussion continued.  
(Document No. 774).



The following delegations were present:

Afghanistan; People's Republic of Albania; Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Burma (Union of); Brazil; Bulgaria (People's Republic of); Canada; Ceylon; China; Vatican City (State of the); Colombia (Republic of); Belgian Congo and Territory of Ruanda Urundi; Korea (Republic of); Cuba; Denmark; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Iraq (Republic of); Ireland; Iceland; Israel (State of); Italy; Japan; Luxemburg; Malaya (Federation of); Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Kingdom of the Netherlands; Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian S.S.R.; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Thailand; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (Republic of); British East Africa (Associate Member). A representative of Liberia was also present as an observer.

Private Operating Agencies: British Broadcasting Corporation  
Portuguese Marconi Radio Company  
Cable and Wireless Ltd.

International Organizations: E.B.U.  
I.B.T.O.  
C.I.N.

The Delegate of Cuba supported by the Delegate of the People's Republic of Bulgaria referred to an account in the Morning Electron of a debate which had taken place in a Plenary Meeting of the Radio Conference the previous afternoon. The discussion was not correctly reflected, nor were the statements of his delegation.

The Chairman said that note would be taken of the comments by the Delegate of Cuba.

Report of the Ad Hoc Group - Future policy relating to the radio frequency spectrum 4-27.5 Mc/s - Discussion continued. (Document No. 774)

The Delegate of Australia said that the report of the Ad Hoc Group was a valuable contribution to the work of the Conference, and as the first attempt to alleviate the serious situation which had developed

in the band concerned, deserved full support. He congratulated the Delegate of Ethiopia, Chairman of the Ad Hoc Group, on the manner in which he had co-ordinated the varying view-points expressed in the Group and finally succeeded in presenting an excellent report so expeditiously.

The Delegate of New Zealand also congratulated the convenor and members of the Group on the report.

The Delegate of the United States of America expressed his appreciation of the excellent report and congratulated the original exponent of the idea that a group should be formed to study future policy relating to the 4-27.5 Mc/s band. The United States Delegation intended actively to support the concepts contained in the draft resolutions.

#### Appendix I

The Delegate of India, supported by the Delegate of the United States proposed the re-arrangement of i) to viii) on page 4.

The Delegate of Switzerland proposed the re-arrangement of paragraphs a) b) c) and d) under "invites".

It was decided that the Chairman of the Ad Hoc Group, in consultation with the Drafting Committee, would deal with both proposed amendments. They would also give some thought to the insertion of an introduction before "resolves"; the Delegate of Ceylon suggested that the text contained in Document No. 664 might assist them in that connection.

Drafting changes proposed by the Delegates of Czechoslovakia and Mexico were approved.

#### Annex 1

The Delegate of Mexico proposed the insertion of "with the co-operation of the Directors of the C.C.I.'s" after "I.F.R.B." in paragraph 2.

The Delegate of the United Kingdom did not feel that such an amendment was necessary. The part to be played by the C.C.I.'s had been considered very carefully but he did not feel that it applied to paragraph 2. The I.F.R.B., in its wisdom, would call upon all available technical information.

The Delegate of Ceylon thought that the point raised by the Delegate of Mexico was covered by the reference to the collaboration with the Directors of the C.C.I.R. and the C.C.I.T.T. in paragraph 5.

The Delegate of Mexico felt that the fact that the C.C.I.'s were not mentioned in paragraph 2 was inconsistent with the reference to them in paragraph 1) on the first page of the report.



The deletion of "Terms of Reference for the" in the title, and a drafting change proposed by the Delegate of Mexico were approved.

Annex 2

Drafting changes by the Chairman of the Ad Hoc Group and the Delegates of India and Mexico were approved.

At the suggestion of the Delegates of the United Kingdom and New Zealand, it was decided to add to the end of paragraph 3 "Due attention will need to be given to estimated traffic growth."

It was also decided, at the suggestion of the Delegate of New Zealand, to insert a new paragraph between 3 and 4 as follows: "The Panel will need to take account of the different degrees of technical development of countries as well as their differing telecommunication needs so far as the various telecommunication services are concerned."

The Delegate of New Zealand felt that it was essential for the problem to be understood in a wide field and at the highest level within Administrations, Members of the Union and that the report of the Panel should be as concise as possible. He proposed the insertion of the following sentence after paragraph 4: "The Panel should study the best method of informing Administrations of the problems which exist." It was so decided.

The Delegates of Mexico, Colombia and Paraguay proposed that paragraph 4 should be amended to make it quite clear that the new countries, and those in course of development, would be given economic assistance in order to enable them to proceed with any programmes envisaged by the Panel.

The Delegate of Pakistan supported by the Delegate of the Belgian Congo, felt that the text given in Document No. 774 made it quite clear that the smaller users of the spectrum, and not the larger, would be those requiring economic assistance.

The Delegate of the United Kingdom was of the opinion that paragraph 4 fully covered the principle that the Delegates of Mexico, Colombia and Paraguay had in mind, and fully supported the view expressed by the Delegate of Pakistan. He had no wish to override in any way, however, the amendment proposed by the Delegates of Mexico, Colombia and Paraguay suggested that a vote be taken.

A vote was held on the proposal by the Delegates of Colombia, Mexico and Paraguay to amend paragraph 4, and by 13 votes to 16, with 20 abstentions, the proposal was rejected.

It was decided by 45 votes to 2, with 6 abstentions, that paragraph 4 should remain as given in Document No. 774.

The Delegate of New Zealand proposed that paragraphs 5 and 6 should be amended to make it clear that the panel would take into consideration the problems foreseen in the future as a result of increasing traffic, broadcasting requirements, long distance aviation requirements, etc. The Delegate of Ceylon preferred the brevity and simplicity of the text contained in Document No. 774. In his view such an amendment was unnecessary since it was inherent in the purpose of the Panel that the problem would be studied from all angles.

The Delegate of New Zealand withdrew his proposal.

It was decided that the Chairman of the Ad Hoc Group, in consultation with the Drafting Committee, would find more appropriate wording to replace "Administrative Radio Conference or otherwise" in paragraph 6.

The Delegate of Colombia asked if the Chairman of the Ad Hoc Group would define the scope of the term "economic assistance". His delegation's approval of Document No. 774 would depend on the answer.

The Delegate of Ethiopia, Chairman of the Ad Hoc Group, said that Document No. 774 had been based on Document No. 664 and referred in particular to Annex 2 of the latter document. With regard to the scope of economic assistance, he could only give the point of view of his Delegation, which was that economic assistance consisted of a) donations from national organizations or governments sometimes through the intermediary of organizations such as the U.N. or b) in the form of low-interest loans by national organizations, governments, or international organizations such as the international bank. He thought that both forms of economic assistance were covered in Document No. 774.

The Delegate of Colombia was very much concerned that a problem such as relieving the congestion in the 4-27.5 Mc/s band should depend upon donations or loans. He was of the opinion that the assistance concerned should be technical as well as economic and had some doubts as to the successful accomplishment of the tasks entrusted to the Panel if technical assistance as such was not taken into consideration.

By 59 votes against 0, with 3 abstentions, Appendix I, Annexes 1 and 2 were approved.

## Appendix II

In reply to questions from the Delegate of Greece, the Chairman of the Ad Hoc Group explained that certain of the experts on the Panel would be nominated by Administrations and others by the Administrative Council, the salary of each Member of the Panel would, however, be paid by his Administration. The Chairman also explained that the sum of 100,000 Swiss francs mentioned in paragraph 1 on page 10 was to cover their travelling expenses and per diems which would be paid by the I.T.U.

The Delegate of Mexico suggested that "not exceeding 100,000 Swiss francs" should be replaced by "not less than 100,000 Swiss francs" on page 10, as there was no doubt that the Plenipotentiary Conference would not include a single franc more than the minimum asked for, although the contrary might result from the present text. The Chairman thought that if such an amendment were made the Plenipotentiary Conference would also want to know the upper limit of the sum involved.

The Delegate of India felt that the proposal by the Delegate of Mexico would mean exceeding the budget. He favoured the retention of the present text and, with reference to the tasks assigned to the I.F.R.B. in Annex 1, expressed some anxiety in connection with the I.F.R.B. budget.

The Delegate of Ceylon suggested that the expression "sum of 100,000 Swiss francs" should be used.

The Chairman of the Ad Hoc Group explained that the figure could not be estimated with accuracy because a) the exact duration of the meetings was not known; b) the number of languages in which the Panel would work was not yet known and upon that factor depended the number of staff, including the interpreters, required; c) the travelling expenses of the experts on the Panel could not be estimated until their countries of origin were known. He believed therefore, that the text given in Document No. 774 was the most suitable since expenses would be covered to the extent of, and not exceeding, 100,000 Swiss francs. The figure would of course be kept as low as possible.

In reply to a query from the Delegate of the F.P.R. of Yugoslavia the Chairman of the Ad Hoc Group thought it was preferable not to specify the number of experts in paragraph 2, page 10, so that the Administrative Council would be free to nominate six or seven, depending on the number of experts available with the qualifications required. To make it quite clear that travel and living allowances would be paid only to the experts, and not to the Directors of the permanent organs, he proposed that "experts, Members of the Panel" be used in paragraph 2 on page 10.

The Delegate of Brazil formally moved the adoption of Appendix II as given in Document No. 774, with the amendment to paragraph 2 proposed by the Chairman of the Ad Hoc Group.

The Delegate of Australia suggested an alternative drafting of paragraph 2, which was accepted by the Delegate of the F.P.R. of Yugoslavia. The Delegate of Mexico also proposed drafting changes to paragraph 2.

It was decided to authorize the Chairman of the Ad Hoc Group, in consultation with the Drafting Committee, to prepare a suitable text for paragraph 2.

The Delegate of the United States of America made the following statement:

"In agreeing to Appendix II of Document No. 774 and any other recommendation involving expenses, the delegation of the U.S.A. desires to make it clear that our delegation has no power to commit our Government to guarantee to provide our share of expenses for participation in Conferences or International Panels in advance of specific appropriations therefor by the Congress of the United States. The Executive Board of our Government will recommend to our Congress the appropriation of the money necessary to defray such expenses.

"We request that this statement be recorded in the minutes of this Plenary Meeting."

The Delegate of Mexico made the following statement:

"When the Ad Hoc Group started work on the idea of reaching a solution to the grave problem of the congestion of the spectrum between 4 and 27.5 Mc/s, more radical than the half measures which are of course all the Conference is able to take, the delegation of Mexico, in the Special Group, enthusiastically submitted written proposals, based on the logical supposition that the Panel of Experts would include in its studies all existing assignments in that part of the spectrum, taking into account all the countries using such frequencies. It was said that that was going too far. I therefore asked certain questions to find out exactly how far the Panel of Experts could go, but received no reply.

"True, minor points in the Mexican proposal are fully covered in Document No. 774, such as those about the very complete preliminary work which the I.F.R.B. is to carry out before the Experts meet, and about the making of estimates of the credits the Plenipotentiary Conference must authorize and the Administrative Council include in its annual budget of the Union. However, certain fundamental questions have remained unanswered, regarding the scope of the studies of the Panel of Experts. The Mexican delegation hoped that its doubts would be clarified in the course of the debate in this Plenary Meeting.

"However, quite apart from such doubts, today I have made proposals for changes to the text with a view to making it consistent throughout and I have encountered unexpected resistance to changes which, if they are made, would make the collaboration of the permanent organs of the Union with the I.F.R.B. during the preparatory stages, a reality. Although in part b) of the Resolution given in Appendix 1, it is stated that "the preparatory work ... should be undertaken by the I.F.R.B. in collaboration with the other permanent organs of the Union", this is not carried into the programme for the preliminary study contained in Annex 1, particularly paragraph 2, at which stage it would be impossible for solid

work to be accomplished without the collaboration of the Consultative Committees. The C.C.I.R. and the C.C.I.T.T. are mentioned solely in paragraph 5, which refers to the stage at which a report to the Administrative Council has to be made on the results of the study. This means that the Consultative Committees will collaborate only in the drawing up of the report on work in which they did not participate. This is a clear case of inconsistency.

" Other changes have been proposed today by the delegation of Mexico with the same result. All this increases our doubts regarding the scope and basis of the work of the Panel of Experts which, as can be seen, will work very much on its own and with the vaguest instructions.

" If its activities covered certain regions or countries only, perhaps the convening of an Extraordinary Administrative Radio Conference would not be justified, nor the expenditure incurred by meetings of Experts.

" Such vagueness in the fundamental aspects of the draft, and the reluctance to include any element of precision, are disappointing. Without being opposed to the creation and work of the Panel of Experts, we continue to have misgivings about the scope and efficacy of its work, and we shall abstain from voting on Document No. 774, in the hope that some beneficial results may come from the work of the Panel of Experts, that cannot be foreseen at the present stage."

Subject to drafting changes proposed by the Chairman and the Delegates of Mexico and India, Appendix II was approved by 56 votes to 0, with 6 abstentions.

The Chairman said that there were two recommendations on the subject, contained in the 13th series of blue documents, which would be considered at a later meeting. He congratulated the Chairman and the members of the Ad Hoc Group on the excellent work they had accomplished in such a short time.

The meeting adjourned at 4.45 p.m.

Rapporteur

Deputy Secretary of the Conference

Chairman

V. Bouladon

C. Stead

Charles J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 854-E  
12 December, 1959

## PLENARY MEETING

### MINUTES

OF THE

### SEVENTEENTH PLENARY MEETING

Wednesday, 9 December, 1959, at 11 a.m.

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| <u>Chairman:</u>                               | Mr. Charles J. Acton (Canada)  |
| <u>Vice-Chairmen:</u>                          | Mr. Juan A. Autelli (Argentine Republic)<br>Dr. M.B. Sarwate (Republic of India) |
| <u>Deputy Secretary<br/>of the Conference:</u> | Mr. Clifford Stead   |

### Subjects discussed

1. The Agenda (Document No. 811)
2. Plan for the future Radio Regulations (Document No. 814)
3. Draft Resolution - Telecommunication and the Peaceful Uses of Outer Space Vehicles (Document No. 778)
4. Statement by the Federal Republic of Germany (Document No. 794)
5. Note by the Chairman - Article 6 of the new Convention (Document No. 795)
6. Approval of the Minutes of the Eleventh Plenary Meeting (Document No. 757)
7. Draft Letter to the Chairman of the Plenipotentiary Conference (Document No. 781)

The following Delegations were present:

Afghanistan; Albania (People's Republic of); Argentine Republic; Australia (Commonwealth of); Austria; Belgium; The Bielorussian Soviet Socialist Republic; Burma (Union of); Brazil; Bulgaria (People's Republic of); Canada; Ceylon; China; Vatican City (State of the); Belgian Congo and Territory of Ruanda Urundi; Korea (Republic of); Cuba; Denmark; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Iraq (Republic of); Ireland; Iceland; Israel (State of); Italy; Japan; Malaya (Federation of); Morocco (Kingdom of); Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan (Republic of); Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Thailand; Tunisia; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (Republic of).

Private recognized operating Agencies: Cable and Wireless Ltd.

- British Broadcasting Corporation

International Organizations: International Broadcasting and Television Organization

European Broadcasting Union

International Chamber of Shipping

1. The Agenda (Document No. 811)

The Chairman said that, for reasons of urgency, item 6 would be considered first.

The Agenda, as amended, was adopted.

2. Plan for the future Radio Regulations (Document No. 814)

The Delegate of France, speaking as Chairman of the Drafting Committee, said that the main aims of the Drafting Committee, in drawing up Document No. 814, had been to reduce the number of Chapters in the Radio Regulations, taking into account the Articles which had been added or deleted, and to re-arrange the order of Articles, deleting and, where necessary, transferring short Articles of three or four lines. Referring to the Plan for the future Radio Regulations given in Document No. 814, he explained the reasons for the detailed changes that had been made.

The Delegates of the United States of America, the United Kingdom and Brazil unreservedly supported the new Plan as being a considerable improvement on the structure of the existing Radio Regulations.

The Delegate of Yugoslavia thought that the words "International Frequency Registration Board" should be deleted from the title given to Chapter III.

The Chairman of the Drafting Committee pointed out that certain Articles in Chapter III were concerned directly with the I.F.R.B. The title should therefore remain as it stood.

The Delegate of Yugoslavia withdrew his suggestion.

The Delegate of the Belgian Congo agreed with the new Plan in principle, but regretted that it had not been drawn up at the beginning of the Conference. He hoped that the Drafting Committee of the next Radio Conference would take the drafting of such a Plan as its first task.

The Delegate of the Federal Republic of Germany also supported the adoption of the new Plan, but wondered whether Article 12 might not become a new Article 3 in Chapter I.

The Chairman of the Drafting Committee thought that Article 12 should stay where it was, since the purpose of considering "Technical Characteristics of Equipment and Emissions" was to provide against interference.

With regard to the point raised by the Delegate of the Belgian Congo, he wished to observe that as long ago as September he had issued Document No. 223 asking delegations to submit ideas and comments for the drawing up of the new Plan. He had received none. Moreover, before it was possible to draw up such a Plan, it was necessary to know which Articles in the existing Regulations were to be deleted and what new Articles were to be inserted in the revised version. That was only possible at a late stage of the Conference.

The new Plan for the future Radio Regulations was adopted.

The Chairman congratulated the Drafting Committee and its Chairman on the work which had borne fruit in Document No. 814.

3. Draft Resolution - Telecommunication and the Peaceful Uses of Outer Space Vehicles (Document No. 778)

The Delegate of the United Kingdom said that, while supporting the principle of the Draft Resolution in Document No. 778, he would propose that, after the word "considering", it be drafted in a simpler and more effective fashion as follows:



"how important a part telecommunication is bound to play in that connection, and the major role of the I.T.U.;

" instructs the Secretary-General

"a) to inform the United Nations and the other international organizations concerned of the decisions of the Administrative Radio Conference and of the technical studies being undertaken by the C.C.I.R.

"b) to keep the same organizations informed of progress and developments."

In addition, the information contained in the rest of the document was in general unnecessary, and in some cases misleading. It should therefore be deleted.

The Delegates of the United States, the Union of Soviet Socialist Republics and France, supported the United Kingdom amendments, which made the Draft Resolution clearer and a more accurate reflection of their views.

The Deputy Secretary of the Conference suggested that, to avoid ambiguity, the words "Geneva, 1959" should be added after "Administrative Radio Conference" in the United Kingdom amendment.

The Delegate of Sweden supported the United Kingdom amendment. He assumed that, in the amended version of paragraph b) the Delegate of the United Kingdom had intended that the organizations referred to should be "informed of progress and developments" in as great a detail as possible. That would provide the I.T.U. with further publicity, of which he was entirely in favour.

The Delegate of the United Kingdom said that such had been his intent. The reports to organizations could bring up the role of the Union with regard to frequency allocations and other matters, the fact that the Radio Conference had made allocations throughout the spectrum for the purposes of space research and the fact that steps would be taken at a suitable time to convene a conference to consider the question of permanent allocations. Mention might also be made of the decision by the IXth Plenary Assembly of the C.C.I.R. to set up a Study Group to study technical questions regarding systems of telecommunication with and between locations in space.

The Delegate of Czechoslovakia supported the United Kingdom amendment, but proposed that the words "in this field" be added at the end of the new proposed paragraph b).

The Delegate of Denmark agreed with what had just been said by the Delegate of the United Kingdom. He thought it should be mentioned, however, that the extraordinary administrative radio conference to be

convened would also take up the question of inserting provisions in the Radio Regulations to provide for the identification and control of radio emissions from space vehicles, taking into account possible Recommendations of the C.C.I.R.

The Delegate of Pakistan said that, if the informatory part of the Draft Resolution were deleted, as proposed by the United Kingdom, decisions regarding the contents of the letters and reports to the organizations mentioned would be left to the Secretary-General. He thought it would be useful if the Secretariat could produce a draft letter before the end of the Conference so that Delegates might have the opportunity of seeing what information was to be transmitted.

The Chairman said that, for reasons of time, it would be difficult for the Secretariat to draft the letter before the end of the Conference. It would probably be sufficient if the letter contained information regarding the decisions that had been taken concerning allocations of frequency bands for space research purposes, the decision of the Conference that the Administrative Council in 1962 and 1963 should examine the question of holding an extraordinary administrative radio conference and the technical decisions and recommendations of the C.C.I.R. with regard to identification and control which the Conference had adopted.

The Deputy Secretary of the Conference said that he felt that the letter to the organizations referred to was such an important matter that it should not be rushed in any way. The Secretariat would be extremely grateful if Delegates who had ideas with regard to the contents would hand them in before the end of the Conference.

The Delegate of Pakistan said that, if it were impossible for the Secretariat to prepare a draft letter before the end of the Conference, copies of it and all other such letters should be circulated to Administrations.

The Vice-Chairman of the I.F.R.B. said that he hoped that the Secretariat would be given the discretion to include the information given on pages 2 to 4 of Document No. 778. Since the letter was to be addressed primarily to the United Nations, which was a non-technical body, he believed that the information he had referred to would prove a helpful guide to that organization.

The Delegate of the United States was opposed to the inclusion of material from Pages 2 to 4 of Document No. 778. Many of the statements, particularly on Page 4 were misleading.

The Delegate of the United Kingdom fully agreed with the Delegate of the United States. It would be most unwise for the information in Document No. 778 to be sent to the United Nations. It should surely be possible to produce a constructive letter, stating clearly the role of the I.T.U. and the C.C.I.R.

The Chairman said that he was informed by the Deputy Secretary of the Conference that it would be quite feasible for the Secretariat to circulate copies of the letter as requested by the Delegate of Pakistan.

The Draft Resolution, as amended, was adopted.

4. Statement by the Federal Republic of Germany (Document No. 794)

The Chairman proposed that consideration of Document No. 794 be deferred until the Draft Resolution contained in Document No. 722 was considered in the blue sheets.

It was so agreed.

5. Note by the Chairman - Article 6 of the new Convention (Document No. 795)

The Chairman proposed that the Meeting take note of Document No. 795.

It was so agreed.

6. Approval of the Minutes of the Eleventh Plenary Meeting (Document No. 757)

Following requests for corrections in the Minutes of the Eleventh Plenary Meeting, by the Delegates of Ethiopia, Czechoslovakia, Mexico and Pakistan (Document No. 757), the Deputy Secretary of the Conference announced that a revised version of those Minutes would be issued.

7. Draft Letter to the Chairman of the Plenipotentiary Conference (Document No. 781)

The Delegate of the Union of Soviet Socialist Republics said that the provision of technical assistance was a part of the duties of the I.F.R.B. as laid down in No. 293 of the new Article 10 of the Radio Regulations and stated in Draft Recommendation contained in Annex 2 of Document No. 781. Paragraph 3 i) of Document No. 652, which was the subject of Annex 1 to Document No. 781, stated in effect that, if the I.F.R.B. was not provided with an additional small staff of engineers, it would not be able to carry out all its duties towards new and developing countries. The Soviet Delegation was opposed to putting such narrow, specific problems before the Plenipotentiary Conference, which should merely be informed of the general tasks and duties of the specialized organs of the Union so that it could take such information into account when considering the structure of the Union as a whole.

The Delegate of the United States pointed out that Committee 5 had adopted the Recommendation for a small staff of engineers in the I.F.R.B. by a substantial majority. There was no doubt that the Members of the I.F.R.B. were ultimately responsible for the discharge of the Board's duties towards new or developing countries, as they were for all the other activities of the Board. However, they had a great number of functions,

and it was for that reason that Committee 5 had decided that they should be provided with the small staff of engineers mentioned, if they were to provide the necessary assistance to new or developing countries. It was essential that the Plenipotentiary Conference be informed of that decision before it finalized the Union's budget.

The Delegate of Mexico said that his Delegation had always been in favour of the Board's carrying out fully the provisions of the Convention and the Radio Regulations with regard to the question of advice to Administrations. Although the provisions in the Convention and the Regulations were clear, it had not been possible for the Board to implement them all, partly due to erroneous interpretation of No. 110 of the E.A.R.C. Agreement, and partly due to lack of resources. One of the most important factors in ensuring that provisions were put into practical effect was to draft them in clear and unequivocal language. He fully supported paragraph 3 i) of Document No. 652, and was in favour of transmitting it to the Plenipotentiary Conference as proposed in Document No. 781.

The Delegate of Pakistan believed that the series of recommendations contained in Document No. 652 represented the best compromise that could be reached in existing conditions in favour of the interests of new or developing countries. Paragraph 3 i) embodied the basic idea that there were many countries which would like to obtain the form of assistance that was mentioned therein and that the I.F.R.B. had so far been unable to provide. It was essential that the I.F.R.B. should provide such assistance in future - though that did not necessarily mean that staff would have to be increased - and he was therefore in favour of transmitting the paragraph to the Plenipotentiary Conference.

The Delegate of Ethiopia supported Annexes 1 and 2 of Document No. 781. The three ideas contained therein were extremely important for many countries. It had emerged from the discussions in Committee 5 that the chief difficulties of new or developing countries were in obtaining crystals and, due to lack of special equipment, in monitoring. Correct interpretation of the Radio Regulations which had previously been impossible for many Administrations was a very important matter.

Annex to Document No. 781 was adopted.

The Chairman said that, as a result of the adoption of Annex 1, it would not be necessary to take any action on Annex 2.

It was so agreed.

The meeting rose at 12.15 p.m.

Rapporteurs:  
G. Mackenzie  
S. Vittese

Deputy-Secretary  
of the Conference:  
Clifford Stead

Chairman of the  
Conference:  
Charles J. Acton

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 384-E (CP)  
Document No. 855-E (CAR)  
11 December 1959COMMITTEE C (CP)  
COMMITTEE 3 (CAR)

## SUMMARY RECORD

Fifth Meeting of Committee C/3

(Finance Control Committee)

Wednesday, 9 December, 1959, at 3 p.m.

Chairman: Mr. J. B. Darnell (New Zealand)Vice-Chairman: Mr. V. Šenk (Federal People's Republic of Yugoslavia)The Agenda was adopted.1. Summary Record of the Fourth Meeting (Document No. 327-CP and 766-CAR)

This was adopted without amendment.

2. Expenditure, and approximate estimates of expenditure, on 30 November, 1959 (Document No. 328-CP and Document No. 767-CAR):

The Chairman said that to gain time, it had been decided to submit the document to the Committee direct, without prior consideration by the working party. Expenditure was shown as on 30 November, 1959, and the estimates had been made on the assumption that both Conferences would end on 17 December. Things still seemed to be going well; the table on page 9 showed a margin of 180,000 Swiss francs in relation to the Budget.

Mr. Châtelain (General Secretariat) said that if the statement of expenditure on 10 November were compared with that on 30 November, it would be seen that there had been a considerable rise in actual expenditure, due to the salaries paid on the 25th of the month. The extra staff, mentioned at the previous meeting, explained why the sum shown in Column 5 as a reserve for possible future recruitment had decreased. Furthermore, it had been considered essential to keep 100,000 Swiss francs in reserve to cope with the possible prolongation of the Conferences beyond 17 December.

Mr. C. Stead (General Secretariat), answering a question from the Chairman about day-to-day expenses, said it was hard to give a definite figure. For example, if one conference finished before the other, part of

Document No. 384-E (CP)

Document No. 855 (CAR)

Page 2

the staff could be got rid of. Or the entire staff could be kept on to ensure that documents came out more quickly, in which case the expenses in question would come to some 20-25,000 Swiss francs a day.

Mr. C.B. Nielsen (Denmark) said there had been a marked increase under "telegrams" on Page 8. What was the explanation of that?

Mr. Châtelain (General Secretariat) said that formerly telegrams had been debited immediately after they had been handed in, while at present, as the result of an agreement entered into with the Telephone Department, Geneva, bills were made up monthly. Previous estimates had appeared too low, and it had been considered prudent to increase them. There had been a similar increase for local transport, because the typing pool and mimeograph section had doubled in size and were working twenty-four hours a day, Saturdays and Sundays included.

Mr. Vargues (France) proposed -and it was so decided -, that a bonus of 1,500 Swiss francs should be awarded to staff of the postal telegraphic, and telephone services - 500 francs to each.

Mr. T. C. Weaver (United Kingdom of Great Britain and Northern Ireland) asked how the 5,000 Swiss francs had been saved in "publication and distribution of reports" (item 13 on Page 3).

Mr. Stead (General Secretariat) said that a tax had been included in the bills paid. That had been refunded, since international organizations were exempt therefrom.

The Committee then instructed the Secretariat, in conjunction with the Geneva postal authorities, to examine the question of whether it would be possible in connection with future conferences to reduce the cost of despatch of the documents which Delegates would send home after the conferences. It would inform the Plenary Assembly of its findings, and the Plenary Assembly would then decide whether such expenses should be debited to the conferences.

The document was then adopted.

Mr. Nielsen (Denmark), on behalf of his working party said:

"A further examination was made on 28 November of the vouchers and bills in respect of expenses incurred by the Plenipotentiary and Administrative Radio Conferences. The items examined were found to be correctly authorized and paid for.

" It was noticed that accounts rendered to date showed that an amount of 15,858 Swiss francs had so far been spent on production of the List of Participants and it is felt that this is an excessive amount for this publication. It is considered that a List of Participants prepared by the roneo method could have been produced much more quickly and certainly at much less cost. Furthermore it would have been possible with such a method to provide regular lists of additions and amendments without the necessity for the publication at frequent intervals in the Morning Electron'.

" The Group now considers that its task is completed and it is not proposed to hold any further meetings."

The Chairman thanked the speaker and his Group. Mr. Châtelain (General Secretariat) said that the external audit done by the Swiss Government extended to the accounts of the Conferences too.

3. List of participants in the expenses of the Conferences (Document No. 329-CP and Document No. 768-CAR)

Mr. Stead (General Secretariat) said that the contributory classes of all countries and organizations which would share in defraying the expenses of the Conferences were now known. All in all, there were 608.5 contributory units.

4. Publication of the Final Acts (Document No. 330-CP and Document No. 769-CAR)

Although the documents had not yet appeared, the Committee decided to recommend that the Plenary Assemblies debit one quarter of printing costs to the Conferences.

5. Other business

The Committee authorized the Secretariat to make transfers from Section to Section of Conference costs, if required.

The Chairman thanked Messrs. Nielson and Hase for the good work they had done as Chairmen of Sub-Committees, also the General Secretariat, in particular Messrs. Stead, Châtelain and Prélaz for the very able assistance they had given to the Committee. He also expressed his thanks and appreciation to his Vice-Chairmen, Messrs. Šenk and Gayer and to Mr. Delaloye, Rapporteur, for their good work and support.

The Delegate of China, on behalf of the Committee, said how sincerely grateful they were to the Chairman.

The meeting rose at 4.15 p.m.

Rapporteur:  
B. Delaloye

Chairman:  
J.B. Darnell

Document No. ~~683~~-E  
11 December 1959

**SERIES 22**

## PLENARY MEETING

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

## SUMMARY

[illegible]



## ARTICLE 5

Title MOD

**Frequency Allocations**  
**10 kc/s to 40 Gc/s**

Title ADD

**Section I. Regions and Areas**

100 NOC

§ 1. For the allocation of frequencies the world has been subdivided into three Regions <sup>1</sup> (see Appendix 24).

101 NOC

*Region 1 :*

Region 1 includes the area limited on the East by line A (lines A, B and C are defined below) and on the West by line B, excluding any of the territory of Iran which lies between these limits. It also includes that part of the territory of Turkey and the Union of Soviet Socialist Republics lying outside of these limits, the territory of the Mongolian Peoples' Republic, and the area to the North of the U.S.S.R. which lies between lines A and C.

102 NOC

*Region 2 :*

Region 2 includes the area limited on the East by line B and on the West by line C.

103 (MOD)

*Region 3 :*

Region 3 includes the area limited on the East by line C and on the West by line A, except the territories of the Mongolian Peoples' Republic, Turkey, the territory of the U.S.S.R. and the area to the North of the U.S.S.R. It also includes that part of the territory of Iran lying outside of those limits.

100.1 (MOD)

<sup>1)</sup> It should be noted that where the words "regions" or "regional" are without a capital "R" in these Regulations they do not relate to the three Regions here defined for purposes of frequency allocation.

103a (MOD)

The lines A, B, and C are defined as follows :

104 NOC

*Line A :*

Line A extends from the North Pole along meridian 40° East of Greenwich to parallel 40° North ; thence by great circle arc to the intersection of meridian 60° East and the Tropic of Cancer ; thence along the meridian 60° East to the South Pole.

105 NOC

*Line B :*

Line B extends from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North ; thence by great circle arc to the intersection of meridian 50° West and parallel 40° North ; thence by great circle arc to the intersection of meridian 20° West and parallel 10° South ; thence along meridian 20° West to the South Pole.

106 NOC

*Line C :*

Line C extends from the North Pole by great circle arc to the intersection of parallel 65° 30' North with the international boundary in Behring Strait ; thence by great circle arc to the intersection of meridian 165° East of Greenwich and parallel 50° North ; thence by great circle arc to the intersection of meridian 170° West and parallel 10° North ; thence along parallel 10° North to its intersection with meridian 120° West ; thence along meridian 120° West to the South Pole.

107 MOD

§ 2. The "European Broadcasting Area" is bounded on the West by the Western boundary of Region 1, on the East by the meridian 40° East of Greenwich and on the South by the parallel 30° North so as to include the western part of the U.S.S.R. and the territories bordering the Mediterranean, with the exception of the parts of Arabia and Saudi-Arabia included in this sector. In addition, Iraq is included in the European Broadcasting Area.

107a ADD

The "European Maritime Area" is bounded on the North by a line extending along parallel 72° North from its intersection with meridian 55° East to its intersection with meridian 5° West, then along meridian 5° West to its intersection with parallel 67° North thence along parallel 67° North to its intersection with meridian 30° West ; on the West by a line extending along meridian 30° West to its intersection with parallel 30° North ; on the South by a line extending along parallel 30° North to its intersection with meridian 43° East ; on the East by a line extending along meridian 43° East to its intersection with parallel 60° North, thence along parallel 60° North to its intersection with meridian 55° East and thence along meridian 55° East to its intersection with parallel 72° North.

107b ADD

The "Tropical Zone" (see Appendix 24) is defined as :

- a) the whole of that area in Region 2 between the Tropics of Cancer and Capricorn ;
- b) the whole of that area in Regions 1 and 3 contained between the parallels 30° North and 35° South with the addition of :
  - 1) the area contained between the meridian 40° East and 80° East of Greenwich and the parallels 30° North and 40° North ;
  - 2) that part of Libya North of parallel 30° North.

107c ADD

In Region 2, the Tropical Zone may be extended to parallel 33° North, subject to appropriate special arrangements between the countries concerned in that Region.

Title ADD

## Section II. Categories of Services and Allocations

Title ADD

### *Primary Services, Permitted Services and Secondary Services*

97 MOD

Where, in a box of the Table in Section IV of this Article, a band is indicated as allocated to more than one service, either on a world-wide or Regional basis, such services are listed in the following order :

- a) services, the names of which are printed in "small capitals" (example **FIXED**); these services are called "primary" services;
- b) services, the names of which are printed in "grotesque light" (example Radiolocation); these are "permitted" services (see No. 97a);
- c) services, the names of which are printed in "italics" (example : *Mobile* ); these are "secondary" services (see No. 97b).

97a. ADD

Stations of the permitted and primary services have equal rights, except that, in the preparation of frequency plans, frequencies for the primary service shall be chosen without regard for the permitted service.

97b. ADD

Stations of a secondary service :

- a) shall not cause harmful interference to stations of primary or permitted services to which frequencies are already assigned or to which frequencies may be assigned at a later date ;
- b) cannot claim protection from harmful interference from stations of a primary or permitted service to which frequencies are already assigned or may be assigned at a later date ;
- c) can claim protection, however, from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.

97c. ADD

Where a band is indicated in a footnote to the Table as allocated to a service "on a secondary basis" in an area smaller than a Region, or in a particular country, this is a secondary service (see No. 97b).

97d ADD

Where a band is indicated in a footnote to the Table as allocated to a service "on a primary basis", or "on a permitted basis" in an area smaller than a Region, or in a particular country, this is a primary service or a permitted service only in that area or country.

Title ADD

*Additional services*

97e ADD

Where a band is indicated in a footnote to the Table as "also" allocated to a service in an area smaller than a Region, or in a particular country, this is an "additional" service, i.e. a service which is added in this area or in this country to the service or services which are indicated in the Table (see No. 97f).

97f ADD

If the footnote does not include any restriction on an additional service apart from the restriction to operate only in a particular area or country, stations of this service shall have equality of right to operate with stations of the other service or services, the names of which are printed in "small capitals" in the Table.

97g ADD

If restrictions are imposed on an additional service in addition to the restriction to operate only in a particular area or country, this is indicated in the footnote to the Table.

Title ADD

*Alternative allocations*

97h ADD

Where a band is indicated in a footnote to the Table as allocated to one or more services in an area smaller than a Region, or in a particular country, this is an "alternative" allocation, i.e. an allocation which replaces, in this area or in this country, the allocation indicated in the Table (see No. 97i).

97i ADD

If the footnote does not include any restriction on stations of the service or services concerned, apart from the restriction to operate only in a particular area or country, these stations shall have an equality of right to operate with stations of the service or services, the names of which are printed in "small capitals" in the Table, and to which the band is allocated in other areas or countries.

97j ADD

If restrictions are imposed on stations of a service to which an alternative allocation is made, in addition to the restriction to operate only in a particular country or area, this is indicated in the footnote.

Title ADD

#### *Miscellaneous Provisions*

97k ADD

Where it is indicated in these Regulations that a service may operate in a specific frequency band subject to not causing harmful interference, this means also that this service cannot claim protection from harmful interference caused by other services to which the band is allocated under Chapter II of these Regulations.

97L ADD

Except if otherwise specified in a footnote, the term "fixed service", where appearing in Section IV of this Article, does not include systems using ionospheric scatter propagation.

97m ADD

The term "authorised" applied to a specific service in a footnote means that this service is among the services to which the band concerned is allocated under Section IV of this Article.

Title ADD

#### **Section III. Description of the Table of Frequency Allocations**

97n ADD

The heading of the Table in Section IV of this Article includes three columns, each of which corresponds to one of the Regions (see No. 100). Where an allocation occupies the whole of the width of the Table or only one or two of the three columns, this is a world-wide allocation or a Regional allocation, respectively.

97o ADD

The frequency band referred to in each allocation is indicated in bold type in the lefthand top corner of the part of the Table concerned.

97p ADD

Within each of the categories specified in No. 97, services are listed in alphabetical order according to the French language. The order of listing does not indicate relative priority within each category.

97q ADD

The footnote references which appear in the Table below the allocated service or services, apply to the whole of the allocation concerned.

97r ADD

The footnote references which appear to the right of the name of a service are applicable only to that particular service.

97s ADD

In certain cases, the names of countries appearing in the footnotes have been simplified in order to shorten the text.

Title ADD

**Section IV. Table of Frequency Allocations — 10 kc/s to 40 Gc/s**

ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959

Document No. 857-E

SERIES A

PLENARY MEETING

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

SUMMARY

| Blue Document No. | Series No. | Pages          | Former Article | New Article | Pages | Remarks |
|-------------------|------------|----------------|----------------|-------------|-------|---------|
| 683               | 8          | 8-01 to 8-16   | 5              | 5           | A—01  |         |
| 705               | 10         | 10-01 to 10-10 | „              | „           | A—17  |         |
| 770               | 14         | 14-01 to 14-23 | „              | „           | A—27  |         |
| 726               | 12         | 12-01 to 12-19 | „              | „           | A—50  |         |
|                   |            |                |                |             |       |         |





ART 5

kc/s  
10—70

—E

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2                                | Region 3 |
| Below 10               | (Not allocated)<br>109a                 |          |
| 10—14                  | RADIONAVIGATION<br><i>Radiolocation</i> |          |
| 14—19.95               | FIXED<br>MARITIME MOBILE<br>110a        | 110      |
| 19.95—20.05            | STANDARD FREQUENCY<br>110a              | 110b     |
| 20.05—70               | FIXED<br>MARITIME MOBILE<br>110a 110c   | 110      |

(MOD)

**109a** Administrations authorizing the use of frequencies below 10 kc/s for special national purposes shall ensure that no harmful interference is caused thereby to the services to which the bands above 10 kc/s are allocated (see also Article 14, No. 14-07).

**110** Limited to coast telegraph stations (A1 and F1 only).

**110a** The stations of services to which the bands between 14 and 70 kc/s are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequencies 25 kc/s and 50 kc/s will be used for this purpose under the same conditions.

**110b** The standard frequency is 20 kc/s.

**110c** In the U.S.S.R., frequencies in the band 60-80 kc/s may be used for industrial, scientific and medical purposes subject to the condition that interference is not caused to stations of services to which this band is allocated.

A—01

ART 5

kc/s  
70—90

—E

| Allocation to Services  |   |  |
|---|---|--|
| Region 1  | Region 2  | Region 3   |
| <b>70—72</b><br>RADIONAVIGATION 110d<br>110c                                      | <b>70—90</b><br>FIXED<br>MARITIME MOBILE 110<br>MARITIME RADIONAVIGATION 110d<br><i>Radiolocation</i> | <b>70—90</b><br>FIXED<br>MARITIME MOBILE 110<br>RADIONAVIGATION 110d |
| <b>72—84</b><br>FIXED<br>MARITIME MOBILE 110<br>RADIONAVIGATION 110d<br>110c 111a |   |  |
| <b>84—86</b><br>RADIONAVIGATION 110d<br>111a                                      |   |  |
| <b>86—90</b><br>FIXED<br>MARITIME MOBILE 110<br>RADIONAVIGATION 110d<br>111a      | 111b  | 111  |

(MOD)

**110d** Limited to continuous wave systems.**111** In the bands 70-72 kc/s and 84-86 kc/s, the radionavigation service is the primary service except in Japan and Pakistan.

MOD

**111a** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 80-150 kc/s is allocated on a secondary basis to the aeronautical and land mobile services while within and between these countries these services shall have equal right to operate.**111b** The establishment and operation of maritime radionavigation stations shall be subject to arrangements between administrations whose services, operating in accordance with the Table, may be affected. However, the fixed, maritime mobile and radiolocation services shall not cause harmful interference to maritime radionavigation stations established under such arrangements.

A—02

ART 5

kc/s  
90—110

—E

MOD

| Allocation to Services |                            |                     |
|------------------------|----------------------------|---------------------|
| Region 1               | Region 2                   | Region 3            |
| 90—110                 | 90—110                     | 90—110              |
| FIXED                  | RADIONAVIGATION            | FIXED               |
| MARITIME MOBILE 110    | <i>Fixed</i>               | MARITIME MOBILE 110 |
| RADIONAVIGATION        | <i>Maritime mobile</i> 110 | RADIONAVIGATION     |
| 111a 112               | 112                        | 112                 |

- 112** The development and operation of long distance radionavigation systems are authorized in this band, which will become exclusively allocated, wholly or in part, to the radionavigation service for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services. If a pulse radionavigation system is employed, the pulse emissions shall nevertheless be confined within the band 90-110 kc/s and shall not cause harmful interference outside the band to stations operating in accordance with the Regulations. In Regions 1 and 3, during the period prior to the international adoption of any long distance radionavigation system, the operation of specific radionavigation stations shall be subject to arrangements between administrations whose services, operating in accordance with the Table, may be affected. Once established under such arrangements radionavigation stations shall be protected from harmful interference.

ART 5

kc/s

—E

110—130

| Allocation to Services |                                  |                      |
|------------------------|----------------------------------|----------------------|
| Region 1               | Region 2                         | Region 3             |
| <b>110—112</b>         | <b>110—130</b>                   | <b>110—130</b>       |
| FIXED 112b             | FIXED 112b                       | FIXED 112b           |
| MARITIME MOBILE 112b   | MARITIME MOBILE 112b             | MARITIME MOBILE 112b |
| RADIONAVIGATION 110d   | MARITIME<br>RADIONAVIGATION 110d | RADIONAVIGATION 110d |
| 111a 112a              |                                  |                      |
| <b>112—115</b>         | <i>Radiolocation</i>             |                      |
| RADIONAVIGATION 110d   |                                  |                      |
| 111a                   |                                  |                      |
| <b>115—126</b>         |                                  |                      |
| FIXED 112b             |                                  |                      |
| MARITIME MOBILE 112b   |                                  |                      |
| RADIONAVIGATION 110d   |                                  |                      |
| 111a 112a 113a         |                                  |                      |
| <b>126—129</b>         |                                  |                      |
| RADIONAVIGATION 110d   |                                  |                      |
| 111a                   |                                  |                      |
| <b>129—130</b>         |                                  |                      |
| FIXED 112b             |                                  |                      |
| MARITIME MOBILE 112b   |                                  |                      |
| RADIONAVIGATION 110d   |                                  |                      |
| 111a 112a              | 111b 112a                        | 112a 113             |

MOD

MOD

MOD

MOD

ADD

- 112a** Aeronautical stations may use frequencies in the bands 110-112 kc/s, 115-126 kc/s and 129-130 kc/s on a permitted basis for high-speed communications to aircraft.
- 112b** Only classes A1 or F1, A4 or F4 emissions are authorized in the band 110-160 kc/s for stations of the fixed and maritime mobile services.
- 113** In the bands 112-117.6 kc/s and 126-129 kc/s, the radionavigation service is the primary service except in Japan and Pakistan.
- 113a** In the band 115-117.6 kc/s the radionavigation service is the primary service, except in France and the F. R. of Germany where it is a secondary service.

ART 5

kc/s  
130—160

—E

| Allocation to Services   |  |          |
|--|--|----------|
| Region 1   | Region 2   | Region 3 |
| <b>130—150</b><br>MARITIME MOBILE 114 115<br>Fixed<br>111a 112b 116a | <b>130—150</b><br>FIXED<br>MARITIME MOBILE 114<br>112b |          |
| <b>150—160</b><br>MARITIME MOBILE 112b 117<br>BROADCASTING<br>118    | <b>150—160</b><br>FIXED<br>MARITIME MOBILE<br>112b     |          |

MOD

MOD

MOD

- 114** The frequency 143 kc/s is the calling frequency for stations in the maritime mobile service using the band 90-160 kc/s. The conditions for its use are prescribed in Article 32.
- 115** Limited to ship stations.
- 116a** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 130-150 kc/s is allocated on a secondary basis to the radio-navigation service while within and between these countries this service shall have equal right to operate.
- 117** The maritime mobile service shall not cause harmful interference to the reception of broadcasting stations within the boundaries of the national territories in which the broadcasting stations are situated.
- 118** By special arrangement.

ART 5

kc/s  
160—285

—E

| Allocation to Services  |   |   |
|---|---|---|
| Region 1  | Region 2  | Region 3  |
| 160—255<br>BROADCASTING<br><br>119  | 160—200<br>FIXED<br><br>124   | 160—200<br>FIXED<br><br><i>Aeronautical<br/>radionavigation</i> |
| 255—285<br>MARITIME MOBILE 117<br>BROADCASTING<br>AERONAUTICAL<br>RADIONAVIGATION<br>119 121 123a | 200—285<br><br>AERONAUTICAL RADIONAVIGATION<br><br><i>Aeronautical mobile</i> |   |

MOD

- 119** In the Belgian Congo and Ruanda Urundi, Ethiopia, the Portuguese Overseas Provinces in Region 1 south of the equator, Rhodesia and Nyasaland, and the Union of South Africa and the Territory of South West Africa, the band 160-200 kc/s is allocated to the fixed service; the band 200-285 kc/s is allocated to aeronautical mobile and aeronautical radionavigation services.
- 121** In the western part of the European Broadcasting Area, the band 255-285 kc/s is used solely by the aeronautical radionavigation service except that in the United Kingdom frequencies are also assigned, by special arrangement, to stations of the maritime mobile service.
- 123a** Norwegian stations of the aeronautical fixed service situated in northern areas subject to auroral disturbances are allowed to continue operation on one frequency in the band 255-285 kc/s.
- 124** In northern areas which are subject to auroral disturbances the aeronautical fixed service is the primary service.

A—06

ART 5

kc/s  
285—405

—E

MOD

| Allocation to Services                     |  |          |
|--|--|----------|
| Region 1                                   | Region 2                                   | Region 3 |
| 285—315                                    |  |          |
| MARITIME RADIONAVIGATION<br>(radiobeacons) |  |          |
| <i>Aeronautical radionavigation</i>        |  |          |
| 315—325                                    | 315—325                                    |          |
| AERONAUTICAL<br>RADIONAVIGATION            | MARITIME RADIONAVIGATION<br>(radiobeacons) |          |
| 126  | <i>Aeronautical radionavigation</i>        |          |
| 325—405                                    |  |          |
| AERONAUTICAL RADIONAVIGATION               |  |          |
| <i>Aeronautical mobile</i>                 |  |          |
| 132  |  |          |

SUP

125a

- 126** In the U.S.S.R. and the Black Sea areas of Bulgaria, Roumania and Turkey, the band 315-325 kc/s is also allocated to the maritime radionavigation service under the following conditions:
- a) Stations of this service shall not cause interference to stations of the aeronautical radionavigation service in the North Sea area.
  - b) In the Black Sea and White Sea areas, the maritime radionavigation service is the primary service and the aeronautical radionavigation service is the permitted service.
  - c) In the Baltic Sea area, the assignment of frequencies in this band to new stations in the maritime and aeronautical radionavigation services shall be subject to prior consultation between the administrations concerned.
- 132** Norwegian fixed stations situated in northern areas subject to auroral disturbances are allowed to continue operation on two frequencies in the band 385-395 kc/s for transmissions chiefly composed of weather messages.

A—07

ART 5

kc/s  
405—510

—E

MOD

| Allocation to Services  |   |   |
|---|---|---|
| Region 1  | Region 2  | Region 3  |
| <b>405—415</b><br>MOBILE except<br>aeronautical mobile<br>AERONAUTICAL<br>RADIONAVIGATION<br>MARITIME<br>RADIONAVIGATION<br>(radio direction-finding)<br>133 134 136a | <b>405—415</b><br>MARITIME<br>RADIONAVIGATION<br>(radio direction-finding)<br>Aeronautical radionavigation<br><i>Aeronautical mobile</i><br>133 | <b>405—415</b><br>RADIONAVIGATION<br><i>Aeronautical mobile,</i><br>133 |
| <b>415—490</b>  | MARITIME MOBILE<br>138 139  |   |
| <b>490—510</b>  | MOBILE (distress and calling)<br>140  |   |

**133** The frequency 410 kc/s is designated for the maritime radionavigation service (radio direction-finding). Other allocated services in the band 405-415 kc/s shall not cause harmful interference to radio direction-finding. In the band 405-415 kc/s no frequency shall be assigned to coast stations.

**134** The use of the band 405-415 kc/s by the radionavigation service is limited to radio direction-finding except in the Baltic and North Sea areas where this band may also be used for the maritime radionavigation service for radiobeacon stations of mean power not exceeding 10 watts and subject to not causing harmful interference to radio direction-finding.

MOD

**136a** In Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 405-415 kc/s is also allocated, on a secondary basis, to the aeronautical mobile service.

**138** In the European Maritime Area, subject to the conditions specified in the Final Acts of the European Maritime Conference (Copenhagen 1948), and any subsequent revision of that agreement, the administrations concerned may keep in the bands 415-485 kc/s and 515-525 kc/s such of the following broadcasting stations as will not cause harmful interference to the maritime mobile service: Hamar, Innsbruck, Oestersund, Oulu.

**139** Limited to radiotelegraphy.

**140** The frequency 500 kc/s is the international distress and calling frequency for radiotelegraphy. The conditions for its use are prescribed in Article 32.



ART 5

kc/s

—E

510—1 605

MOD

| Allocation to Services  |  |   |
|---|--|---|
| Region 1  | Region 2   | Region 3  |
| <b>510—525</b><br>MARITIME MOBILE 139<br><i>Aeronautical radionavigation</i><br>138 | <b>510—525</b><br>MOBILE<br>Aeronautical radionavigation 140a                      | <b>510—525</b><br>MARITIME MOBILE<br><i>Aeronautical mobile</i><br><i>Land mobile</i><br>140b |
| <b>525—535</b><br>BROADCASTING<br>142   | <b>525—535</b><br>MOBILE<br>Broadcasting 140c<br>Aeronautical radionavigation 140a | <b>525—535</b><br>MOBILE<br>Broadcasting  |
| <b>535—1 605</b><br>BROADCASTING  |  |   |

MOD

**140a** In operating stations of the aeronautical radionavigation service, the administrations concerned, shall take all the technical steps necessary to avoid harmful interference to the maritime mobile service.

MOD

**140b** In India, Iran and Pakistan, the band 510-525 kc/s is also allocated, on a secondary basis, to the aeronautical radionavigation service.

**140c** The carrier power of any broadcasting station in this band shall not exceed 250 watts.

**142** In Rhodesia and Nyasaland, and the Union of South Africa and the Territory of South West Africa, the band 525-535 kc/s is allocated to the mobile service.

ART 5

kc/s  
1 605—2 000

—E

| Allocation to Services               |                                   |             |
|--------------------------------------|-----------------------------------|-------------|
| Region 1                             | Region 2                          | Region 3    |
| 1 605—2 000                          | 1 605—1 800                       | 1 605—1 800 |
| FIXED                                | FIXED                             | FIXED       |
| MOBILE except<br>aeronautical mobile | MOBILE                            | MOBILE      |
|                                      | AERONAUTICAL<br>RADIONAVIGATION   |             |
|                                      | Radiolocation                     |             |
|                                      |                                   | 143a 143b   |
|                                      | 1 800—2 000                       |             |
|                                      | AMATEUR                           |             |
|                                      | FIXED                             |             |
|                                      | MOBILE except aeronautical mobile |             |
|                                      | RADIONAVIGATION                   |             |
| 143c 144 145 146                     | 146a 147a                         |             |

**143a** In Japan, the band 1 605-1 800 kc/s is allocated on a permitted basis to the maritime radionavigation service using continuous wave systems with a mean power of not more than 50 watts.

**143b** In Australia, North Borneo, Brunei, Sarawak, Singapore, China, Indonesia, Malaya, New Zealand and the Philippines, the band 1 605-1 800 kc/s is allocated on a permitted basis to the aeronautical radionavigation service, the stations of which shall use a mean power not exceeding 2 kW.

**143c** In the Tropical Zone of Region 1, with the exception of that part of Libya north of the parallel 30° N, the band 1 605-1 800 kc/s is also allocated, on a secondary basis, to the aeronautical radionavigation service (radiobeacons only).

**143d**

MOD

SUP

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**144** Special arrangements shall determine the conditions of operation of stations of the fixed and mobile services in order to protect these services from mutual harmful interference, having special regard to the difficulties of operation of stations of the maritime mobile service.

**145** In Austria, Denmark, Finland, Ireland, Netherlands, F. R. of Germany, Rhodesia and Nyasaland, United Kingdom, Switzerland, Czechoslovakia, and the Union of South Africa and Territory of South West Africa, administrations may allocate up to 200 kc/s to their amateur service within the band 1 715-2 000 kc/s. However, when allocating bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 watts.

**146** The operation of Loran radionavigation stations is authorized temporarily on 1 950 kc/s (the band occupied being 1 925-1 975 kc/s) provided that, except for the stations comprising the North-East Atlantic Loran System (north of latitude 55° N), the establishment and operation of specific Loran stations shall be the subject of special arrangements among administrations having operations that would be affected. All practicable measures shall be taken to reduce harmful interference from Loran transmissions to other services to which this band or adjacent bands are allocated.

(MOD)

**146a** In Region 2 the Loran system has priority. Other services to which the band is allocated may use any frequency in this band provided that they do not cause harmful interference to the Loran system.

In Region 3 the Loran system in any particular area operates either on 1 850 or 1 950 kc/s, the bands occupied being 1 825-1 875 kc/s and 1 925-1 975 kc/s respectively. Other services to which the band 1 800-2 000 kc/s is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1 850 or 1 950 kc/s.

**147a** In India, the band 1 800-2 000 kc/s is allocated on a permitted basis to the aeronautical mobile service.

ART 5

**kc/s**  
**2 000 — 2 194**

—E

| Allocation to Services  |   |          |
|---|---|----------|
| Region 1  | Region 2  | Region 3 |
| <b>2 000 — 2 045</b><br>FIXED<br>MOBILE except<br>aeronautical mobile<br>144                        | <b>2 000 — 2 065</b><br><br><br><br><br>FIXED<br><br>MOBILE |          |
| <b>2 045 — 2 065</b><br>METEOROLOGICAL AIDS<br>FIXED<br>MOBILE except<br>aeronautical mobile<br>144 |   |          |
| <b>2 065 — 2 170</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br><br>144                | <b>2 065 — 2 107</b><br><br>MARITIME MOBILE<br><br>147b     |          |
|   | <b>2 107 — 2 170</b><br><br>FIXED<br><br>MOBILE             |          |
| <b>2 170 — 2 194</b>  | MOBILE (distress and calling)<br><br>148                    |          |

**147b** In Region 2, limited to ship stations using radiotelegraphy.

(MOD)

**148** The frequency 2 182 kc/s is the international distress and calling frequency for radiotelephony. The conditions for the use of this frequency are prescribed in Article 35.

ART 5

kc/s  
2 194—2 625

—E

| Allocation to Services   |   |          |
|--|---|----------|
| Region 1   | Region 2  | Region 3 |
| <b>2 194—2 300</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>144                     | <b>2 194—2 300</b><br>FIXED<br>MOBILE                     |          |
| <b>2 300—2 498</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>BROADCASTING 150<br>144 | <b>2 300—2 495</b><br>FIXED<br>MOBILE<br>BROADCASTING 150 |          |
| <b>2 498—2 502</b><br>STANDARD FREQUENCY<br>152 152a   | <b>2 495—2 505</b><br>STANDARD FREQUENCY<br>152 152a      |          |
| <b>2 502—2 625</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>144                     | <b>2 505—2 625</b><br>FIXED<br>MOBILE                     |          |

**150** For the conditions of use of this band by the broadcasting service see Nos. 243, 244 and 250-254.\*

**152** The standard frequency is 2 500 kc/s.

**152a** The standard frequency guard-bands at 2.5 Mc/s, 5 Mc/s, 10 Mc/s, 15 Mc/s, 20 Mc/s and 25 Mc/s may be used by the radio astronomy service. The radio astronomy service shall be protected from harmful interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.

\* Note by Com. 8: these numbers are to be changed.

(MOD)

ART 5

kc /s  
2 625 — 2 850

—E

| Allocation to Services   |   |          |
|--|---|----------|
| Region 1   | Region 2  | Region 3 |
| <b>2 625 — 2 650</b><br>MARITIME MOBILE<br>MARITIME<br>RADIONAVIGATION<br>118    | <b>2625 — 2 850</b><br><br><br><br><br>FIXED<br><br>MOBIL |          |
| <b>2 650 — 2 850</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>153 |   |          |

- 153 Special arrangements shall determine the conditions of operation of stations of the fixed and mobile services in order to protect these services from mutual harmful interference, having special regard to the difficulties of operation of stations of the maritime mobile service and also to the needs of the fixed service in certain areas.

ART 5

kc/s

—E

2 850 — 3 500

| Allocation to Services |                                       |          |
|------------------------|---------------------------------------|----------|
| Region 1               | Region 2                              | Region 3 |
| 2 850 — 3 025          | AERONAUTICAL MOBILE (R)               |          |
| 3 025 — 3 155          | AERONAUTICAL MOBILE (OR)              |          |
| 3 155 — 3 200          | FIXED                                 |          |
|                        | MOBILE except aeronautical mobile (R) |          |
| 3 200 — 3 230          | FIXED                                 |          |
|                        | MOBILE except aeronautical mobile (R) |          |
|                        | BROADCASTING 150                      |          |
| 3 230 — 3 400          | FIXED                                 |          |
|                        | MOBILE except aeronautical mobile     |          |
|                        | BROADCASTING 150                      |          |
| 3 400 — 3 500          | AERONAUTICAL MOBILE (R)               |          |

ART 5

**kc/s**  
**3 500—4 000**

—E

| Allocation to Services   |  |   |
|--|--|---|
| Region 1   | Region 2   | Region 3  |
| <b>3 500—3 800</b><br>AMATEUR<br>FIXED<br>MOBILE except<br>aeronautical mobile | <b>3 500—4 000</b><br>AMATEUR<br>FIXED<br>MOBILE except<br>aeronautical mobile (R) | <b>3 500—3 900</b><br>AMATEUR<br>FIXED<br>MOBILE          |
| <b>3 800—3 900</b><br>FIXED<br>AERONAUTICAL MOBILE (OR)<br>LAND MOBILE         |  | 153a 153b   |
| <b>3 900—3 950</b><br>AERONAUTICAL MOBILE (OR)                                 |  | <b>3 900—3 950</b><br>AERONAUTICAL MOBILE<br>BROADCASTING |
| <b>3 950—4 000</b><br>FIXED<br>BROADCASTING                                    |  | <b>3 950—4 000</b><br>FIXED<br>BROADCASTING               |

**153a** In Australia, the band 3 500-3 700 kc/s is allocated to the amateur service; the band 3 700-3 900 kc/s is allocated to the fixed and mobile services.

**153b** In India, the band 3 500-3 890 kc/s is allocated to the fixed and mobile services; the band 3 890-3 900 kc/s is allocated to the amateur service.



ART 5

kc/s  
4 000—4 850

—E

MOD

| Allocation to Services  |  |  |
|---|--|--|
| Region 1  | Region 2                                 | Region 3   |
| 4 000—4 063<br>FIXED  |  |  |
| 4 063—4 438<br>MARITIME MOBILE<br>154 155a  |  |  |
| 4 438—4 650<br>FIXED<br>MOBILE except aeronautical mobile (R)                       |  | 4 438—4 650<br>FIXED<br>MOBILE except<br>aeronautical mobile |
| 4 650—4 700<br>AERONAUTICAL MOBILE (R)  |  |  |
| 4 700—4 750<br>AERONAUTICAL MOBILE (OR)   |  |  |
| 4 750—4 850<br>FIXED<br>AERONAUTICAL MOBILE (OR)<br>LAND MOBILE<br>BROADCASTING 150 | 4 750—4 850<br>FIXED<br>BROADCASTING 150 |  |

ADD

- 154 In the U.S.S.R., in the bands 4 063-4 133 kc/s and 4 408-4 438 kc/s, fixed stations of limited power may operate provided that, in order to minimise the possibility of causing harmful interference to the maritime mobile service, they are situated at least 600 km. from the coast. A limited power station is one whose power and antenna characteristics are so adjusted that the field strength established at any point in any direction does not exceed that obtainable with a non-directive antenna and a peak power of 1 kW.

MOD

- 155a On condition that harmful interference is not caused to the maritime mobile service, the frequencies between 4 063 and 4 438 kc/s may be used exceptionally by fixed stations communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts; however, in Regions 2 and 3, between 4 238 and 4 368 kc/s, a mean power not exceeding 500 watts may be used by such fixed stations.

ART 5

kc/s  
4 850 — 5 480

— E

| Allocation to Services   |   |  |
|--|---|--|
| Region 1   | Region 2  | Region 3   |
| <b>4 850 — 4 995</b><br>FIXED<br>LAND MOBILE<br>BROADCASTING 150         |   |  |
| <b>4 995 — 5 005</b><br>STANDARD FREQUENCY<br>152a 156                   |   |  |
| <b>5 005 — 5 060</b><br>FIXED<br>BROADCASTING 150                        |   |  |
| <b>5 060 — 5 250</b><br>FIXED  |   |  |
| <b>5 250 — 5 430</b><br>FIXED<br>LAND MOBILE                             | <b>5 250 — 5 450</b><br>FIXED<br>LAND MOBILE    | <b>5 250 — 5 430</b><br>FIXED<br>LAND MOBILE                             |
| <b>5 430 — 5 480</b><br>FIXED<br>AERONAUTICAL MOBILE (OR)<br>LAND MOBILE | <b>5 450 — 5 480</b><br>AERONAUTICAL MOBILE (R) | <b>5 430 — 5 480</b><br>FIXED<br>AERONAUTICAL MOBILE (OR)<br>LAND MOBILE |

156 The standard frequency is 5 000 kc/s.

ART 5

kc/s  
5 480—7 100

—E

| Allocation to Services |                          |          |
|------------------------|--------------------------|----------|
| Region 1               | Region 2                 | Region 3 |
| 5 480—5 680            | AERONAUTICAL MOBILE (R)  |          |
| 5 680—5 730            | AERONAUTICAL MOBILE (OR) |          |
| 5 730—5 950            | FIXED                    |          |
| 5 950—6 200            | BROADCASTING             |          |
| 6 200—6 525            | MARITIME MOBILE<br>157   |          |
| 6 525—6 685            | AERONAUTICAL MOBILE (R)  |          |
| 6 685—6 765            | AERONAUTICAL MOBILE (OR) |          |
| 6 765—7 000            | FIXED                    |          |
| 7 000—7 100            | AMATEUR                  |          |

(MOD)

- 157 On condition that harmful interference is not caused to the maritime mobile service, the frequencies between 6 200 and 6 525 kc/s may be used exceptionally by fixed stations, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts. At the time of notification of these frequencies, the attention of the International Frequency Registration Board will be drawn to the above conditions.

ART 5

kc/s

—E

7 100—9 995

| Allocation to Services             |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| Region 1                           | Region 2                 | Region 3                    |
| 7 100—7 300<br>BROADCASTING<br>158 | 7 100—7 300<br>AMATEUR   | 7 100—7 300<br>BROADCASTING |
| 7 300—8 195                        | FIXED                    |                             |
| 8 195—8 815                        | MARITIME MOBILE<br>160   |                             |
| 8 815—8 965                        | AERONAUTICAL MOBILE (R)  |                             |
| 8 965—9 040                        | AERONAUTICAL MOBILE (OR) |                             |
| 9 040—9 500                        | FIXED                    |                             |
| 9 500—9 775                        | BROADCASTING             |                             |
| 9 775—9 995                        | FIXED                    |                             |

158 In the Union of South Africa and the Territory of South West Africa, the band 7 100-7 150 kc/s is allocated to the amateur service.

MOD

160 Between 8 615 and 8 815 kc/s, 12 925 and 13 200 kc/s, and between 17 160 and 17 360 kc/s, the U.S.S.R. will meet their special requirements for the fixed service with due regard to technical provisions (power, location, antenna, etc.) with a view to minimizing the possibility of harmful interference to the maritime mobile service. Coast stations in the maritime mobile service will also have due regard to technical provisions (power, location, antenna, etc.) with a view to minimizing the possibility of harmful interference to the fixed service in the U.S.S.R. The International Frequency Registration Board will be consulted regarding this subject.

ART 5

kc/s  
9 995 — 12 330

—E

| Allocation to Services |                          |          |
|------------------------|--------------------------|----------|
| Region 1               | Region 2                 | Region 3 |
| 9 995 — 10 005         | STANDARD FREQUENCY       |          |
|                        | 152a 161 161a            |          |
| 10 005 — 10 100        | AERONAUTICAL MOBILE (R)  |          |
| 10 100 — 11 175        | FIXED                    |          |
| 11 175 — 11 275        | AERONAUTICAL MOBILE (OR) |          |
| 11 275 — 11 400        | AERONAUTICAL MOBILE (R)  |          |
| 11 400 — 11 700        | FIXED                    |          |
|                        | 162                      |          |
| 11 700 — 11 975        | BROADCASTING             |          |
| 11 975 — 12 330        | FIXED                    |          |

**161** The standard frequency is 10 000 kc/s.

(MOD)

**161a** The band 10 003-10 005 kc/s is also allocated, on a secondary basis, to the space and earth-space services for research purposes.

**162** In the U.S.S.R., the band 11 400-11 450 kc/s is also allocated to the aeronautical mobile (OR) service.

ART 5

**kc/s**  
**12 330 — 14 990**

—E

| Allocation to Services |                          |          |
|------------------------|--------------------------|----------|
| Region 1               | Region 2                 | Region 3 |
| <b>12 330 — 13 200</b> | MARITIME MOBILE<br>160   |          |
| <b>13 200 — 13 260</b> | AERONAUTICAL MOBILE (OR) |          |
| <b>13 260 — 13 360</b> | AERONAUTICAL MOBILE (R)  |          |
| <b>13 360 — 14 000</b> | FIXED<br>164             |          |
| <b>14 000 — 14 350</b> | AMATEUR<br>165           |          |
| <b>14 350 — 14 990</b> | FIXED                    |          |

(MOD)

163 (See No. 160.)

164 The frequency 13 560 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 0.05\%$  of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

165 In the U.S.S.R., the band 14 250-14 350 kc/s is also allocated to the fixed service.

ART 5

kc/s

—E

14 990 — 17 900

| Allocation to Services |                          |          |
|------------------------|--------------------------|----------|
| Region 1               | Region 2                 | Region 3 |
| 14 990 — 15 010        | STANDARD FREQUENCY       |          |
|                        | 152a 166                 |          |
| 15 010 — 15 100        | AERONAUTICAL MOBILE (OR) |          |
| 15 100 — 15 450        | BROADCASTING             |          |
| 15 450 — 16 460        | FIXED                    |          |
| 16 460 — 17 360        | MARITIME MOBILE          |          |
|                        | 160                      |          |
| 17 360 — 17 700        | FIXED                    |          |
| 17 700 — 17 900        | BROADCASTING             |          |

(MOD)

166 The standard frequency is 15 000 kc/s.

167 (See No. 160.)

ART 5

kc/s  
17 900—21 750

—E

| Allocation to Services |                          |          |
|------------------------|--------------------------|----------|
| Region 1               | Region 2                 | Region 3 |
| 17 900—17 970          | AERONAUTICAL MOBILE (R)  |          |
| 17 970—18 030          | AERONAUTICAL MOBILE (OR) |          |
| 18 030—19 990          | FIXED                    |          |
| 19 990—20 010          | STANDARD FREQUENCY       |          |
|                        | 152a                     | 168 168a |
| 20 010—21 000          | FIXED                    |          |
| 21 000—21 450          | AMATEUR                  |          |
| 21 450—21 750          | BROADCASTING             |          |

MOD

168 The standard frequency is 20 000 kc/s.

168a The band 19 990-20 010 kc/s is also allocated, on a secondary basis, to the space and earth-space services for research purposes.



ART 5

kc/s

—E

21 750 — 25 010

| Allocation to Services |  |          |
|------------------------|--|----------|
| Region 1               | Region 2                                       | Region 3 |
| 21 750 — 21 850        | FIXED  |          |
| 21 850 — 22 000        | AERONAUTICAL FIXED<br>AERONAUTICAL MOBILE (R)  |          |
| 22 000 — 22 720        | MARITIME MOBILE                                |          |
| 22 720 — 23 200        | FIXED  |          |
| 23 200 — 23 350        | AERONAUTICAL FIXED<br>AERONAUTICAL MOBILE (OR) |          |
| 23 350 — 24 990        | FIXED<br>LAND MOBILE<br>169                    |          |
| 24 990 — 25 010        | STANDARD FREQUENCY<br>152a 170                 |          |

- 169 Inter-ship radiotelegraphy may be used in the maritime mobile service between the frequencies 23 350 and 24 000 kc/s.
- 170 The standard frequency is 25 000 kc/s.

ART 5

kc/s

—E

25 010—27 500

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2  | Region 3 |
| 25 010—25 070          | FIXED<br>MOBILE except aeronautical mobile            |          |
| 25 070—25 110          | MARITIME MOBILE<br>170a                               |          |
| 25 110—25 600          | FIXED<br>MOBILE except aeronautical mobile            |          |
| 25 600—26 100          | BROADCASTING  |          |
| 26 100—27 500          | FIXED<br>MOBILE except aeronautical mobile<br>171 172 |          |

170a Limited to ship stations employing A1 or F1 emissions.

171 The frequency 27 120 kc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 0.6\%$  of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

172 In Region 2, Australia and New Zealand, the amateur service may operate between the frequencies 26 960 and 27 230 kc/s.

ART 5

Mc/s  
27.5—41

—E

| Allocation to Services                 |   |          |
|--|---|----------|
| Region 1                               | Region 2  | Region 3 |
| 27.5—28<br>METEOROLOGICAL AIDS<br>172a | 27.5—28<br>METEOROLOGICAL AIDS<br>FIXED<br>MOBILE         |          |
| 28—29.7                                | AMATEUR   |          |
| 29.7—41                                | FIXED 175a 175b 175c 175d<br>MOBILE<br>175e 175f 175g 176 |          |

**172a** In Albania, Bulgaria, Hungary, Poland, Roumania, Switzerland, Czechoslovakia, and the U.S.S.R., the band 27.5-28 Mc/s is also allocated to the fixed and mobile services.

(MOD)

**175a** Stations designed to use ionospheric scatter may operate only subject to arrangements between administrations concerned and those whose services, operating in accordance with the Table, may be affected.

**175b** Systems designed to use ionospheric scatter or other fixed service systems designed to operate over distances exceeding 800 km shall confine their emissions to the following bands:

| Region 1  | Region 2  | Region 3  |
|-----------|-----------|-----------|
| 32.6—33   | 32.6—33   | 32.6—33   |
| 36.2—36.6 | 34.6—35   | 34.6—35   |
| 39 —39.4  | 36.4—36.8 | 36.4—36.8 |

and shall have priority in Region 2 in the bands shown above for such use in that Region.

**175c** Ionospheric scatter stations, existing on 1 January 1960, and not causing harmful

interference to the other services to which the band is allocated, may continue to operate on frequencies now assigned until re-accommodated.

**175d** In the case of bands limited to a particular Region the provisions of No. 3-05 shall apply and administrations shall avoid beaming such transmissions towards another Region unless specifically co-ordinated otherwise.

**175e** In the United Kingdom, the band 29.7-41 Mc/s is also allocated to the aeronautical radionavigation service.

**175f** As regards the use of the frequencies 38 Mc/s and 40-68 Mc/s by the radio astronomy service, see Recommendation No. 31.

(MOD)

**175g** The band 39.986-40.002 Mc/s is also allocated, on a secondary basis, to the space and earth-space services for research purposes.

**176** The frequency 40-68 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 0.05\%$  of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

ART 5

Mc/s  
41—68

—E

| Allocation to Services  |  |   |
|---|--|---|
| Region 1  | Region 2   | Region 3  |
| <b>41—47</b><br><br>BROADCASTING<br><br><i>Fixed</i> 175a   176a<br><br><i>Mobile</i><br><br>178 178a 178b 178c | <b>41—50</b><br><br>FIXED    175a 175c 176a<br><br>MOBILE                    | <b>41—44</b><br><br>FIXED        175a 176a<br><br>MOBILE                                  |
|   |  | <b>44—50</b><br><br>FIXED    175a 175c 176a<br><br>MOBILE<br><br>BROADCASTING             |
| <b>47—68</b><br><br>BROADCASTING<br><br>178 178a 178c 178d 178e   | <b>50—54</b><br><br>AMATEUR<br><br>178f 178g 178h 178i                       |   |
|   | <b>54—68</b><br><br>FIXED        175a 176a<br><br>MOBILE<br><br>BROADCASTING | <b>54—68</b><br><br>FIXED    175a 175c 176a<br><br>MOBILE<br><br>BROADCASTING<br><br>178h |

**176a** Systems designed to use ionospheric scatter which may cause harmful interference to the broadcasting service are prohibited.

**178** In Rhodesia and Nyasaland, the band 41-44 Mc/s is allocated to the fixed, mobile and aeronautical radionavigation services; the bands 44-50 and 54-68 Mc/s are allocated to the fixed, mobile and broadcasting services; the band 50-54 Mc/s is allocated to the amateur service.

**178a** In the Belgian Congo and Ruanda Urundi, and the Union of South Africa and the Territory of South West Africa, the band 41-50 Mc/s is also allocated to

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the fixed, mobile and aeronautical radionavigation services; the band 50-54 Mc/s is allocated to the amateur service; and the band 54-68 Mc/s is allocated to the fixed, mobile and broadcasting services. The band 53-54 Mc/s may be used for model control.

MOD

**178b** In Spain, France, Monaco and the United Kingdom, the band 41-47 Mc/s is allocated to the broadcasting service.

**178c** In the Portuguese Overseas Provinces in Region 1 south of the equator, the band 41-68 Mc/s is also allocated on a permitted basis to the fixed and mobile services.

**178d** In Austria, the F. R. of Germany and Czechoslovakia, the band 47-68 Mc/s is also allocated, on a secondary basis, to the fixed service and mobile, except aeronautical mobile, service.

**178e** In Albania, Bulgaria, Hungary, Poland, Roumania and the U.S.S.R., the band 47-48.5 Mc/s is also allocated, on a secondary basis, to the fixed and mobile services; the band 56.5-58 Mc/s is also allocated, on a secondary basis, to the fixed service.

**178f** In Malaya, New Zealand and Singapore, the band 50-51 Mc/s is allocated to the fixed, mobile and broadcasting services.

MOD

**178g** In India, Indonesia, Iran and Pakistan, the band 50-54 Mc/s is allocated to the fixed and mobile services.

**178h** In Australia, the band 50-54 Mc/s is allocated to the fixed, mobile and broadcasting services; the band 56-58 Mc/s is allocated to the amateur service.

**178i** In New Zealand, the band 51-53 Mc/s is also allocated to the fixed and mobile services; the band 53-54 Mc/s is allocated to the fixed and mobile services.

ART 5

**Mc/s**  
**68—75.4**

—E

| Allocation to Services  |   |  |
|---|---|--|
| Region 1  | Region 2  | Region 3   |
| <b>68—74.8</b><br><br>FIXED<br><br>MOBILE except<br>aeronautical mobile | <b>68—74.6</b><br><br>FIXED<br><br>MOBILE<br><br>BROADCASTING<br><br><br><br><br><br><br>180e | <b>68—70</b><br><br>FIXED<br><br>MOBILE<br><br>AERONAUTICAL<br>RADIONAVIGATION<br><br>181a 181b 181c |
|   |   | <b>70—74.6</b><br><br>FIXED<br><br>MOBILE<br><br>181c 183a 183b                                      |
|   |   |  |
|   |   |  |
| 180 180a 180b 180c 180d   | <b>74.6—75.4</b><br><br><br>AERONAUTICAL RADIONAVIGATION<br><br><br><br><br><br><br>184       |  |
| <b>74.8—75.2</b>  |   |  |
| AERONAUTICAL<br>RADIONAVIGATION   |   |  |
| 184   |   |  |

**180** In the U.S.S.R., the bands 68-73 Mc/s and 76-87.5 Mc/s are allocated to the broadcasting service. The services to which these bands are allocated in other countries and the broadcasting service in the U.S.S.R. are subject to local agreement in order to avoid mutual harmful interference.

**180a** In Austria, Belgium, France, Greece, Morocco and the United Kingdom, the band 68-70 Mc/s is also allocated to the aeronautical radionavigation service for ground-based transmitters only.

**180b** In Albania, Bulgaria, Hungary, Poland, Roumania and Czechoslovakia, the bands 68-73 Mc/s (sound broadcasting) and 76-87.5 Mc/s (television) are also allocated to the broadcasting service. In these countries, broadcasting stations in these bands shall be established and operated only in accordance with agreements

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and associated plans, to be drawn up by a special regional conference to be held not later than 1 May 1960. In the preparation of plans for the broadcasting service and the associated agreement concerning the fixed and mobile services, account should be taken of the existing allocation to broadcasting in the U.S.S.R. and to the fixed and mobile services in other countries which may be affected. The plans and agreement shall have the object of ensuring that no harmful interference is caused between the broadcasting service and the fixed and mobile services. The countries: Albania, Austria, Bulgaria, Denmark, Greece, Hungary, Italy, Poland, F. R. of Germany, Yugoslavia, Roumania, Sweden, Switzerland, Czechoslovakia, Turkey, the U.S.S.R. and other interested countries shall participate in the conference.

- 180c** In Greece and the United Kingdom, the band 72.8-74.8 Mc/s is also allocated to the aeronautical radionavigation service for ground-based transmitters only.
- 180d** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the bands 73-74.8 Mc/s and 75.2-76 Mc/s are also allocated to the aeronautical radionavigation service for ground-based transmitters only.
- 180e** In Region 2, the band 73-74.6 Mc/s may be used by the radio astronomy service. Administrations assigning frequencies to stations of services to which this band is allocated, should take all practicable measures to avoid harmful interference to radio astronomy observations.
- 181a** In Australia, the band 68-70 Mc/s is allocated to the fixed, mobile and broadcasting services; the band 85-88 Mc/s is allocated to the broadcasting and radionavigation services.
- 181b** In China, the bands 68-70 Mc/s and 75.4-87 Mc/s are allocated to the fixed, mobile and broadcasting services; the band 100-108 Mc/s is allocated to the fixed and broadcasting services.
- 181c** In Korea, the band 68-72 Mc/s is also allocated to the broadcasting service; the bands 76-87 Mc/s and 100-108 Mc/s are allocated to the fixed, mobile and broadcasting services.
- 183a** In India, the bands 70-72.8 Mc/s and 76-85 Mc/s are also allocated to the broadcasting service.
- 183b** In North Borneo, Brunei, Sarawak, Singapore and Malaya, the band 72.8-74.6 Mc/s is also allocated to the aeronautical radionavigation service; the band 100-108 Mc/s is allocated to the fixed, mobile and broadcasting services.
- 184** The frequency 75 Mc/s is assigned to aeronautical marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guard-band to stations of other services which, because of their power or geographical position, might cause harmful interference to marker beacons.

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ART 5

**Mc/s**  
**75.2—100**

—E

| Allocation to Services  |   |  |
|---|---|--|
| Region 1  | Region 2  | Region 3   |
| <b>75.2—87.5</b><br><br>FIXED<br><br>MOBILE except<br>aeronautical mobile<br><br><br><br><br><br><br><br><br><br>180 180b 180d 192a<br>192b 192c 192d | <b>75.4—88</b><br><br>FIXED<br><br>MOBILE<br><br>BROADCASTING | <b>75.4—78</b><br><br>FIXED<br><br>MOBILE<br>181b 181c 183a 192g                                       |
|   |   | <b>78—80</b><br><br>FIXED<br><br>MOBILE<br>AERONAUTICAL<br>RADIONAVIGATION<br>181b 181c 183a 192b 192g |
|   |   | <b>80—87</b><br><br>FIXED<br><br>MOBILE<br>181a 181b 181c 183a<br>192b 192g 192h                       |
|   |   | <b>87—100</b><br><br>FIXED<br><br>MOBILE<br>BROADCASTING<br>181a 192h 192i                             |
| <b>87.5—100</b><br><br>BROADCASTING<br><br>192e 192f  | <b>88—100</b><br><br>BROADCASTING                             |  |

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**192a** In Belgium, Morocco and the United Kingdom, the band 78-80 Mc/s is also allocated to the aeronautical radionavigation service for ground-based transmitters only; in France this band is allocated to the radionavigation service.

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**192b** The band 79-75-80-25 Mc/s is also allocated in Regions 1 and 3 (except Korea, India and Japan) to the radio astronomy service. In making assignments to stations of other services to which this band is allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference. The radio astronomy service shall be protected from harmful interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.

**192c** In the United Kingdom, the band 82-87 Mc/s is also allocated to the radio-location service.

**192d** In Nigeria, Sierra Leone and Gambia, the band 86-87.5 Mc/s is also allocated to the broadcasting service.

**192e** In the United Kingdom, the band 87.5-88 Mc/s is also allocated to the land mobile service.

**192f** In the United Kingdom, the band 95-100 Mc/s is also allocated, on a permitted basis, to the fixed and land mobile services.

**192g** In Japan, the band 76-87 Mc/s is also allocated to the broadcasting service.

**192h** In New Zealand, the band 83-88 Mc/s is also allocated to the radionavigation service; the band 100-108 Mc/s is allocated to the fixed and mobile services.

**192i** In India, the band 87-100 Mc/s is allocated to the broadcasting service.

ART 5

Mc/s  
100—108

—E

| Allocation to Services                   |      |      |              |      |      |          |      |      |  |
|--|------|------|--------------|------|------|----------|------|------|--|
| Region 1                                 |      |      | Region 2     |      |      | Region 3 |      |      |  |
| 100—108                                  |      |      | 100—108      |      |      |          |      |      |  |
| MOBILE except<br>aeronautical mobile (R) |      |      | BROADCASTING |      |      |          |      |      |  |
| 193                                      | 193a | 193b |              | 181b | 181c | 183b     | 192h | 194a |  |

**193** In the Portuguese Overseas Provinces in Region 1 south of the equator, Rhodesia and Nyasaland, and the Union of South Africa and Territory of South West Africa, the band 100-108 Mc/s is allocated to the broadcasting service.

**193a** In Austria, Belgium, Spain, Israel, Italy, Yugoslavia, Switzerland and, if necessary, in Denmark, the Netherlands and the F. R. of Germany, the band 100-104 Mc/s is allocated on a permitted basis to the broadcasting service. The introduction of the broadcasting service in these countries is subject to special arrangements between the interested and affected administrations, to ensure that harmful interference is not caused to the services of the other countries operating in accordance with the Radio Regulations.

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**193b** In Denmark, Finland, Greece, Ireland, Iceland, Norway, the F. R. of Germany, Sweden and Turkey, the band 100-108 Mc/s is also allocated to the fixed service and the same allocation will also be made eventually in the Netherlands and the United Kingdom. In Italy and Yugoslavia, the band 104-108 Mc/s is also allocated to the fixed service. The effective radiated power of any station in the fixed service shall normally not exceed 25 watts. In case higher powers are used, the introduction of the fixed service is subject to special arrangements between interested and affected administrations.

**194a** In the Philippines, the band 100-108 Mc/s is also allocated to the fixed and mobile services.

ART 5

Mc/s

—E

108—144

| Allocation to Services   |  |   |
|--|--|---|
| Region 1   | Region 2   | Region 3                                    |
| 108—117.975<br>AERONAUTICAL RADIONAVIGATION                                    |  |   |
| 117.975—132<br>AERONAUTICAL MOBILE (R)<br>195                                  |  |   |
| 132—136<br>AERONAUTICAL MOBILE (R)<br>195a 195b                                | 132—136<br>FIXED<br>MOBILE 195c 195d<br>196 196a |   |
| 136—137<br>SPACE 194b<br>FIXED<br>MOBILE<br>EARTH-SPACE 194b<br>195b 196a 196b |  |   |
| 137—144<br>AERONAUTICAL MOBILE (OR)<br>195b 196c 196d                          | 137—144<br>FIXED<br>MOBILE<br>Radiolocation      | 137—144<br>FIXED<br>MOBILE<br>196 196a 196e |

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194b For research purposes.

195 The frequency 121.5 Mc/s is the aeronautical emergency frequency in this band; mobile stations of the maritime mobile service may communicate on this frequency for safety purposes with stations of the aeronautical mobile service.

195a In certain countries of Region 1, the aeronautical mobile (OR) service will continue to operate for an unspecified period, on a primary basis.

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**195b** In the Belgian Congo and Ruanda Urundi, Nigeria, Sierra Leone, Gambia, Portuguese Overseas Provinces in Region 1 south of the equator, Rhodesia and Nyasaland, and the Union of South Africa and Territory of South West Africa, the band 132-144 Mc/s is allocated to the fixed and mobile services.

**195c** In Region 2, in the band 132-135 Mc/s, the aeronautical mobile (R) service shall operate on a primary basis subject to co-ordination between administrations concerned and those having services operating in accordance with the Table, which may be affected.

**195d** In Region 3, in the band 132-136 Mc/s, which will eventually become exclusively allocated to the aeronautical mobile (R) service, frequency assignments to the aeronautical mobile service shall be co-ordinated between administrations concerned and shall be protected from harmful interference.

**196** In New Zealand, the bands 132-136 Mc/s and 137-144 Mc/s are allocated to the aeronautical mobile (OR) service.

**196a** In Australia, the band 132-144 Mc/s is allocated to the aeronautical mobile (OR) service until 1 July 1963, after which date the band 132-146 Mc/s will be allocated to the broadcasting service and the band 148-150 Mc/s will be allocated to the amateur service.

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**196b** In the band 136-137 Mc/s, the aeronautical mobile (OR) service will be the primary service for as long as it continues to operate in this band. On discontinuation of this service, the space and earth-space services will be the primary services. In Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., this band is allocated on a primary basis to the aeronautical mobile service.

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**196c** In Austria, the Netherlands and the United Kingdom, the band 137-144 Mc/s will, at some future date, be allocated to the fixed service and mobile, except aeronautical mobile, service.

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**196d** In Denmark, Greece, Norway, Portugal, F. R. of Germany, Sweden, Switzerland and Turkey, the band 137-144 Mc/s is also allocated to the fixed service and mobile, except aeronautical mobile (R), service.

**196e** In China, the band 137-144 Mc/s is also allocated to the radiolocation service.

ART 5

**Mc/s**  
**144—174**

—E

| Allocation to Services  |                                   |   |
|---|-----------------------------------|---|
| Region 1  | Region 2                          | Region 3  |
| <b>144—146</b><br>AMATEUR<br>196a   |                                   |   |
| <b>146—151</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>195a 197a 197b                   | <b>146—148</b><br>AMATEUR<br>199a |   |
| <b>151—154</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>Meteorological aids<br>197a 197b | <b>148—174</b><br>FIXED<br>MOBILE | <b>148—170</b><br>FIXED<br>MOBILE                 |
| <b>154—156</b><br>FIXED<br>MOBILE except<br>aeronautical mobile (R)<br>197a                             |                                   | 196a 198 199b                                     |
| <b>156—174</b><br>FIXED<br>MOBILE except<br>aeronautical mobile<br>197a 198 199                         |                                   | <b>170—174</b><br>FIXED<br>MOBILE<br>BROADCASTING |

(MOD)

- 197a** In Rhodesia and Nyasaland and the Union of South Africa and Territory of South West Africa, the band 146-174 Mc/s is also allocated to the aeronautical mobile service.
- 197b** In Region 1, the band 150-153 Mc/s is also allocated to the radio astronomy service. In making assignments to new stations of other services to which this band is allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference. The radio astronomy service shall be protected from harmful interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.
- 198** The frequency 156.8 Mc/s is the international safety and calling frequency for the maritime mobile VHF radiotelephone service. Administrations shall ensure that a guard-band of 75 kc/s on each side of the frequency 156.8 Mc/s is provided. The conditions for the use of this frequency are contained in Article 35. In the bands 156.025-157.425 Mc/s, 160.625-160.975 Mc/s and 161.475-162.025 Mc/s, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by that administration (see Article 35). Any use of frequencies in these bands by stations of other services to which they are allocated, should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiotelephone service.
- 199** In France, Morocco and Monaco, the band 162-174 Mc/s is allocated to the broadcasting service.
- 199a** In China, India and Japan, the band 146-148 Mc/s is also allocated to the fixed and mobile services
- 199b** In New Zealand, the band 148-156 Mc/s is allocated to the aeronautical mobile (OR) service.

ART 5

**Mc/s**  
**174—235**

—E

| Allocation to Services |      |      |          |                |      |      |                      |  |  |
|------------------------|------|------|----------|----------------|------|------|----------------------|--|--|
| Region 1               |      |      |          | Region 2       |      |      | Region 3             |  |  |
| <b>174—216</b>         |      |      |          | <b>174—216</b> |      |      |                      |  |  |
| BROADCASTING           |      |      |          | FIXED          |      |      |                      |  |  |
|                        |      |      |          | MOBILE         |      |      |                      |  |  |
|                        |      |      |          | BROADCASTING   |      |      |                      |  |  |
| 203a                   | 203b | 203c | 203d     | 203d           | 203e | 203f |                      |  |  |
| <b>216—223</b>         |      |      |          | <b>216—220</b> |      |      | <b>216—225</b>       |  |  |
| AERONAUTICAL           |      |      |          | FIXED          |      |      | AERONAUTICAL         |  |  |
| RADIONAVIGATION        |      |      |          | MOBILE         |      |      | RADIONAVIGATION      |  |  |
| BROADCASTING           |      |      |          | RADIOLOCATION  |      |      | <i>Radiolocation</i> |  |  |
| 204a                   | 204b | 204c | 204d 205 | <b>220—225</b> |      |      |                      |  |  |
| <b>223—235</b>         |      |      |          | AMATEUR        |      |      |                      |  |  |
| AERONAUTICAL           |      |      |          | RADIOLOCATION  |      |      | 206e 206f 206g       |  |  |
| RADIONAVIGATION        |      |      |          | <b>225—235</b> |      |      | <b>225—235</b>       |  |  |
| <i>Fixed</i>           |      |      |          | FIXED          |      |      | FIXED                |  |  |
| <i>Mobile</i>          |      |      |          | MOBILE         |      |      | MOBILE               |  |  |
| 204c                   | 204d | 205  | 206a     |                |      |      | AERONAUTICAL         |  |  |
| 206b                   | 206c | 206d |          |                |      |      | RADIONAVIGATION      |  |  |

**203a** In the Union of South Africa and the Territory of South West Africa, the bands 174-181 Mc/s and 213-216 Mc/s are also allocated to the fixed and land mobile services.

**203b** In the United Kingdom, the band 174-184 Mc/s is also allocated to the fixed service; the band 211-216 Mc/s is allocated to the broadcasting and aeronautical radionavigation services.



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**203c** In Ethiopia, Kenya, Tanganyika, Uganda, Nigeria, Sierra Leone, Gambia, Rhodesia and Nyasaland, and Zanzibar, the band 174-216 Mc/s is also allocated to the fixed and mobile services.

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**203d** The band 183-6 Mc/s  $\pm$  0.5 Mc/s is also allocated to the space and earth-space services for research purposes subject to causing no harmful interference

**203e** In India, the band 197-216 Mc/s, and in New Zealand, Pakistan and Philippines, the band 200-216 Mc/s are also allocated to the aeronautical radionavigation service.

**203f** In Australia, the band 202-209 Mc/s is allocated to the aeronautical radionavigation service.

**204a** The aeronautical radionavigation service will be operated only in Denmark, Spain, France, Greece, Nigeria, the Netherlands, Portugal, the United Kingdom, Sweden, Turkey and the Union of South Africa and Territory of South West Africa.

The broadcasting service will be introduced in such a way so as not to reduce the areas of coverage of the aeronautical radionavigation service of the above-mentioned countries existing on (\*) December, 1959, or such lesser areas as may exist thereafter. The agreement of administrations concerned shall be obtained before new broadcasting stations are brought into operation which could cause harmful interference to the aeronautical radionavigation service.

The administrations employing the aeronautical radionavigation service shall not operate airborne equipment during flights over countries in which the band 216-223 Mc/s is used exclusively for the broadcasting service.

**204b** In Italy, the band 216-223 Mc/s is also allocated to the fixed service.

**204c** In France and in Italy, the provisions of No. 204a concerning the introduction of the broadcasting service apply to the band 216-225 Mc/s.

**204d** In the United Kingdom, the band 216-225 Mc/s is allocated to the aeronautical radionavigation and radiolocation services. The radiolocation service is a secondary service.

**205** In Rhodesia and Nyasaland, the band 220-225 Mc/s is allocated to the amateur service.

**206a** In Austria and Switzerland, the band 223-230 Mc/s is allocated on a permitted basis to the broadcasting service; the band 230-235 Mc/s is allocated to the fixed and mobile services.

**206b** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 223-230 Mc/s is allocated to the broadcasting service. The broadcasting service in these countries shall be introduced so as not to cause harmful interference to the aeronautical radionavigation service and broadcasting stations operating in this band shall be established only in accordance with agreements and associated plans to be concluded at the next European VHF/UHF Broadcasting Conference.

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\* Date of the Final Acts of the Geneva Conference.

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- 206c** In the Union of South Africa and the Territory of South West Africa, the band 223-235 Mc/s is also allocated to the broadcasting service and the provisions of No. 204a concerning the introduction of that service will apply to this band.
- 206d** In Nigeria, Sierra Leone and Gambia, the band 223-251 Mc/s is also allocated to the broadcasting service.
- 206e** In Indonesia, the band 216-222 Mc/s is allocated to the fixed, mobile and broadcasting services.
- 206f** In Japan, the band 216-222 Mc/s is allocated to the broadcasting service.
- 206g** In China, Korea and the Philippines, the band 216-225 Mc/s is also allocated to the fixed and broadcasting services.

ART 5

**Mc/s**  
**235—401**

—E

| Allocation to Services |                              |      |          |
|------------------------|------------------------------|------|----------|
| Region 1               | Region 2-                    |      | Region 3 |
| 235—328.6              | FIXED                        |      |          |
|                        | MOBILE                       |      |          |
|                        | 206d                         | 207a | 207b     |
| 328.6—335.4            | AERONAUTICAL RADIONAVIGATION |      | 207c     |
|                        | 207b                         |      |          |
| 335.4—400              | FIXED                        |      |          |
|                        | MOBILE                       |      |          |
| 400—401                | METEOROLOGICAL AIDS          |      |          |
|                        | SPACE                        | 194b |          |
|                        | EARTH-SPACE                  | 194b |          |
|                        | 209a                         | 209b |          |
|                        |                              |      |          |

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- 207a** The frequency 243 Mc/s is the frequency in this band for use by survival craft stations and equipment used for survival purposes.
- 207b** Radio astronomy observations on the Deuterium line (322-329 Mc/s) are carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of the radio astronomy service in their future planning of this band.
- 207c** Limited to Instrument Landing Systems (glide path).
- 209a** In Albania, Bulgaria, Greece, Hungary, Poland, Yugoslavia, Roumania, Sweden, Czechoslovakia, and the U.S.S.R., the band 400-401 Mc/s is also allocated to the fixed and mobile services.
- 209b** In the United Kingdom, the band 400-420 Mc/s is also allocated to the radio-location service; however between 400 and 410 Mc/s the allocation to the radio-location service is on a secondary basis.

ART 5

**Mc/s**  
**401—420**

—E

| Allocation to Services |  |      |      |          |
|------------------------|--|------|------|----------|
| Region 1               | Region 2                                 |      |      | Region 3 |
| 401—406                | METEOROLOGICAL AIDS                      |      |      |          |
|                        | <i>Fixed</i>                             |      |      |          |
|                        | <i>Mobile</i> except aeronautical mobile |      |      |          |
|                        | 209b                                     | 209c | 209d | 209e     |
| 406—420                | FIXED                                    |      |      |          |
|                        | MOBILE except aeronautical mobile        |      |      |          |
|                        | 209b                                     | 209e |      |          |

**209c** In France, the band 401-406 Mc/s is allocated to the meteorological aids service.

**209d** In Albania, Bulgaria, Greece, Hungary, Iran, Norway, Poland, Yugoslavia, Roumania, Sweden, Switzerland, Czechoslovakia, Turkey and the U.S.S.R., the band 401-406 Mc/s is also allocated, on a primary basis, to the fixed service and mobile, except aeronautical mobile, service.

**209e** The band 404-410 Mc/s in Regions 2 and 3, and the band 406-410 Mc/s in Region 1 are also allocated to the radio astronomy service. An appropriate continuous band within these limits shall be designated on a national or area basis. In making assignments to stations of other services to which these bands are allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference. The radio astronomy service shall be protected from harmful interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.

ART 5

**Mc/s**  
**420—470**

—E

| <b>Allocation to Services</b>   |                                 |                 |      |      |      |  |
|---|---------------------------------|-----------------|------|------|------|--|
| <b>Region 1</b>   | <b>Region 2</b>                 | <b>Region 3</b> |      |      |      |  |
| <b>420 — 430</b><br>FIXED<br><b>MOBILE except aeronautical mobile Radiolocation</b><br>211a    211b \ | <b>420 — 450</b>                |                 |      |      |      |  |
| <b>430 — 440</b><br><b>AMATEUR RADIOLOCATION</b><br>211a 211b 211c 211d 211e                          | RADIOLOCATION<br><i>Amateur</i> |                 |      |      |      |  |
| <b>440 — 450</b><br>FIXED<br><b>MOBILE except aeronautical mobile Radiolocation</b><br>211a    211b   |                                 |                 | 211a | 211f | 211g |  |
| <b>450 — 470</b>  | FIXED<br>MOBILE<br>211a         |                 |      |      |      |  |

**211a** Radio altimeters may also be used, temporarily, in the band 420-460 Mc/s until they are able to operate in a band allocated to the aeronautical radionavigation service or until they are no longer required.

- 211b** In the United Kingdom, the band 420-450 Mc/s is allocated, on a primary basis, to the radiolocation service and on a secondary basis to the amateur service.
- 211c** In Greece, Italy and Switzerland, the band 430-440 Mc/s is also allocated to the fixed service and mobile, except aeronautical mobile, service.
- 211d** In Austria, Portugal, the F. R. of Germany, Yugoslavia and Switzerland, the frequency 433.92 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 0.2\%$  of that frequency.
- 211e** In Norway, the band 435-440 Mc/s is also allocated to the fixed service.
- 211f** In Indonesia, the band 420-450 Mc/s is also allocated, on a secondary basis, to the fixed service and mobile, except aeronautical mobile, service.
- 211g** In Australia, the band 420-450 Mc/s is also allocated to the fixed service until the frequency assignments in this band for the fixed service stations are transferred to another band.

ART 5

**Mc/s**  
**470 — 942**

—E

| Allocation to Services  |   |   |
|---|---|---|
| Region 1  | Region 2  | Region 3  |
| <b>470 — 582</b><br>BROADCASTING  | <b>470 — 890</b><br>BROADCASTING                  | <b>470 — 585</b><br>BROADCASTING  |
| <b>582 — 606</b><br>BROADCASTING<br>RADIONAVIGATION<br>211h 211i 211j 211k 211l     |   | 211s  |
| <b>606 — 790</b><br>BROADCASTING<br>211l 211m 211n 211o 211p                        |   | <b>585 — 610</b><br>RADIONAVIGATION<br>211p 211t 211u                               |
| <b>790 — 890</b><br>FIXED<br>BROADCASTING<br>211l 211o 211q 211r                    |   | <b>610 — 890</b><br>FIXED<br>MOBILE<br>BROADCASTING<br>211p 211v 211w               |
| <b>890 — 942</b><br>FIXED<br>BROADCASTING<br><i>Radiolocation</i><br>211l 211o 211q | <b>890 — 942</b><br>FIXED<br>RADIOLOCATION<br>212 | <b>890 — 942</b><br>FIXED<br>MOBILE<br>BROADCASTING<br><i>Radiolocation</i><br>211w |

ART 5

**Mc/s**  
**942—960**

—E

| Allocation to Services |                |                |
|------------------------|----------------|----------------|
| Region 1               | Region 2       | Region 3       |
| <b>942—960</b>         | <b>942—960</b> | <b>942—960</b> |
| FIXED                  | FIXED          | FIXED          |
| BROADCASTING           |                | MOBILE         |
|                        |                | BROADCASTING   |
| 211l 211o 211q         |                | 211v 211w      |

**211h** In the United Kingdom, the band 582-606 Mc/s is allocated on a primary basis to the aeronautical radionavigation service and on a secondary basis to the radiolocation service.

**211i** In Italy, the band 582-606 Mc/s is also allocated to the fixed service until January, 1965.

**211j** In France and the F. R. of Germany, the band 582-606 Mc/s is allocated on a primary basis to the broadcasting service and on a secondary basis to the radio-navigation service.

**211k** In Belgium, the band 582-606 Mc/s is allocated on a primary basis to the radio-navigation service and on a secondary basis to the broadcasting service.

**211l** In Israel, the band 582-960 Mc/s is also allocated to the fixed service and mobile, except aeronautical mobile, service.

**211m** In Region 1, the radionavigation service may continue to operate in the band 606-610 Mc/s until the band is required for the broadcasting service.

**211n** In Italy, the band 606-685 Mc/s is also allocated to the fixed service until January, 1965.

**211o** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 645-960 Mc/s is also allocated to the aeronautical radio-navigation service.

**211p** In Regions 1 and 3, the band 606-614 Mc/s may be used by the radio astronomy service until such time as it is required for use by other services to which this band is allocated. During this period administrations should take all practicable measures to avoid harmful interference to radio astronomy observations.

**211q** In Region 1, stations of the fixed service using tropospheric scatter may operate in the band 790-960 Mc/s subject to arrangements between the administrations concerned and affected. Such operations in the band 790-860 Mc/s shall be on a secondary basis to those of the broadcasting service.

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- 211r** In Belgium, France and Monaco, the band 790-860 Mc/s is allocated to the broadcasting service.
- 211s** In Australia, the band 470-500 Mc/s is allocated to the fixed and mobile services.
- 211t** In China, Korea, Japan and the Philippines, the band 585-610 Mc/s is also allocated to the broadcasting service.
- 211u** In Australia, the band 585-610 Mc/s is allocated on a primary basis to the broadcasting service and on a secondary basis to the radionavigation service.
- 211v** In Australia, the band 610-820 Mc/s is allocated to the broadcasting service; the bands 820-890 Mc/s and 942-960 Mc/s are allocated to the fixed service.
- 211w** In India and Pakistan, the band 610-960 Mc/s is allocated to the broadcasting service.
- 212** In Region 2, the frequency 915 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 25$  Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

ART 5

**Mc/s**  
**960—1 350**

—E

| Allocation to Services |                              |           |          |
|------------------------|------------------------------|-----------|----------|
| Region 1               | Region 2                     |           | Region 3 |
| <b>960—1 215</b>       | AERONAUTICAL RADIONAVIGATION |           |          |
|                        | 214a                         |           |          |
| <b>1 215—1 300</b>     | RADIOLOCATION                |           |          |
|                        | <i>Amateur</i>               |           |          |
|                        | 215                          | 215a 215b | 215c     |
| <b>1 300—1 350</b>     | AERONAUTICAL RADIONAVIGATION |           | 218a     |
|                        | <i>Radiolocation</i>         |           |          |
|                        | 218b                         | 218c      |          |

- 214a** The bands 960-1 215 Mc/s, 1 535-1 660 Mc/s, 4 200-4 400 Mc/s, 5 000-5 250 Mc/s and 15·4-15·7 Gc/s are reserved on a world-wide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based facilities.
- 215** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 1 215-1 300 Mc/s is also allocated to the fixed service.
- 215a** In Belgium, France, Norway, the Netherlands, Portugal and Sweden, the band 1 215-1 300 Mc/s is also allocated to the radionavigation service.
- 215b** In China, India, Indonesia, Japan, Pakistan, Portuguese Overseas Provinces in Region 1 south of the equator, and in Switzerland, the band 1 215-1 300 Mc/s is also allocated to the fixed and mobile services.
- 215c** In the F. R. of Germany, the band 1 250-1 300 Mc/s is allocated to the amateur service.
- 218a** The use of the bands 1 300-1 350 Mc/s, 2 700-2 900 Mc/s and 9 000-9 200 Mc/s by the aeronautical radionavigation service is restricted to ground-based radars and, in the future, to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.
- 218b** In the United Kingdom, the band 1 300-1 350 Mc/s is allocated to the radiolocation service.
- 218c** In Albania, Austria, Bulgaria, Hungary, Indonesia, Poland, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the band 1 300-1 350 Mc/s is also allocated to the fixed and mobile services.

MOD

A—50

ART 5

Mc/s

—E

1 350—1 535

| Allocation to Services   |   |                                       |
|--|---|---------------------------------------|
| Region 1   | Region 2  | Region 3                              |
| <b>1 350—1 400</b><br>FIXED<br>MOBILE<br>RADIOLOCATION<br>218d   | <b>1 350—1 400</b><br><br>RADIOLOCATION<br><br>218d |                                       |
| <b>1 400—1 427</b><br><br>RADIO ASTRONOMY<br>218e  |   |                                       |
| <b>1 427—1 429</b><br><br>SPACE 194b<br>FIXED<br>MOBILE except aeronautical mobile<br>EARTH-SPACE 194b |   |                                       |
| <b>1 429—1 535</b><br>FIXED<br>MOBILE except<br>aeronautical mobile                                    | <b>1 429—1 435</b><br>FIXED<br>MOBILE               | <b>1 429—1 535</b><br>FIXED<br>MOBILE |
|  | <b>1 435—1 535</b><br>MOBILE<br><i>Fixed</i>        |                                       |

**218d** In Region 2 and Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the existing installations of the radionavigation service may continue to operate, temporarily, in the band 1 350-1 400 Mc/s.

**218e** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 1 400-1 427 Mc/s is also allocated to the fixed service and the mobile, except aeronautical mobile, service.

ART 5

**Mc/s**  
**1 535 — 1 700**

—E

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2  | Region 3 |
| <b>1 535 — 1 660</b>   | <b>AERONAUTICAL RADIONAVIGATION</b><br><br>214a 218f 218g   |          |
| <b>1 660 — 1 700</b>   | <b>METEOROLOGICAL AIDS</b><br><br><b>FIXED</b><br><br><b>MOBILE except aeronautical mobile</b><br><br>218h 218i |          |

- 218f** In Italy, the band 1 535-1 600 Mc/s is allocated to the fixed service. However, when the aeronautical radionavigation systems in the band 1 535-1 600 Mc/s have developed further, Italy will examine the possible extension of the use of this band in Italy to the aeronautical radionavigation service.
- 218g** In Albania, Austria, Bulgaria, Hungary, Indonesia, Poland, the F. R. of Germany, Roumania, Czechoslovakia and the U.S.S.R., the band 1 535-1 660 Mc/s is also allocated to the fixed service.
- 218h** In Austria and in Finland, the meteorological aids service is the primary service.
- 218i** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the bands 1 660-1 690 Mc/s, 3 165-3 195 Mc/s, 4 800-4 810 Mc/s, 5 800-5 815 Mc/s and 8 680-8 700 Mc/s are also used for radio astronomy observations.

ART 5

**Mc/s**  
**1 700—2 300**

—E

| Allocation to Services   |   |          |
|--|---|----------|
| Region 1   | Region 2  | Region 3 |
| <b>1 700—1 710</b><br>FIXED<br><i>Space</i> 194b<br><i>Mobile</i><br><i>Earth-space</i> 194b<br>219a | <b>1 700—1 710</b><br>FIXED<br>MOBILE<br><i>Space</i> 194b<br><i>Earth-space</i> 194b |          |
| <b>1 710—2 290</b><br>FIXED<br><i>Mobile</i><br>219b   | <b>1 710—2 290</b><br>FIXED<br>MOBILE   |          |
| <b>2 290—2 300</b><br>FIXED<br><i>Space</i> 194b<br><i>Mobile</i><br><i>Earth-space</i> 194b<br>219a | <b>2 290—2 300</b><br>FIXED<br>MOBILE<br><i>Space</i> 194b<br><i>Earth-space</i> 194b |          |

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- 219a** In Region 1, the bands 1 700-1 710 Mc/s and 2 290-2 300 Mc/s, are allocated on a secondary basis to the space and earth-space services subject to causing no harmful interference to the other services to which these bands are allocated.
- 219b** In Switzerland, the band 1 710-2 290 Mc/s is allocated to the fixed service and the mobile, except aeronautical mobile, service.

ART 5

**Mc/s**  
**2 300—2 450**

—E

| Allocation to Services |                    |                |
|------------------------|--------------------|----------------|
| Region 1               | Region 2           | Region 3       |
| <b>2 300—2 450</b>     | <b>2 300—2 450</b> |                |
| FIXED                  |                    | RADIOLOCATION  |
| <i>Amateur</i>         |                    | <i>Amateur</i> |
| <i>Mobile</i>          |                    | <i>Fixed</i>   |
| <i>Radiolocation</i>   |                    | <i>Mobile</i>  |
| 220 220a 220b          |                    | 220 220c       |

- 220** The frequency 2 450 Mc/s is designated for industrial, scientific and medical purposes except in Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., where the frequency 2 375 Mc/s is used. Emissions must be confined within  $\pm 50$  Mc/s of the frequencies designated. Radiocommunication services operating within these limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.
- 220a** In the United Kingdom, the band 2 300-2 450 Mc/s is allocated on a primary basis to the radiolocation service and on a secondary basis to the amateur, fixed and mobile services.
- 220b** In the F. R. of Germany, the band 2 300-2 350 Mc/s is allocated to the amateur service and this service is excluded from the band 2 350-2 450 Mc/s.
- 220c** In India, Japan and Pakistan, the band 2 300-2 450 Mc/s is allocated on a primary basis to the fixed, mobile and radiolocation services, and on a secondary basis to the amateur service.

ART 5

**Mc/s**  
**2 450—2 700**

—E

| Allocation to Services |                     |          |
|------------------------|---------------------|----------|
| Region 1               | Region 2            | Region 3 |
| <b>2 450—2 550</b>     | <b>2 450—2 550</b>  |          |
| FIXED                  | FIXED               |          |
| MOBILE                 | MOBILE              |          |
| <i>Radiolocation</i>   | RADIOLOCATION       |          |
| 220 221a               | 220                 |          |
| <b>2 550—2 700</b>     | FIXED               |          |
|                        | MOBILE              |          |
|                        | 221b 221c 221d 221e |          |

- 221a** In France and the United Kingdom, the band 2 450-2 550 Mc/s is allocated on a primary basis to the radiolocation service and, on a secondary basis, to the fixed and mobile services.
- 221b** In the United Kingdom, the radiolocation service may operate in the band 2 550-2 600 Mc/s, provided no harmful interference is caused to tropospheric scatter systems.
- 221c** In the F. R. of Germany, the band 2 550-2 700 Mc/s is allocated to the fixed service.
- 221d** In Region 1, tropospheric scatter systems may operate in the band 2 550-2 700 Mc/s under arrangements concluded between administrations concerned and those having services operating in accordance with the Table, which may be affected.
- 221e** The bands 2 690-2 700 Mc/s and 4 990-5 000 Mc/s are also allocated to the radio astronomy service. In making assignments to stations of other services to which these bands are allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference. The radio astronomy service shall be protected from harmful interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.

ART 5

**Mc/s**  
**2 700—3 300**

—E

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2  | Region 3 |
| <b>2 700—2 900</b>     | AERONAUTICAL RADIONAVIGATION 218a<br><i>Radiolocation</i><br>222a |          |
| <b>2 900—3 100</b>     | RADIONAVIGATION 223a<br><i>Radiolocation</i>                      |          |
| <b>3 100—3 300</b>     | RADIOLOCATION<br>218i 223b 223c                                   |          |

- 222a** In the band 2 700-2 900 Mc/s ground-based radars used for meteorological purposes are authorized to operate on the basis of equality with stations of the aeronautical radionavigation service.
- 223a** The use of the band 2 900-3 100 Mc/s by the aeronautical radionavigation service is limited to ground-based radars.
- 223b** In Albania, Austria, Belgium, Bulgaria, Hungary, Poland, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the band 3 100-3 300 Mc/s is also allocated to the radionavigation service.
- 223c** In the band 3 100-3 300 Mc/s, existing racons and shipborne radars in merchant ships may operate within the band 3 100-3 266 Mc/s.



ART 5

**Mc/s**  
**3 300—4 200**

—E

| Allocation to Services   |   |   |  |
|--|---|---|--|
| Region 1   | Region 2  | Region 3  |  |
| <b>3 300—3 400</b><br>RADIOLOCATION<br>224a 224b                                     | <b>3 300—3 500</b><br>RADIOLOCATION<br><i>Amateur</i><br>224c |   |  |
| <b>3 400—3 600</b><br>FIXED<br>MOBILE<br><i>Radiolocation</i><br>224d 224e 224f 224g | <b>3 500—3 700</b><br>FIXED<br>MOBILE<br>RADIOLOCATION        | <b>3 500—3 700</b><br>RADIOLOCATION<br><i>Fixed</i><br><i>Mobile</i><br>224h 224i |  |
| <b>3 600—4 200</b><br>FIXED<br><i>Mobile</i><br>224f                                 | <b>3 700—4 200</b><br>FIXED<br>MOBILE<br>224j 224k            |   |  |

**224a** In Albania, Austria, Bulgaria, Hungary, Poland, Portugal, Roumania, Switzerland, Czechoslovakia and the U.S.S.R., the band 3 300-3 400 Mc/s is also allocated to the radionavigation service.

**224b** In Austria, Greece, Norway, the Netherlands, Portugal and Sweden, the band 3 300-3 400 Mc/s is also allocated to the fixed and mobile services.

**224c** In China, India, Indonesia, Japan and Pakistan the band 3 300-3-500 Mc/s is also allocated to the fixed and mobile services.

**224d** In Austria, the band 3 400-3 600 Mc/s is also allocated to the radionavigation service.

**224e** In Denmark and Norway, the fixed, mobile and radiolocation services operate on a basis of equality in the band 3 400-3 600 Mc/s.

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- 224f** In the United Kingdom, the band 3 400-3 770 Mc/s is allocated to the radiolocation service.
- 224g** In Austria, Israel, Netherlands, F. R. of Germany and the United Kingdom, the band 3 400-3 475 Mc/s is also allocated, on a secondary basis, to the amateur service.
- 224h** In China and Japan, the band 3 500-3 700 Mc/s is allocated on a primary basis to the fixed and mobile services.
- 224i** In Japan, in the band 3 620-3 700 Mc/s, the radiolocation service is excluded.
- 224j** In Australia, the band 3 700-3 770 Mc/s is allocated to the radiolocation service.
- 224k** In India, the band 3 850-4 150 Mc/s is also allocated to the radiolocation service.

ART 5

Mc/s

—E

4 200—5 000

| Allocation to Services |      |                              |      |          |
|------------------------|------|------------------------------|------|----------|
| Region 1               |      | Region 2                     |      | Region 3 |
| 4 200 — 4 400          |      | AERONAUTICAL RADIONAVIGATION |      |          |
|                        | 214a | 225                          | 225a | 225b     |
| 4 400 — 5 000          |      | FIXED                        |      |          |
|                        |      | MOBILE                       |      |          |
|                        | 218i | 221e                         |      |          |

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- 225** In China and Phillipines, the band 4 200-4 400 Mc/s is also allocated, on a secondary basis, to the fixed service.
- 225a** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 4 200-4 400 Mc/s is also allocated to the fixed and mobile services subject to causing no harmful interference to the aeronautical radio-navigation service used by aircraft on international air routes in these countries.
- 225b** In Austria, Denmark, Norway, the F. R. of Germany, Sweden and Switzerland, the band 4 200-4 210 Mc/s is also allocated, on a secondary basis, to the fixed service.

ART 5

**Mc/s**  
**5 000—5 470**

—E

| Allocation to Services |                              |          |
|------------------------|------------------------------|----------|
| Region 1               | Region 2                     | Region 3 |
| <b>5 000—5 250</b>     | AERONAUTICAL RADIONAVIGATION |          |
|                        | 214a                         |          |
| <b>5 250—5 255</b>     | RADIOLOCATION                |          |
|                        | <i>Space</i>                 | 194b     |
|                        | <i>Earth-space</i>           | 194b     |
|                        | 226a                         |          |
| <b>5 255—5 350</b>     | RADIOLOCATION                |          |
|                        | 226a                         |          |
| <b>5 350—5 460</b>     | AERONAUTICAL RADIONAVIGATION | 226b     |
|                        | <i>Radiolocation</i>         |          |
| <b>5 460—5 470</b>     | RADIONAVIGATION              | 226b     |
|                        | <i>Radiolocation</i>         |          |

**226a** In Albania, Austria, Bulgaria, Hungary, Poland, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the band 5 250-5 350 Mc/s is also allocated to the radionavigation service.

**226b** The use of the band 5 350-5 470 Mc/s by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.

ART 5

**Mc/s**  
**5 470—5 925**

—E

| Allocation to Services   |  |  |
|--|--|--|
| Region 1   | Region 2   | Region 3   |
| <b>5 470—5 650.</b><br>MARITIME RADIONAVIGATION<br><i>Radiolocation</i><br>226c 226d |  |  |
| <b>5 650—5 850</b><br>RADIOLOCATION<br><i>Amateur</i><br>218i 227a 227b 227c 228     |  |  |
| <b>5 850—5 925</b><br>FIXED<br>MOBILE<br>228   | <b>5 850—5 925</b><br>RADIOLOCATION<br><i>Amateur</i><br>228 | <b>5 850—5 925</b><br>FIXED<br>MOBILE<br><i>Radiolocation</i><br>228 |

- 226c** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 5 470-5 650 Mc/s is also allocated to the aeronautical radio-navigation service.
- 226d** Between 5 600 and 5 650 Mc/s, ground-based radars used for meteorological purposes are authorized to operate on the basis of equality with stations of the maritime radionavigation service.
- 227a** In the F. R. of Germany, the band 5 650-5 775 Mc/s is allocated to the amateur service and the band 5 775-5 850 Mc/s is allocated to the fixed service.
- 227b** In China, India, Indonesia, Japan and Pakistan the band 5 650-5 850 Mc/s is also allocated to the fixed and mobile services.
- 227c** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 5 800-5 850 Mc/s is allocated to the fixed and mobile services.
- 228** The frequency 5 800 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 75$  Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

ART 5

**Mc/s**  
**5 925—8 500**

—E

| Allocation to Services |                    |           |
|------------------------|--------------------|-----------|
| Region 1               | Region 2           | Region 3  |
| <b>5 925—8 400</b>     | FIXED              |           |
|                        | MOBILE             |           |
|                        | 229a               | 229b 229c |
|                        |                    |           |
| <b>8 400—8 500</b>     | FIXED              |           |
|                        | MOBILE             |           |
|                        | <i>Space</i>       | 194b      |
|                        | <i>Earth-space</i> | 194b      |
|                        | 229c               |           |

**229a** In India, the band 6 000-6 500 Mc/s is also allocated to the radiolocation service.

**229b** In Italy, the band 6 275-6 575 Mc/s is also allocated to the radiolocation service.

**229c** In Australia and the United Kingdom, the band 8 250-8 500 Mc/s is allocated to the radiolocation service; the band 8 400-8 500 Mc/s is also allocated, on a secondary basis, to the space and earth-space services for research purposes.

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ART 5

**Mc/s**  
**8 500—9 000**

—E

| Allocation to Services   |          |          |
|--|----------|----------|
| Region 1   | Region 2 | Region 3 |
| <b>8 500—8 750</b><br>RADIOLOCATION<br>218i 229d                                 |          |          |
| <b>8 750—8 850</b><br>RADIOLOCATION<br>AERONAUTICAL RADIONAVIGATION 229e<br>229f |          |          |
| <b>8 850—9 000</b><br>RADIOLOCATION<br>229f 229g                                 |          |          |

**229d** In Albania, Austria, Bulgaria, Hungary, Poland, Roumania, Sweden, Czechoslovakia and the U.S.S.R., the band 8 500-8 750 Mc/s is also allocated to the radionavigation service.

**229e** The use of the band 8 750-8 850 Mc/s by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 Mc/s.

**229f** In Belgium, France, the Netherlands and the F. R. of Germany, the band 8 825-9 225 Mc/s is also allocated to the maritime radionavigation service for use by ground-based radars.

**229g** In Albania, Austria, Bulgaria, Hungary, Poland, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the bands 8 850-9 000 Mc/s, 9 200-9 300 Mc/s and 9 500-9 800 Mc/s are also allocated to the radionavigation service.

ART 5

**Mc/s**  
**9 000 — 10 500**

—E

| Allocation to Services |  |          |
|------------------------|--|----------|
| Region 1               | Region 2   | Region 3 |
| <b>9 000 — 9 200</b>   | AERONAUTICAL RADIONAVIGATION<br><i>Radiolocation</i><br>229f | 218a     |
| <b>9 200 — 9 300</b>   | RADIOLOCATION<br>229f 229g                                   |          |
| <b>9 300 — 9 500</b>   | RADIONAVIGATION<br><i>Radiolocation</i><br>230a              |          |
| <b>9 500 — 9 800</b>   | RADIOLOCATION<br>229g  |          |
| <b>9 800 — 10 000</b>  | RADIOLOCATION<br><i>Fixed</i><br>230b 230c                   |          |
| <b>10 000 — 10 500</b> | RADIOLOCATION<br><i>Amateur</i><br>230d 230e                 |          |

**230a** The use of the band 9 300-9 500 Mc/s by the aeronautical radionavigation service is limited to airborne weather radars, and ground-based radars. In this band ground-based radars used for meteorological purposes have priority over other radiolocation devices.

**230b** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 9 800-10 000 Mc/s is also allocated to the fixed and radio-navigation services.

**230c** In India, Indonesia, Japan and Sweden, the fixed and radiolocation services operate on a basis of equality in the band 9 800-10 000 Mc/s.

**230d** In Japan and Sweden, the band 10 000-10 500 Mc/s is also allocated to the fixed and mobile services.

**230e** In the F. R. of Germany and Switzerland, the band 10 000-10 250 Mc/s is also allocated to the fixed and mobile services; the band 10 250-10 500 Mc/s is allocated to the amateur service.

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ART 5

Gc/s  
10.5 — 13.25

—E

| Allocation to Services   |  |          |
|--|--|----------|
| Region 1   | Region 2   | Region 3 |
| <b>10.5 — 10.55</b><br>FIXED<br>MOBILE<br><i>Radiolocation</i> | <b>10.5-10.55</b><br><br>RADIOLOCATION<br><br>231a         |          |
| <b>10.55 — 10.7</b>  | FIXED<br>MOBILE<br><i>Radiolocation</i><br><br>231b        |          |
| <b>10.7 — 11.7</b>   | FIXED<br>MOBILE  |          |
| <b>11.7 — 12.7</b>   | FIXED<br>MOBILE except aeronautical mobile<br>BROADCASTING |          |
| <b>12.7 — 13.25</b>  | FIXED<br>MOBILE  |          |

**231a** Limited to continuous wave systems.

**231b** The bands 10.68-10.7 Gc/s, 15.35-15.4 Gc/s, 19.3-19.4 Gc/s and 31.3-31.5 Gc/s are also allocated to the radio astronomy service. In making assignments to stations of other services to which these bands are allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference. The radio astronomy service shall be protected from interference from services operating in other bands in accordance with the provisions of these Regulations, only to the extent that these services are protected from each other.

ART 5

**Gc/s**  
**13.25—15.4**

—E

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2  | Region 3 |
| <b>13.25—13.4</b>      | AERONAUTICAL RADIONAVIGATION<br>231c 231d                       |          |
| <b>13.4—14</b>         | RADIOLOCATION<br>231d 231e 231f                                 |          |
| <b>14—14.4</b>         | RADIONAVIGATION<br>231d   |          |
| <b>14.4—15.15</b>      | FIXED<br>MOBILE   |          |
| <b>15.15—15.25</b>     | SPACE 194b<br>EARTH-SPACE 194b<br><i>Fixed</i><br><i>Mobile</i> |          |
| <b>15.25—15.4</b>      | FIXED<br>MOBILE<br>231b   |          |

**231c** Limited to Doppler navigation aids.

**231d** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the bands 13.25-13.5 Gc/s, 14.175-14.4 Gc/s, 15.4-17.7 Gc/s, 21-22 Gc/s, 23-24.25 Gc/s and 33.4-36 Gc/s are also allocated to the fixed and mobile services.

**231e** In Sweden, the bands 13.4-14 Gc/s, 15.7-17.7 Gc/s, 23-24.25 Gc/s and 33.4-36 Gc/s are also allocated to the fixed and mobile services.

**231f** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia, and the U.S.S.R., the band 13.5-14 Gc/s is also allocated to the radionavigation service.

ART 5

Gc/s  
15.4—24.25

—E

| Allocation to Services |                              |          |
|------------------------|------------------------------|----------|
| Region 1               | Region 2                     | Region 3 |
| 15.4—15.7              | AERONAUTICAL RADIONAVIGATION |          |
|                        | 214a                         | 231d     |
| 15.7—17.7              | RADIOLOCATION                |          |
|                        | 231d                         | 231e     |
| 17.7—21                | FIXED                        |          |
|                        | MOBILE                       |          |
|                        | 231b                         |          |
| 21—22                  | AMATEUR                      |          |
|                        | 231d                         |          |
| 22—23                  | FIXED                        |          |
|                        | MOBILE                       |          |
|                        | 231g                         |          |
| 23—24.25               | RADIOLOCATION                |          |
|                        | 231d                         | 231e     |

**231g** The frequency 22.125 Gc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of  $\pm 125$  Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

ART 5

Gc/s  
24.25—40

—E

| Allocation to Services |   |          |
|------------------------|---|----------|
| Region 1               | Region 2  | Region 3 |
| 24.25—25.25            | RADIONAVIGATION<br>231h 231i                                    |          |
| 25.25—31.5             | FIXED<br>MOBILE<br>231b   |          |
| 31.5—31.8              | SPACE 194b<br>EARTH-SPACE 194b<br><i>Fixed</i><br><i>Mobile</i> |          |
| 31.8—33.4              | RADIONAVIGATION   |          |
| 33.4—36                | RADIOLOCATION<br>231d 231e 231i                                 |          |
| 36—40                  | FIXED<br>MOBILE   |          |
| above 40               | (Not allocated)   |          |

**231h** In the band 24.25-25.25 Gc/s, ground-based radionavigation aids are not permitted except where they operate in cooperation with airborne or shipborne radionavigation devices.

**231i** In Japan, the bands 24.25-25.25 Gc/s and 33.4-36 Gc/s are also allocated to the meteorological aids service.

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 858-E  
11 December, 1959**

**SERIES B**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Blue Document No. | Series No. | Pages                 | Former Article               | New Article  | Pages | Remarks |
|-------------------|------------|-----------------------|------------------------------|--------------|-------|---------|
| 551               | 1          | 1-01                  | 38                           | 37           | B—01  |         |
| 551               | 1          | 1-02                  | 39                           | 38           | B—02  |         |
| 551               | 1          | 1-02                  | 40                           | 39           | B—02  |         |
| 551               | 1          | 1-03                  | 41                           | 40           | B—03  |         |
| 645               | 5          | 5-05                  | 42                           | 41           | B—15  |         |
| 573               | 2          | 2-18                  | 43                           | 42           | B—16  |         |
| 645               | 5          | 5-07                  | 44                           | 43           | B—17  |         |
| 494-574 and 625   | 2-5-13     | 2-20<br>5-10<br>13-09 | 45                           | 44           | B—20  |         |
| —                 | —          | —                     |                              |              |       |         |
| 551               | 1          | 1-20 to 1-43          | Additional Radio Regulations |              | B—25  |         |
| —                 | —          | —                     | Art. 1 to 12                 | Art. 1 to 13 |       |         |
|                   |            |                       | Art. 19                      | Art. 14      | B—48  |         |



**Former reference**

Chap.: XV  
 Art. : 38 to 41  
 Nos. : 950-999a

**Source**

Committee: 7  
 Doc. No.: 335

**New reference**

Chap.: IX  
 Art. : 37 to 40  
 Nos. : 37-01 to 40-55

**CHAPTER IX****Radiotelegrams and Radiotelephone Calls****ARTICLE 37****Order of Priority of Communications in the Mobile Service**

950

**37-01**

The term "communication" as used in this Article means radiotelegrams as well as radiotelephone calls. The order of priority for communications in the mobile service shall be as follows :

1. Distress calls, distress messages, and distress traffic.
2. Communications preceded by the urgency signal.
3. Communications preceded by the safety signal.
4. Communications relating to radio direction finding.
5. Communications relating to the navigation and safe movement of aircraft.
6. Communications relating to the navigation, movements, and needs of ships, and weather observation messages destined for an official meteorological service.
7. Government radiotelegrams : Priorité Nations.
8. Government communications for which priority has been requested.
9. Service communications relating to the working of the radiocommunication service or to communications previously exchanged.
10. Government communications other than those shown in 7 and 8 above, and all other communications.

**B—01**

## ARTICLE 38

**Indication of the Station of Origin of Radiotelegrams**

- 951 **38-01 § 1.** When, because of duplication of names, the name of a station is followed by its call sign, the latter is separated from the name of the station by a solidus. Example: Oregon/OZOC (not Oregonozoc); Rose/DDOR (not Roseddor).
- 952 **38-02 § 2.** When a coast or aeronautical station retransmits over the general network of telecommunication channels a radiotelegram received from a mobile station, it transmits, as office of origin, the name of the mobile station in which the radiotelegram originated as this name appears in the appropriate list of stations, followed by its own name. Where appropriate, the provisions of No. 38-01 shall also apply.
- 953 **38-03 § 3.** In order to avoid any confusion with a telegraph office or a fixed station of the same name, the coast or aeronautical station may, if desirable, complete the indication of the name of the mobile station of origin by the word "ship" or "aircraft" placed before the name of the station of origin.

## ARTICLE 39

**Routing of Radiotelegrams**

- 954 **39-01 § 1.** (1) In routing radiotelegrams, a mobile station should, as a general rule, give preference to the coast or aeronautical station established on the territory of the country of destination, or the country likely to provide the most suitable transit route for radiotelegrams.
- 955 **39-02** (2) However, to expedite or facilitate the routing of radiotelegrams to a coast or aeronautical station, a mobile station may transmit them to another mobile station. The latter shall dispose of such radiotelegrams in the same manner as if they originated with itself (see the Additional Radio Regulations, Article 10).

956

**39-03 § 2.** A mobile station, when using class A2 emission in the bands between 405 and 535 kc/s to transmit radiotelegrams to a coast or aeronautical station which is not the nearest to it, shall cease working or shall change frequency or class of emission upon the first request made by a coast or aeronautical station which is nearer of the mobile station than the coast or aeronautical station being worked, when this request is based upon interference which the working of the mobile station causes to the nearer coast or aeronautical station.

957

**39-04 § 3.** If the sender of a radiotelegram handed in at a mobile station has indicated the coast or aeronautical station to which he desires his radiotelegram to be sent, the mobile station shall, in order to effect this transmission to the coast or aeronautical station indicated, wait, if necessary, until the conditions specified in Nos. 39-01 to 39-03 above are fulfilled.

958

**39-05 § 4.** In order to facilitate disposal of traffic, and subject to such restrictions as individual governments may impose, coast stations may, in exceptional circumstances and with discretion, without incurring additional charges, exchange radiotelegrams and service message relating thereto.

## ARTICLE 40

### Accounting for Radiotelegrams and Radiotelephone Calls

#### Section I. General

959

**40-01 § 1.** In principle, land station and ship and aircraft station charges shall not be entered in the international telegraph and telephone accounts.

960

**40-02 § 2.** Administrations reserve to themselves the right to make, between themselves and with the recognized private operating agencies concerned, different arrangements with a view to the adoption of other accounting systems, more specifically the adoption, as far as practicable, of the system by with the land station and ship



and aircraft station charges follow the radiotelegrams and radio-telephone calls from country to country through the medium of the telegraph and telephone accounts.<sup>1</sup> Such arrangements are subject to previous agreement between the administrations concerned.

961 **40-03 § 3.** In the absence of a different arrangement in accordance with the provisions of No. 40-02, the accounts relating to these charges are prepared monthly by the administrations to which the land stations are subject, and are forwarded by them to the administrations or accounting authorities concerned.

962 **40-04 § 4.** (1) Where the enterprise operating the land station is not the administration of the country, this enterprise may replace the administration of that country as far as accounts are concerned. In this event, the provisions of Nos. 40-06 to 40-55 shall apply to such enterprise in the same manner as to an administration.

963 **40-05** (2) When the provisions of No. 30-20 are not followed, and the operating enterprise controlling the mobile station is not known, accounts should be sent to the administration to which the mobile station is subject, for forwarding to the appropriate accounting authority for settlement.

## **Section II. Establishment of Accounts for Radiotelegrams**

964 **40-06 § 5.** (1) In the case of radiotelegrams originating in ship and aircraft stations, the administration to which the land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of origin is subject, or the operating enterprise direct) with :

- the land station charges,
- the charges relating to transmission over the general network of telecommunication channels, which will hereafter be called telegraph charges,
- the total charges collected for prepaid replies, land station and telegraph charges made for collation,

960.1 **40-02.1** <sup>1</sup> Canada and the United States of America request that this system be adopted to the greatest possible extent in relations between themselves and other countries.

- charges collected for delivery by express as well as the supplementary charges fixed by the Telegraph Regulations for delivery by post or by air mail,
- charges fixed by the Telegraph Regulations for copies of multiple telegrams.

965

**40-07** (2) So far as concerns transmission over the general network of telecommunication channels, radiotelegrams are treated, from the point of view of accounting, in conformity with the provisions of the Telegraph Regulations.

966

**40-08** § 6. (1) For radiotelegrams to a country other than that to which the land station belongs, the telegraph charges to be settled in accordance with the above provisions are the charges shown in the table of rates relating to international telegraph correspondence, or those fixed by special arrangements between the administrations and/or recognized private operating agencies of adjacent countries and published by those administrations or recognized private operating agencies.

967

**40-09** (2) However, account must be taken of the fact that a seven-word minimum charge is levied for every radiotelegram; for press radiotelegrams this minimum is fourteen words.

968

**40-10** § 7. (1) In the case of radiotelegrams addressed to ship and aircraft stations, the administration to which the office of origin is subject is debited direct by the administration to which the land station is subject, with the land station and ship or aircraft station charges plus the land station and ship or aircraft station charges applicable to collation and for copies of multiple telegrams, but only where the radiotelegram has been transmitted to the ship or aircraft station. In the case provided for in No. 2132, however, the administration to which the office of origin is subject is debited with the land station charge by the administration to which the land station is subject.

969

**40-11** (2) Unless otherwise arranged, the administration to which the office of origin is subject is debited through the medium of the telegraph accounts, from country to country if necessary, by the administration to which the land station is subject, with the telegraph charges and the total charges for prepaid replies.

- 970 **40-12** (3) When the radiotelegram has been transmitted, the administration to which the land station is subject credits the administration to which the mobile station of destination is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of destination is subject, or the operating enterprise direct) :
- 971 **40-13** a) with the ship or aircraft station charge ;
- 972 **40-14** b) if occasion arises, with
- the charges due to intermediate ship or aircraft stations,
  - the total charge collected for prepaid replies,
  - the ship or aircraft station charge for collation,
  - the charges fixed by the Telegraph Regulations for copies of multiple telegrams.
- 973 **40-15** § 8. When the charge for a radiotelegram is paid for wholly or partly by means of a reply voucher, the radiotelegram shall be treated for accounting purposes as if the charge had been paid in cash.
- 974 **40-16** § 9. Radiotelegrams exchanged between stations in ships or aircraft
- 975 **40-17** a) *without the intervention of land stations* :
- except when other arrangements have been made, the enterprise to which the station of destination is subject debits the enterprise to which the station of origin is subject with all charges collected, less the charges due to this latter station ;
- 976 **40-18** b) *through the medium of a single land station* :
- the administration to which the land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of origin is subject, or the operating enterprise direct) with all the charges collected, less the charges due to that mobile station, in accordance with the provisions of Nos. 40-06 and 40-07. Thereafter the provisions of Nos. 40-10 to 40-14 are applied ;

977

**40-19**c) *through the medium of two land stations :*

the administration to which the first land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of origin is subject, or the operating enterprise direct) with all the charges collected, less the charges due to that mobile station, in accordance with the provisions of Nos. 40-06 and 40-07. The provisions of Nos. 40-10 to 40-14 are then applied, the first land station being regarded as the office of origin as far as the accounts are concerned.

978

**40-20 § 10.**

In the case of radiotelegrams which, at the request of the sender, are forwarded through one or two intermediate ship or aircraft stations, each such intermediate station debits with the charge accruing to it for transit :

979

**40-21**

a) the ship or aircraft station of destination, in the case of a radiotelegram originating on land and destined for a ship or aircraft station, or in the cases contemplated in Nos. 40-18 and 40-19 (second radiotelegraph transmission) ;

980

**40-22**

b) the ship or aircraft station of origin, in the case of a radiotelegram originating on a ship or aircraft station and destined for the land, or in the cases provided for in Nos. 40-17 to 40-19 (first radiotelegraph transmission).

### **Section III. Establishment of Accounts for Radiotelephone Calls**

980a

**40-23 § 11.**

In the case of radiotelephone calls originating in ship or aircraft stations, the administration to which the land station is subject :

— debits the administration to which the mobile station of origin is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of origin is subject, or the operating enterprise

direct) with the land station charges, the charges relating to transmission over the telephone system of the country of the land station, and, where appropriate, with the charges relating to transmission over the international telephone system,

credits, where appropriate, through the international telephone accounts, the administration or recognized private operating agency of the country of destination, and the administrations or recognized private operating agencies of intermediate countries, if any, with the charges relating to transmission over the international telephone system.

980b

**40-24** § 12. (1) In the case of radiotelephone calls destined for ship or aircraft stations and originating in the country to which the land station belongs, the administration to which the land station is subject credits the administration to which the mobile station of destination is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of destination is subject, or the operating enterprise direct) with the ship or aircraft station charges.

980c

**40-25** (2) In the case of radiotelephone calls destined for ship or aircraft stations and originating in a country other than that to which the land station belongs :

980d

**40-26** a) the administration to which the land station is subject :  
 — debits the administration or recognized private operating agency of the country of origin with the land station and ship or aircraft station charges,  
 — credits the administration to which the mobile station of destination is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of destination is subject, or the operating enterprise direct) with the ship or aircraft station charges ;

980e

**40-27** b) the administration or recognized private operating agency of the country in which the calls originate credits, through the international telephone accounts,

the administration of the country to which the land station is subject, and the administrations or recognized private operating agencies of intermediate countries, if any, with the charges relating to transmission over the international telephone system.

980f                    **40-28** § 13.    The provisions of Nos. 40-16 to 40-19 relative to the accounting for radiotelegrams exchanged between stations on ships or aircraft shall be followed in the case of radiotelephone calls exchanged between stations on ships or aircraft.

980g                    **40-29** § 14.    For accounting purposes, collect radiotelephone calls shall be regarded as originating in the country or mobile station of destination.

#### Section IV. Exchange and Verification of Accounts

##### Payment of Balances

981                    **40-30** § 15. (1) In principle, radiotelegrams and radiotelephone calls are entered individually, with all necessary particulars, in the monthly accounts which serve as a basis for the accounting mentioned in this Article. A specimen statement is given in Appendix 21. The accounts, in duplicate, are forwarded before the end of the third month following that to which the accounts relate.

981a                   **40-31**        (2) However, when by special agreement, the accounts cover a period of more than one month, these accounts shall be forwarded before the end of the third month following the last month of the period to which the accounts in question relate.

982                    **40-32** § 16.    The acceptance of an account is notified or observations thereon are made within a period of six months from the date of its despatch. An administration or recognized private operating agency which has not received any observations in this period shall be entitled to regard the account as admitted by right.

983

**40-33 § 17.** The periods mentioned in Nos. 40-30 and 40-32 may be exceeded when exceptional difficulties occur in the transmission of the documents by post between the land stations and the administrations to which they are subject. However, the debtor administration or recognized private operating agency may refuse the settlement and adjustment of accounts presented more than eighteen months after the date of handing-in of the radiotelegrams or the date of establishment of the radiotelephone calls to which the accounts relate.

984

**40-34 § 18.** Unless otherwise arranged, the following provisions are applicable to the radiotelegraph and radiotelephone accounts referred to in the present Article.

985

**40-35 § 19. (1)** When there are differences between the accounts prepared by two administrations, two recognized private operating agencies, or an administration and a recognized private operating agency, the monthly accounts shall be admitted without revision in the following cases :

| Amount of the account of the creditor | Difference not exceeding  |
|---------------------------------------|---|
| less than 1,000 gold francs           | 10 gold francs  |
| from 1,000 to 100,000 gold francs     | 1 % of the amount of the creditor's account   |
| more than 100,000 gold francs         | 1 % of the first 100,000 gold francs, and 0.5 % of the remainder of the creditor's account. |

986

**40-36** (2) A revision which has been begun shall be stopped following the exchange of observations between the two administrations and/or recognized private operating agencies concerned, as soon as the difference is brought down to a sum not exceeding the maximum fixed by No. 40-35.

987

**40-37** § 20. (1) Immediately after the acceptance of the accounts proper to the last month of the quarter, a quarterly account showing the balance for the whole of the three months of the quarter shall, unless otherwise arranged between the two administrations and/or recognized private operating agencies concerned, be prepared by the creditor administration or recognized private operating agency and forwarded in duplicate to the debtor administration or recognized private operating agency, which, after verification, shall return one of the copies endorsed with its acceptance.

988

**40-38** (2) In default of acceptance of one or other of the monthly accounts of a given quarter before the expiration of the sixth month following the quarter to which the accounts relate, the quarterly account may, nevertheless, be prepared by the creditor administration or recognized private operating agency with a view to a provisional settlement which shall become obligatory for the debtor administration or recognized private operating agency under the conditions fixed by No. 40-40.

988a

**40-39** (3) Adjustments later agreed upon shall be included in a subsequent quarterly settlement.

989

**40-40** § 21. The quarterly account shall be verified and the amount shall be paid within a period of six weeks dating from the day on which it is received by the debtor administration or recognized private operating agency. Beyond this period, the creditor administration or recognized private operating agency shall have the right to charge interest at the rate of six per cent per annum, reckoned from the day following the date of expiration of the said period.

990

**40-41** § 22. (1) The balance of the quarterly account in gold francs shall be paid by the debtor administration or recognized private operating agency to the creditor administration or recognized private operating agency by a sum equivalent to its value, in conformity with the provisions of these Regulations and of such special monetary agreements as may exist between the countries of the administrations or recognized private operating agencies concerned.



- 990a                    **40-42**            (2) This payment must be effected, without cost to the creditor administration or recognized private operating agency<sup>1</sup>, by one of the following methods :
- 991                    **40-43**            a) at the choice of the debtor administration or recognized private operating agency, in gold or by means of cheques or drafts payable on demand in the capital or in a commercial centre of the creditor country, or by transfer on a bank of this capital or of a commercial centre of the creditor country ; cheques, drafts or transfers shall be made out in one of the currencies specified under A of Appendix 22.
- 992                    **40-44**            b) by agreement between the two administrations and/or recognized private operating agencies, through the intermediary of a bank clearing through the Bank of International Settlements at Basle ;
- 993                    **40-45**            c) by any other means agreed upon between the parties concerned.
- 994                    **40-46**            (3) The currencies used for payment, and the rules for converting the balances expressed in gold francs into the currency of payment, shall be those shown in Appendix 22.
- 995                    **40-47**            (4) Any loss or gain resulting from the settlement of balances by cheque or draft shall be treated according to the following rules :
- 996                    **40-48**            a) any loss or gain arising from an unforeseen rise or fall affecting the gold par rate of one of the currencies specified in (3) a), (3) b) or (3) c) of § 2 of Appendix 22 and occurring up to and including the day on which the cheque or draft is received, shall be divided equally between the administrations and/or recognized private operating agencies concerned ;
- 990a. 1                **40-42.1** <sup>1</sup> Taxes, clearing expenses, impositions and commissions which may be levied on the creditor administration or recognized private operating agency by the country in which they operate shall not be considered as expenses to be borne by the debtor administration or recognized private operating agency.

- 997                      **40-49**                      b) when a considerable variation occurs in the gold par rate or in the rate upon which conversion was based, the provisions indicated in No. 40-48 shall be applied, except when a rise or fall is caused by a revaluation or devaluation of the currency of the creditor country ;
- 998                      **40-50**                      c) in the case of delay in the despatch of a cheque or draft which has been delivered, or in the transmission to a bank of a transfer order, the debtor administration and/or recognized private operating agency shall bear any loss incurred as a result of such delay ; any unreasonable period<sup>1</sup> which may have elapsed between delivery by the bank and forwarding of the cheque or draft shall be considered as a delay ; if any gain is incurred as a result of such delay, one half shall be made good to the debtor administration or recognized private operating agency ;
- 998a                      **40-51**                      d) in any case provided for in Nos. 40-48 to 40-50, differences not exceeding five per cent shall be ignored ;
- 998b                      **40-52**                      e) the provisions of Nos. 40-42 to 40-46 shall be observed for the settlement of differences ; and the period of settlement shall begin from the date of receipt of the cheque or draft.
- 998c                      **40-53**                      (5) When the amount of the balance is more than 5,000 gold francs (five thousand), the date of the despatch of a cheque or a draft, the date of its purchase and its amount, or else the date of the transfer order and its amount, shall, upon a request by the creditor administration or recognized private operating agency, be notified by the debtor administration or recognized private operating agency by means of a service telegram.
- 998.1                      **40-50.1<sup>1</sup>** A period greater than four working days counted from the day of issue of the cheque or draft (but not including that day) until the day of forwarding of this cheque or draft.

**Section V. Period of Retention of Accounting Records**

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**40-54** § 23. (1) The originals of radiotelegrams and documents relating to radiotelegrams and radiotelephone calls retained by the administrations and/or recognized private operating agencies are held, with all necessary precautions from the point of view of secrecy, until the settlement of the relative accounts and, in any case, for at least six months counting from the month in which the accounts were sent.

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**40-55** (2) However, should an administration or recognized private operating agency deem it desirable to destroy such documents before the above-mentioned period, and hence is not in a position to carry out an inquiry in respect of the services for which it is responsible, such administration or recognized private operating agency shall bear all the consequences both as regards refund of charges and any difference in the accounts in question which might otherwise have been observed.

| Former reference                                 | Source   | New reference                                      |
|--|--|--|
| Chap.: XVI<br>Art.: 42 to 45<br>Nos.: 1000-1057h | Committee: 7<br>Doc. No.: 494, 574,<br>582 and 625 | Chap.: X<br>Art.: 41 to 44<br>Nos.: 41-01 to 44.33 |

## CHAPTER X

### Miscellaneous Stations and Services

#### ARTICLE 41

##### Amateur Stations

- |      |  |
|------|--|
| 1000 | <b>41-01</b> § 1. Radiocommunications between amateur stations of different countries shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radiocommunications.   |
| 1001 | <b>41-02</b> § 2. (1) When transmissions between amateur stations of different countries are permitted they shall be made in plain language and shall be limited to messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties. |
| 1002 | <b>41-03</b> (2) The preceding provisions may be modified by special arrangements between the administrations of the countries concerned.  |
| 1003 | <b>41-04</b> § 3. (1) Any person operating the apparatus of an amateur station shall have proved that he is able to send correctly by hand and to receive correctly by ear, texts in Morse code signals. Administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 144 Mc/s.  |
| 1004 | <b>41-05</b> (2) Administrations shall take such measures as they judge necessary to verify the technical qualifications of any person operating the apparatus of an amateur station.  |

- 1005           **41-06** § 4.       The maximum power of amateur stations shall be fixed  
by the administrations concerned, having regard to the technical  
qualifications of the operators and to the conditions under which  
these stations must work.
- 1006           **41-07** § 5. (1) All the general rules of the Convention and of the present  
Regulations shall apply to amateur stations. In particular, the  
emitted frequency shall be as stable and as free from spurious emis-  
sions as the state of technical development for such stations permits.
- 1007           **41-08**       (2) During the course of their transmissions amateur stations  
shall transmit their call sign at short intervals.

## ARTICLE 42

### Experimental Stations

- 1008           **42-01** § 1. (1) An experimental station may enter into communication  
with an experimental station of another country only after it has been  
authorized to do so by its administration. Each administration  
notifies other administrations concerned when such authorizations  
are issued.
- 1009           **42-02**       (2) The administrations concerned determine by special  
arrangement the conditions under which communications may be  
established.
- 1010           **42-03** § 2. (1) In experimental stations any person operating radio-  
telegraph apparatus, either on his own account or for another, must  
have proved his ability to transmit by hand and to receive by ear,  
texts in Morse code signals.
- 1011           **42-04**       (2) Administrations shall take such steps as they think  
necessary to verify the qualifications, from the technical point of  
view, of any person operating the apparatus of an experimental  
station.
- 1012           **42-05** § 3.       The administrations concerned shall fix the maximum  
power of experimental stations, having regard to the purpose for

which their establishment has been authorized and the conditions under which they are to work.

- 1013 **42-06** § 4. (1) All the general rules of the Convention, and these Regulations, apply to experimental stations. In particular, experimental stations must comply with the technical conditions imposed upon transmitters operating in the same frequency bands, except where the technical principles of the experiments prevent this.
- 1014 **42-07** (2) During their emissions, experimental stations must transmit, at short intervals, their call sign, or, in the case of stations not yet provided with a call sign, their name.
- 1015 **42-08** § 5. Where there is no risk of an experimental station causing harmful interference to a service of another country, the administration concerned may, if considered desirable, adopt different provisions from those contained in this Article.

## ARTICLE 43

### Radiodetermination Service

#### Section I. General Provisions

- 1016 **43-01** § 1. Administrations which have established a radiodetermination service shall take the necessary steps to ensure the effectiveness and regularity of that service; however they accept no responsibility for the consequences that might arise from the use of inaccurate information furnished, defective working, or failure of their stations.
- 1017 **43-02** § 2. In the case of doubtful or unreliable observations, the station taking the bearing or fixing the position shall, whenever possible, notify the station for which the information is being obtained of any such doubt or unreliability.

- 1018 **43-03** § 3. Administrations shall notify to the Secretary General the characteristics of each radiodetermination station providing an international service of value to the maritime mobile service and, if considered necessary, for each station or group of stations, the sectors in which the information furnished is normally reliable. This information is published in the list of stations, and the Secretary General shall be notified of any change of a permanent nature.
- 1019 **43-04** § 4. The method of identification of radiodetermination stations shall be so chosen as to avoid any doubt as to their identity.
- 1020 **43-05** § 5. Signals sent by radiodetermination stations shall be such as to permit accurate and precise measurements.
- 1021 **43-06** § 6. Any information concerning modification or irregularity of working of a radiodetermination station shall be notified without delay in the following manner :
- 1022 **43-07** a) Land stations of countries operating a radiodetermination service shall send out daily, if necessary, notices of modifications or irregularities in working until such time as normal working is restored or, if a permanent alteration has been made, until such time as it can reasonably be taken that all navigators interested have been warned.
- 1023 **43-08** b) Permanent alterations or irregularities of long duration shall be published as soon as possible in the relevant notices to navigators.
- 1024 **43-09** § 7. Where radiocommunication by telegraphy or telephony is part of a radiodetermination service, such communication shall be subject to the provisions of these Regulations.

## Section II. Radio Direction-finding Stations

- 1025 **43-10** § 8. (1) In the maritime radionavigation service the radiotelegraph frequency normally used for direction-finding is 410 kc/s. All direc-

tion-finding stations of the maritime radionavigation service using radiotelegraphy shall be able to use this frequency. They shall, in addition, be able to take bearings on 500 kc/s, especially for locating stations sending signals of distress, alarm and urgency.

- 1025a **43-11** (1a) Where a direction-finding service is provided in the authorized bands between 1 605 and 2 850 kc/s the direction-finding stations should be able to take bearings on the distress and calling frequency 2 182 kc/s.
- 1026 **43-12 § 9.** The procedure to be followed by radio direction-finding stations is given in Appendix 23.
- 1027 **43-13 § 10.** In the absence of prior arrangements, an aircraft station which calls a radio direction-finding station for a bearing shall use for this purpose a frequency on which the station called normally keeps watch.
- 1028 **43-14 § 11.** In the aeronautical radionavigation service, the procedure contemplated for radio direction-finding in this section is applicable, except where special procedures are in force as a result of arrangements concluded between the administrations concerned.

### Section III. Radiobeacon Stations

- 1029 **43-15 § 12.** When an administration thinks it desirable in the interests of navigation to organize a service of radiobeacon stations, it may use for this purpose :
- 1030 **43-16** a) radiobeacons properly so called, established on land or on ships permanently moored or, exceptionally, on ships navigating in a restricted area, the limits of which are known and published. The emissions of these radiobeacons may have either directional or non-directional patterns ;
- 1031 **43-17** b) fixed stations, coast stations or aeronautical stations designated to function as radiobeacons, at the request of mobile stations.



- 1032 **43-18** § 13. (1) Radiobeacons properly so called use the frequency bands which are available to them under Chapter II.
- 1032a **43-19** (1a) In Region 1 the power radiated by each radiobeacon properly so called shall be adjusted to the minimum necessary to produce the stipulated field strength at the limit of the range required.
- 1033 **43-20** (2) Other stations notified as radiobeacons use for this purpose their normal working frequency and their normal class of emission.

## ARTICLE 44

### Special Services

#### Section I. Meteorology

- 1034 **44-01** § 1. (1) Meteorological messages comprise :
- 1035 **44-02** a) messages addressed to meteorological services officially entrusted with weather forecasts, more specifically for the protection of maritime and air navigation ;
- 1036 **44-03** b) messages from these meteorological services intended specially for :
- 1037 **44-04** — ship stations ;
- 1038 **44-05** — protection of aircraft ;
- 1039 **44-06** — the public.
- 1040 **44-07** (2) The information contained in these messages may be :
- 1041 **44-08** a) observations taken at fixed times ;
- 1042 **44-09** b) warnings of dangerous phenomena ;
- 1043 **44-10** c) forecasts and warnings ;
- 1044 **44-11** d) statements of the general meteorological situation.
- 1045 **44-12** § 2. (1) The various national meteorological services mutually agree to prepare common transmission programmes so as to use the transmitters best situated to serve the regions concerned.

- 1046      **44-13**      (2) The meteorological observations contained in the classes mentioned in Nos. 44-02 to 44-05 are, in principle, drawn up in an international meteorological code, whether they are transmitted by or intended for mobile stations.
- 1047      **44-14 § 3.**      For observation messages intended for an official meteorological service, use shall be made of the facilities resulting from the allocation of exclusive frequencies to synoptic meteorology and the aeronautical meteorological service, in conformity with regional agreements made by the services concerned for the use of these frequencies.
- 1048      **44-15 § 4.** (1) Meteorological messages specially intended for all ship stations shall in principle be sent in accordance with a definite timetable, and, as far as possible, at times when they can be received by ship stations with only one operator. In radiotelegraphy the transmission speed shall not exceed 16 (sixteen) words a minute.
- 1049      **44-16**      (2) During the transmission "to all stations" of meteorological messages intended for stations of the maritime mobile service, all stations of this service whose transmissions might interfere with the reception of these messages, shall keep silent in order to permit all stations which desire to do so, to receive these messages.
- 1050      **44-17**      (3) Meteorological warning messages for the maritime mobile service shall be transmitted without delay. They shall be repeated at the end of the first silence period which follows (see Nos. 33-021 and 35-31) as well as at the end of the first silence periode which occurs in the working hours of a ship station having a single operator. They shall be preceded by the safety signal and sent on the appropriate frequencies (see No. 36-112).
- 1051      **44-18**      (4) In addition to the regular information services contemplated in the preceding sub-paragraphs, administrations shall take the necessary steps to ensure that certain stations shall, upon request, communicate meteorological messages to stations in the maritime mobile services.

- 1052           **44-19**       (5) The provisions of Nos. 44-15 to 44-18 are applicable to the aeronautical mobile service, insofar as they are not contrary to more detailed special arrangements which ensure at least equal protection to air navigation.
- 1053           **44-20** § 5. (1) Messages originating in mobile stations and containing information concerning the presence of cyclones shall be transmitted, with the least possible delay, to other mobile stations in the vicinity and to the appropriate authorities at the first point of the coast with which contact can be established. Their transmission is preceded by the safety signal.
- 1054           **44-21**       (2) Any mobile station may, for its own use, listen to messages containing meteorological observations sent out by other mobile stations, even those which are addressed to a national meteorological service.
- 1054a           **44-22**       (3) Stations of the mobile services which transmit meteorological observations addressed to a national meteorological service are not required to repeat them to other stations. However, the exchange between mobile stations, on request, of information relating to the state of the weather is authorized.

## Section II. Notices to Mariners

- 1055           **44-23** § 6.       The provisions of Nos. 44-15 to 44-19 shall apply to time signals and to notices to mariners.
- 1056           **44-24** § 7.       Messages containing information concerning the presence of dangerous ice, dangerous wrecks, or any other imminent danger to marine navigation, shall be transmitted as soon as possible to other ship stations in the vicinity, and to the appropriate authorities at the first point of the coast with which contact can be established. These transmissions shall be preceded by the safety signal.
- 1057           **44-25** § 8.       When thought desirable, and provided the sender agrees, administrations may authorize their land stations to communicate

information concerning maritime damage or casualties or information of general interest to navigation, to the marine information agencies approved by them and subject to the conditions fixed by them.

### Section III. Medical Advice

- 1057a **44-26** § 9. Mobile stations requiring medical advice may obtain it through any of the land stations shown as providing this service in the list of stations.
- 1057b **44-27** § 10. Radiotelegrams and radiotelephone calls concerning medical advice may be preceded by the appropriate urgency signal (see Nos. 36-100 to 36-108).

### Section IV. Standard Frequency and Time Signals

- 1057c **44-28** § 11. (1) To facilitate more efficient use of the radio frequency spectrum and to assist other technical and scientific activities, administrations should endeavour to provide, on a co-ordinated world-wide basis, a service of standard frequency and time signal transmissions. Attention should be given to the extension of this service to those areas of the world not adequately served.
- 1057d **44-29** (2) To this end, each administration shall take steps to co-ordinate with the assistance of the International Frequency Registration Board, any new standard frequency or time signal transmission or any change in existing transmissions in the standard frequency bands. For this purpose, administrations shall exchange between themselves, and furnish to the Board, all relevant information. On this matter the Board shall consult the Director of the C.C.I.R. who shall also continue to seek the advice and co-operation of the International Time Bureau (B.I.H.), U.R.S.I. and other international organizations having a direct and substantial interest in the subject.
- 1057e **44-30** (3) In so far as is practicable, a new frequency assignment in the standard frequency bands, should not be notified to the Board until appropriate co-ordination has been completed.

1057f

**44-31** § 12. Administrations shall co-operate in reducing interference in the standard frequency bands in accordance with the Recommendations of the C.C.I.R.

1057g

**44-32** § 13. Administrations which provide this service shall co-operate through the C.C.I.R. in the collation and distribution of the results of the measurements of standard frequencies and time signals, as well as details concerning adjustments to the frequencies and time signals.

1057h

**44-33** § 14. In selecting the technical characteristics of standard frequency and time signal transmissions, administrations shall be guided by the relevant C.C.I.R. Recommendations.

## Former reference

## Source

## New reference

Chap.: R.A.  
Art. : 1 to 12  
Nos. : 2001-2139

Committee: 7  
Doc. No.: 335

Chap.: R.A.  
Art. : 1-13  
Nos. : 2001-2162

## ADDITIONAL RADIO REGULATIONS

### ARTICLE 1

#### Application of the Telegraph and Telephone Regulations to Radiocommunications

- 2001      **2001** § 1.      The provisions of the Telegraph and Telephone Regulations and the Protocols annexed thereto are applicable to radiocommunications in so far as the provisions of the Radio Regulations do not provide otherwise.
- 2002      **2002** § 2.      (1) With the exceptions mentioned in the following articles, radiotelegrams are drawn up and treated in accordance with the provisions of the Telegraph Regulations for telegrams.
- 2003      **2003**            (2) The use of groups of letters from the International Code of Signals is permitted in radiotelegrams in the maritime mobile service.
- 2004      **2004** § 3.      Since the word **RADIO** or **AERADIO**, as the case may be, is always included in the list of stations and in the address of a radiotelegram, as part of the name of the land station, this word must not be given as a service indication at the beginning of the preamble in the transmission of a radiotelegram.

### ARTICLE 2

#### Address of Radiotelegrams

- 2005      **2005** § 1.      (1) The address of radiotelegrams destined for mobile stations must be as complete as possible and must include :
- 2006      **2006**            a) the name or the designation of the addressee, with supplementary particulars, if necessary ;
- 2007      **2007**            b) in the case of a ship station, the name of this station followed, when necessary, by its call sign, the latter separated from the name of the station by a fraction bar, as shown in the appropriate list of stations ;

- 2007a                      **2008**                      c) in the case of an aircraft station the call sign, as it appears in No. 2011 ;
- 2008                      **2009**                      d) the name of the land station through which the message is to be forwarded, as it appears in the appropriate list of stations.
- 2008a                      **2010**                      (2) If the ship does not appear in the appropriate list, the sender should, if possible, indicate the nationality and route followed by the ship.
- 2009                      **2011**                      (3) However, the name and call sign required under No. 2007 may be replaced, at the risk of the sender, by particulars of the passage made by such mobile station, indicated by the names of the ports or airports of departure and of destination, or by any equivalent indication.
- 2010                      **2012**                      (4) In the address, the name of the mobile station and that of the land station, written as they appear in the appropriate list of stations are, in all cases and irrespective of their length, each counted as one word.
- 2011                      **2013** § 2. (1) Mobile stations not supplied with the International List of Telegraph Offices may add to the name of the telegraph office of destination,
- the name of the territorial subdivision, or
  - the country of destination, or
  - both of the above,
- if it is doubtful whether, without such addition, the message could be correctly routed without difficulty.
- 2012                      **2014**                      (2) In that case the name of the telegraph office and the supplementary particulars are counted and charged for as a single word. The land station operator receiving the radiotelegram retains or deletes these particulars, or further amends the name of the office of destination as is necessary or sufficient for forwarding the radiotelegram to its proper destination.

## ARTICLE 3

**Time of Handing-in of Radiotelegrams**

- 2013      **2015** § 1. In the transmission of radiotelegrams originating in a mobile station, the date and time of handing-in at this station are given in the preamble.
- 2014      **2016** § 2. The time of handing-in is indicated in Greenwich mean time (G.M.T.) from 0 to 24 h. beginning at midnight, and is always expressed and transmitted by means of four figures (0001 to 2400).
- 2015      **2017** § 3. Administrations of countries situated outside Zone A (Appendix 12 to the Radio Regulations) may, however, authorize ship stations passing along the coasts of their countries to use zone time for giving, in a group of four figures, the time of handing-in. In that case the group must be followed by the letter F.

## ARTICLE 4

**Charges for Radiotelegrams****Section I. General. Full-rate Radiotelegrams**

- 2016      **2018** § 1. The charge for a radiotelegram originating in and/or intended for a mobile station comprises, according to circumstances :
- 2017      **2019**      a) the ship or aircraft charge or charges accruing to the mobile station of origin or destination, or to both of these stations ;
- 2018      **2020**      b) the land station charge accruing to the land station or stations (see No. 2028) which participate in the transmission ;
- 2019      **2021**      c) the charge for transmission over the general network of telecommunication channels, reckoned in accordance with the ordinary rules ;
- 2020      **2022**      d) the charges for accessory services requested by the sender.



- 2021 **2023** § 2. (1) The land station charge and the ship or aircraft charge, as well as the charge for transmission over the general network of telecommunication channels are fixed on the basis of a word rate; for each full-rate radiotelegram, however, a minimum charge for seven words shall be made.
- 2021a **2024** (2) In conformity with Article of the Convention the rate shall be expressed in gold francs. The rate shall be the same in the two directions for radiotelegrams transmitted over the same route.
- 2022 **2025** (3) The maximum land station charge is 0 fr. 60 (sixty centimes) per word; the maximum ship or aircraft charge is 0 fr. 40 (forty centimes) per word. Administrations shall notify to the Secretary General the rates fixed by them.
- 2023 **2026** (4) Each administration, however, reserves to itself the right to fix and authorize a land station charge higher than the maximum charge indicated in No. 2025 in the case of land stations which are exceptionally costly on account of their installation or working.
- 2025 **2027** § 3. (1) When a single land station is used as an intermediary between mobile stations, only one land station charge is collected. If the land station charge applicable to traffic with the mobile station of origin is different from that applicable to traffic with the mobile station of destination, the higher of these two charges is collected. In addition, a land telegraph charge may be collected equal to that indicated in No. 2030 as applicable to transmission over the telecommunication network.
- 2026 **2028** (2) When, at the request of the sender, two land stations are used as intermediaries between two mobile stations, the land station charge of each station is collected and also the telegraph charge for the section between the two stations.
- 2027 **2029** § 4. The retransmission service and charges are governed by Article 11 of these Regulations.
- 2028 **2030** § 5. In the case of radiotelegrams originating in or destined for a country which pass through land stations of that country, the telegraph charge per word applicable to the transmission over the internal telecommunication system of that country is notified in gold francs to the Secretary General by the administration to which the land stations are subject.

- 2030                    **2031** § 6.        Additional charges collected by offices of origin or mobile stations for multiple radiotelegrams (see No. 2115) and radiotelegrams to be delivered by post (direction ship or aircraft to land, see No. 2116) are the charges fixed by the Telegraph Regulations.
- 2031                    **2032** § 7.        The country on whose territory is established a land station serving as intermediary for the exchange of radiotelegrams between a mobile station and another country, is considered, as far as the application of telegraph charges is concerned, as the country of origin or destination of the radiotelegrams, and not as a transit country.
- 2032                    **2033** § 8. (1) For the purpose both of transmission and of international accounting, the word count of the office of origin is decisive in the case of radiotelegrams destined for mobile stations, and that of the mobile station of origin is decisive in the case of radiotelegrams originating in mobile stations.
- 2033                    **2034**            (2) Nevertheless, when a radiotelegram is expressed wholly or partly either :
- in one of the languages of the country of destination (in the case of radiotelegrams originating in mobile stations), or
- in one of the languages of the country to which the mobile station is subject (in the case of radiotelegrams destined for mobile stations),
- and when the radiotelegram contains combinations or alterations of words contrary to the usage of that language, the office or the mobile station of destination, as the case may be, has the right to recover from the addressee the amount of the charge not collected. Where payment is refused, the radiotelegram may be withheld.
- 2034                    **2035** § 9.        The total charge for radiotelegrams is collected from the sender, with the exception of :
- 2035                    **2036**            a) express charges to be collected on delivery (see No. 576 of the Telegraph Regulations) (Geneva Revision, 1958) ;

- 2035a                      **2037**                      b) charges applicable to radiotelegrams to be redirected at the request of the addressee as provided under No. 2122 (see Article 57 of the Telegraph Regulations) (Geneva Revision, 1958) ;
- 2036                      **2038**                      c) the charges applicable to inadmissible combinations or alterations of words, observed by the office or mobile station of destination (see No. 2034) which are collected from the addressee.
- 2037                      **2039** § 10.              Mobile stations must be acquainted with the tariffs necessary for charging for radiotelegrams. However, they are authorized, where necessary, to obtain such information from land stations ; rates furnished by land stations are expressed in gold francs.
- 2038                      **2040** § 11.              The land station or ship or aircraft station charges for radiotelegrams concerning stations not yet included in the appropriate list of stations are fixed, as part of its duties, by the office which collects the charge. The ship or aircraft station charges pertaining to radiotelegrams intended for mobile stations the names or call signs of which are replaced by the indication of the route followed or by any other equivalent indication (see No. 2011), are also fixed, as part of its duties, by the office which collects the charge. They are the normal rates notified by the administration in question or, in the absence of such notification, they are the maximum charges prescribed in No. 2025.
- 2039                      **2041** § 12. (1) No new rate and no modification, either general or of detail, relative to the tariff shall be effective for countries other than those which establish the new rate or rate modification until fifteen days after its notification by the Secretary General, excluding the day of despatch, and it shall not be applied until the first of the month following the expiration of this period.
- 2039a                      **2042**                      (2) If there are several notifications, the date of the first only is to be considered in reckoning the interval.
- 2039b                      **2043**                      (3) The interval of fifteen days shall be reduced to ten days for modifications intended to equalize rates with those already notified for competing routes.

- 2040                      **2044**            (4) Nevertheless, for radiotelegrams originating in mobile stations, modifications of tariffs are not applicable until a month after the periods laid down in No. 2041.
- 2041                      **2045**            (5) No exceptions shall be made to the provisions of Nos. 2041 to 2044.

## **Section II. Reduced-rate Radiotelegrams**

### *A. Radiotelegrams of Immediate General Interest*

- 2042                      **2046** § 13.    No charge for radio transmission in the mobile service is made for radiotelegrams of immediate general interest, which fall within the following classes :
- 2043                      **2047**            a) distress messages and replies thereto ;
- 2044                      **2048**            b) messages originating in mobile stations notifying the presence of icebergs, derelicts, mines and other dangers to navigation, or announcing cyclones and storms ;
- 2045                      **2049**            c) messages announcing unexpected phenomena threatening air navigation or the sudden occurrence of obstacles at airports ;
- 2046                      **2050**            d) messages originating in mobile stations notifying sudden changes in the position of buoys, the working of lighthouses, devices connected with buoyage, etc. ;
- 2047                      **2051**            e) service messages relating to the mobile service.

### *B. Radiotelegrams Relating to Medical Advice*

- 2047a                      **2052** § 14.    No charge for radio transmission is made for messages relating to medical advice exchanged direct between mobile stations and land stations which are shown in the List of Radio Determination and Stations as providing such a service. Such messages from mobile stations to any one of these land stations shall be addressed in accordance with the conditions indicated in this List.

*C. Meteorological Radiotelegrams*

- 2048                    **2053** § 15. (1) The term "meteorological radiotelegram" denotes a radiotelegram consisting solely of meteorological observations or meteorological forecasts, which is sent by an official meteorological service or by a station in official relation with such a service, and addressed to such a service or to such a station.
- 2049                    **2054**            (2) Meteorological radiotelegrams must bear the paid service indication = OBS = before the address. This paid service indication is the only one admitted.
- 2050                    **2055**            (3) If requested, the sender must affirm that the text of his radiotelegram complies with the above conditions.
- 2051                    **2056** § 16. (1) Land station and ship or aircraft station charges applicable to meteorological radiotelegrams are reduced by at least 50 per cent in all relations. The minimum number of chargeable words in meteorological radiotelegrams shall be fixed at seven.
- 2052                    **2057**            (2) For land stations, the date on which this provision is put into force is fixed by agreement between the administrations and operating companies on the one hand, and the official meteorological services concerned on the other hand.

*D. Press Radiotelegrams*

- 2056a                   **2058** § 17.    The minimum number of chargeable words for press radiotelegrams shall be fixed at fourteen.
- 2057                    **2059** § 18. (1) The land station and ship or aircraft charges are reduced by 50 per cent for press radiotelegrams originating in a ship or aircraft station and destined for places on land. These radiotelegrams are subject to the conditions of acceptance laid down in Articles 65 to 69 of the Telegraph Regulations (Geneva Revision, 1958). For those radiotelegrams which are addressed to a destination in the country of the land station, the telegraph charge to be collected is one-half of the telegraph charge applicable to an ordinary radiotelegram.
- 2058                    **2060**            (2) Press radiotelegrams destined for a country other than that of the land station are subject to the press rate in force between the country of the land station and the country of destination.

*E. Radiotelegrams concerning Persons Protected in Time of War  
by the Geneva Conventions of 12 August, 1949*

- 2058a      **2061** § 19. (1) Radiotelegrams concerning persons protected in time of war by the Geneva Conventions of 12 August, 1949, are accepted under the conditions specified in Article 64 of the Telegraph Regulations (Geneva Revision, 1958) and shall bear the paid service indication = RCT = placed before the address.
- 2058b      **2062**      (2) The land station charge and the ship or aircraft station charge for radiotelegrams bearing the paid service indication = RCT = shall be decreased in the same proportion as the charge for transmission on the general network of telecommunication channels (see Nos. 646 and 647 of the Telegraph Regulations) (Geneva Revision, 1958).

ARTICLE 5

**Charges for Radiotelephone Calls in the Maritime  
and Aeronautical Mobile Service**

**Section I. Mobile Station Charge, Land Station Charge, Land-line Charge**

- 2058ca      **2063** § 1.      Unless special arrangements between the administrations and/or the recognized private operating agencies concerned are in effect, the following rules shall be applied as regards charging for radiotelephone calls in the maritime and aeronautical mobile services.
- 2058cb      **2064** § 2.      The charge for a radiotelephone call originating in and/or intended for a mobile station comprises, according to circumstances :
- 2058cc      **2065**      a) the mobile station charge or charges accruing to the mobile station of origin or destination, or to both of these stations ;
- 2058cd      **2066**      b) the land station charge or charges accruing to the land station or land stations which participate in the transmission ;
- 2058ce      **2067**      c) the land-line charge or charges, i.e., the appropriate charge for transmission over the general network of telecommunication channels ;

- 2058cf                    **2068**                    d) the charges for accessory services requested by the person who booked the call (see Section II).
- 2058cg                    **2069** § 3. (1) The charge for a radiotelephone call is fixed on a time basis. Calls of a duration of three minutes or less are charged as for three minutes. In the case of calls whose duration exceeds three minutes, a charge per minute is made for the period in excess of three minutes, any fraction of a minute being charged as for one minute. The charge per minute is one-third of the charge for three minutes.
- 2058ch                    **2070**                    (2) The mobile station charge will in principle be the same for ship stations and aircraft stations of the same nationality under like conditions of installation and working.
- 2058ci                    **2071**                    (3) Administrations shall notify the Secretary General of the rates fixed by them.
- 2058cj                    **2072** § 4. (1) When a single land station is used as an intermediary for a radiotelephone call between two mobile stations, only one land station charge is collected. If the land station charge applicable to traffic with the mobile station booking the radiotelephone call is different from that applicable to traffic with the mobile station called, the higher of these two charges is collected.
- 2058ck                    **2073**                    (2) When at the request of the person booking the radiotelephone call, two land stations are used as intermediaries for a radiotelephone call between two mobile stations, the appropriate land station charge of each station is collected and also the land-line charge between the two land stations.
- 2058cl                    **2074** § 5. (1) When handled through a land station the chargeable duration of a radiotelephone call will be fixed at the end of the call by the land station; if two land stations are participating in the handling of the radiotelephone call, the opinion of that land station will prevail which has accepted the call from the originating mobile station. The decision of this land station will also be valid for international accounting.
- 2058cm                    **2075**                    (2) The chargeable duration of a radiotelephone call between two mobile stations in direct communication with each other will be fixed by the mobile station in which the call originates.

- 2058cn      **2076** § 6. (1) When, through any fault of the service, the booking of a radiotelephone call is not followed by the calling and called stations being placed in communication, no charge shall be payable. If the amount of the charge has been paid, it shall be refunded.
- 2058co MOD      **2077** (2) When, through any fault of the service, the correspondents experience difficulty in the course of a radiotelephone conversation, the chargeable duration of the call shall be reduced to the total time during which speech conditions have been satisfactory.
- 2058cp      **2078** § 7. (1) When after onward transmission of the booking particulars of a radiotelephone call, it is cancelled at the request of the person booking the call, or when a correspondent refuses to accept a call, or when the caller does not answer the call though his station is not engaged, or when the caller has become unavailable a report charge will be collected.
- 2058cq      **2079** (2) The report charge will be not more than one-third of the charge for an ordinary radiotelephone call of three minutes' duration between the two stations concerned.
- 2058cr      **2080** § 8. The total charge for a radiotelephone call is collected from the calling station with the exception of collect calls (if collect calls are admitted). For collect calls, the charge shall be payable by the called subscriber.
- 2058cs      **2081** § 9. Mobile stations must be acquainted with the tariffs applicable to radiotelephone calls. However, they are authorized, where necessary, to obtain such information from land stations; rates furnished by land stations are expressed in gold francs, or in any other currency by special arrangement between the respective administrations and/or recognized private operating agencies of the mobile and land stations.
- 2058ct      **2082** § 10. The rules prescribed in Nos. 2041 to 2044 shall be applied as regards the interval before the application of new rates.

## Section II. Supplementary Charge

- 2058cu      **2083** § 11. Unless special arrangements between the administrations and/or the recognized private operating agencies concerned are in



effect, the following supplementary charges for préavis calls, avis d'appel calls, and collect calls, if admitted, shall be applied.

- 2058cv **2084** § 12. (1) The charge for a préavis call (from ship or aircraft to land), a call with avis d'appel (from ship or aircraft to land) and a collect call, shall be the same as that for an ordinary call of the same duration, with the addition of a supplementary charge equal to one-third of the charge for a radiotelephone call of three minutes' duration, between the two stations concerned.
- 2058cw **2085** (2) The préavis charge or avis d'appel charge is payable when the mobile station with which the call is booked transmits the particulars of this booking. This charge is, however, not collected, when because of a fault of the service, the call is not established or the station wanted has not been advised.
- 2058cx **2086** (3) The caller will, however, be required to pay the supplementary charge for a collect call if the called subscriber refuses to pay for the call and the call is not established.
- 2058cy **2087** (4) When the booking of a radiotelephone call which is liable to the payment of a supplementary charge (for example, a collect call) is accompanied by a préavis or an avis d'appel, only one supplementary charge shall be collected.

## ARTICLE 6

### Radiomaritime Letters and Radio Air Letters

- 2059 **2088** § 1. Each administration may organize a service of radio-maritime letters between ships at sea and its coast stations, and radio air letters between aircraft in flight and its land stations. Such correspondence is transmitted by radio between the ships or aircraft and the land stations. They may be forwarded on the land section :
- 2060 **2089** a) wholly or partly by post (ordinary or airmail) ;

- 2061                      **2090**                      b) exceptionally by telegraph, in which case delivery is subject to the periods of delay fixed for letter telegrams of the European or extra-European systems.
- 2062                      **2091** § 2.                      Radio retransmission of radiomaritime letters and radio air letters is not permitted in the mobile service.
- 2063                      **2092** § 3.                      Radiomaritime letters and radio air letters must be exchanged only with places in the country in which the land station is situated, unless other arrangements have been made with the administrations concerned. In that event, an additional charge may be collected in accordance with the agreement between these administrations.
- 2064                      **2093** § 4.                      Radiomaritime letters bear the paid service indication = SLT = and radio air letters the paid service indication = ALT =. These indications precede the address.
- 2065                      **2094** § 5. (1) Other paid service indications which may be admitted are :  
=RPx=, =PR=, =GP=, =GPR=, =PAV=, =PAVR=.
- 2066 (MOD)                      **2095**                      (2) Where the transmission over the land section is performed exceptionally by telegraph, the only paid service indications which may be admitted are :  
=RPx=, =GP=, =TR=, =LX=, =LXDEUIL=, =Réexpédié de x=.
- 2067                      **2096** § 6.                      The address must enable delivery to be effected without inquiry or requests for information. Registered or abbreviated addresses are admitted when, exceptionally, radiomaritime letters and radio air letters are forwarded telegraphically on the land section.
- 2068                      **2097** § 7.                      As a general rule, the text is subject to the regulations applicable to letter telegrams (see Article 70 of the Telegraph Regulations, Geneva Revision, 1958).

- 2073 **2098** § 8. (1) The ship or aircraft station charge for radiomaritime letters and radio air letters shall be 2 fr. 75 up to 22 words. For each word in excess of 22 : 0 fr. 125.
- 2074 **2099** (2) The land station charge up to 22 words and the charge per word in excess shall be determined by the administrations concerned subject to a maximum of 4 fr. 40 for the first and 0 fr. 20 for the second. The land station charge shall include the postal charge (by ordinary letter) due for routing in the country to which the land station is subject.
- 2075 **2100** (3) The following charges are added where applicable :
- 2076 **2101** — charges due for authorized accessory services and, if necessary, the further charge mentioned in No. 2092.
- 2077 **2102** — the telegraph charge when transmission on the land section is exceptionally by telegraph.
- 2078 **2103** § 9. Radiomaritime letters and radio air letters rank for radio transmission after ordinary radiotelegrams on hand. Those which have not been transmitted within 24 hours of handing-in are sent concurrently with ordinary radiotelegrams.
- 2079 **2104** § 10. The normal rules of accounting as regards radiocommunications are applicable to radiomaritime letters and to radio air letters, in accordance with the provisions of Nos. 2098 and 2099.
- 2080 **2105** § 11. (1) When a radiomaritime letter or a radio air letter fails to reach its destination due to the failure of the postal service, only the charges in respect to the services not carried out are refunded.
- 2081 **2106** (2) Reimbursement of charges is admitted when, through the fault of the telegraph or radiotelegraph service, a radiomaritime or radio air letter has not reached its destination, as well as in the cases provided for in Nos. 911, 912 and 913 of the Telegraph Regulations (Geneva Revision, 1958).

## ARTICLE 7

**Special Radiotelegrams ; Paid Service Indications**

- |      |             |   |
|------|-------------|---|
| 2082 | <b>2107</b> | § 1. The following special radiotelegrams are admitted provided the administrations concerned accept them :   |
| 2083 | <b>2108</b> | a) Press radiotelegrams originating in mobile stations and destined for the land.   |
| 2084 | <b>2109</b> | b) Meteorological radiotelegrams (= OBS =).   |
| 2086 | <b>2110</b> | c) Paid service advices. These are forwarded, as far as practicable, by the same route as that of the original radiotelegram. In the case of diversion (for example, in case of interruption or where the mobile station proceeds beyond the service area of the land station which has acted as intermediary for the transmission of the original radiotelegram) they bear the indication "délié" and particulars of the route followed by the original radiotelegram. |
| 2087 | <b>2111</b> | d) Urgent radiotelegrams, but only over the general network of telecommunication channels.  |
| 2088 | <b>2112</b> | e) Radiotelegrams with prepaid reply. The reply voucher issued on board a mobile station gives the right to send up to its value a radiotelegram to any destination, but only from the mobile station which issued the voucher. When the charge for a radiotelegram paid for by voucher exceeds the value of the voucher, the excess charge must be paid by the sender using the voucher.   |
| 2089 | <b>2113</b> | f) Radiotelegrams with collation.   |
| 2090 | <b>2114</b> | g) Radiotelegrams with notification of delivery destined for mobile stations, but only as far as concerns the notification to the telegraph office of origin of the   |

- date and time at which the land station has transmitted the radiotelegram to the mobile station of destination.
- 2091 **2115** *h)* Multiple radiotelegrams.
- 2092 **2116** *i)* Radiotelegrams to be delivered by express or by post (from ship or aircraft to land).
- 2093 **2117** *j)* De luxe radiotelegrams (subject to the conditions laid down in the Telegraph Regulations, Article 60) (Geneva Revision, 1958).
- 2094 **2118** *k)* Radiotelegrams to be retransmitted by one or two mobile stations at the sender's request (= RM =).
- 2095 **2119** *l)* Radiomaritime letters and radio air letters.
- 2095a **2120** *m)* Radiotelegrams concerning persons protected in time of war by the Geneva Conventions of August 12, 1949 (= RCT =).
- 2096 **2121** *n)* Radiotelegrams to be delivered to the addressee in person.
- 2098 **2122** § 2. In addition, the following paid service indications shall be permitted in radiotelegrams: = GP =, = GPR =, = TR =, = TFX = (from ship or aircraft to land), = TLXx = (from ship or aircraft to land), = Jx = (from land to ship or aircraft), = Réexpédié de x = (only when the charge for forwarding can be collected), = Jour =, = Nuit =, = Etat Priorité Nations =, = Etat Priorité =, = Etat =, = Remettre x = (from ship or aircraft to land).
- 2099 **2123** § 3. Radiotelegrams are not admitted as letter telegrams. Radiotelegrams to follow the addressee at the request of the sender are also not admitted.

## ARTICLE 8

### Period of Retention of Radiotelegrams at Land Stations

#### Section I. Radiotelegrams Destined for Ships at Sea

- 2100 **2124** § 1. (1) The sender of a radiotelegram destined for a ship at sea may specify the number of days during which the coast station may hold the radiotelegram.

- 2101           **2125**       (2) In that case, the sender writes before the address the paid service indication = Jx = (x days) specifying the number of days (ten at the most) exclusive of the day of handing-in of the radiotelegram.
- 2102           **2126** § 2.       When it has not been possible for a land station to transmit to a ship station
- a) a radiotelegram bearing the paid service indication = Jx = within the prescribed period, or
- b) a radiotelegram not bearing this service indication within a period of three days following the date of handing-in,
- the coast station informs the office of origin, which notifies the sender. The sender of the radiotelegram may then ask, by paid service advice, addressed to the coast station, either that his radiotelegram be cancelled as regards the section between the coast station and the ship station or that further attempts at transmitting it to the ship station be made during a period of another seven days at the most. Failing such a request, the radiotelegram is treated as undelivered by the coast station three days after the dispatch of the advice of non-transmission. The office of origin shall be immediately advised, if the coast station transmits the radiotelegram during the last-mentioned period of three days. The same shall apply, if the coast station transmits the radiotelegram during the additional period which may have been requested by the sender.
- 2104           **2127** § 3.       On the morning of the day following that day on which a radiotelegram to a ship station is treated as undelivered by the coast station, the latter shall advise the office of origin which notifies the sender. The coast station and ship station charges, and the charges for the special services not performed may be refunded to the sender.
- 2105           **2128** § 4.       The periods mentioned in No. 2126 shall be ignored if the coast station is sure that the ship station will soon come within its service area.
- 2106           **2129** § 5. (1) On the other hand, the lapse of those periods is not awaited when the coast station is sure that the ship station being in course of a voyage either has definitely left its service area or will not enter it.

If there is reason to believe that no other coast station of the administration or of the private enterprise to which it is subject is or will be in touch with it, the coast station cancels the radiotelegram as far as concerns the section between itself and the ship station and informs the office of origin which notifies the sender. In the contrary case, the coast station forwards the radiotelegram to the coast station believed to be in touch with the ship station, provided, however, that no additional charge results therefrom.

2107

**2130** (2) The coast station which carries out the redirection by wire alters the address of the radiotelegram by placing after the name of the ship station that of the new coast station charged with the transmission and inserting at the end of the preamble the service instruction "redirected from x Radio" which must be transmitted throughout the course of the radiotelegram.

2108

**2131** (3) If, within the limits of the requisite period of retention of radiotelegrams, the coast station which has redirected a radiotelegram to another coast station is subsequently in a position to transmit the radiotelegram direct to the mobile station of destination, it does so by inserting the service instruction "ampliation" before the preamble. It shall then transmit to the coast station to which the radiotelegram had been redirected a service notice informing the latter of the transmission of the said radiotelegram.

2109

**2132** § 6. When a radiotelegram cannot be transmitted to a ship station owing to the arrival of the latter in a port near the coast station, the latter station may, according to circumstances, forward the radiotelegram to the ship station by other means of communication, at the same time informing the office of origin by service advice of the delivery. In this case the coast station charge is retained by the administration to which the coast station is subject and the ship charge is refunded to the sender by the administration to which the office of origin is subject.

## **Section II. Radiotelegrams Destined for Aircraft Stations in Flight**

2110

**2133** § 7. (1) Radiotelegrams intended for aircraft in flight must be sent by land stations with the least possible delay. When the land station

is certain that the aircraft station cannot be reached, it immediately informs the office of origin by service advice, so that the land station and aircraft station charges, and any charges for special services not performed, may be refunded to the sender.

- 2111                    **2134**            (2) When, however, a radiotelegram cannot be transmitted to an aircraft station due to the latter's arrival at an airport (other than that where the land station is situated) and if the stay of the aircraft is prolonged, the land station may, if necessary, forward the radiotelegram to the aircraft station by other means of communication, and advise the office of origin of this transmission by a service message. In this case, the land station charge is retained by the administration to which the land station belongs, and the aircraft station charge is refunded to the sender by the administration to which the office of origin is subject.
- 2112                    **2135**            (3) The radiotelegram may be delivered to the aircraft station at the airport station where the land station, which should have made the transmission, is situated.
- 2113                    **2136**            (4) In this case, the land station notifies the office of origin of this delivery by service advice, and the office of origin refunds the land station and aircraft station charges to the sender.

## ARTICLE 9

### **Doubtful Reception. Transmission by "Ampliation"**

#### **Long-distance Radiocommunications**

- 2114                    **2137** § 1. (1) In the mobile service, when communication becomes difficult, the two stations in communication make every effort to complete the radiotelegram in course of transmission. The receiving station may request not more than two repetitions of a radiotelegram of which the reception is doubtful. If this triple transmission is ineffective, the radiotelegram is kept on hand in case a favourable opportunity for completing its transmission occurs.
- 2115                    **2138**            (2) If the transmitting station considers that it will not be possible to re-establish communication with the receiving station within twenty-four hours, it proceeds as follows :





- subject, it may, if no additional charge is incurred thereby, forward the radiotelegram to this other land station.
- 2123      **2146** § 4. (1) A station of the mobile service which has received a radiotelegram and has been unable to acknowledge its receipt in the usual way, must take the first favourable opportunity to give such acknowledgment.
- 2124      **2147**      (2) When the acknowledgment of receipt of a radiotelegram transmitted between a mobile station and a land station cannot be given direct, it is forwarded through another mobile or land station by service advice if the latter is able to communicate with the station which has transmitted the radiotelegram in question. In any case, no additional charge must result.
- 2125      **2148** § 5. (1) Administrations reserve the right to organize a long-distance radiocommunication service between land stations and mobile stations, with deferred acknowledgment of receipt or without any acknowledgment of receipt.
- 2126      **2149**      (2) When there is doubt about the accuracy of any part of a radiotelegram transmitted under either of these systems, the indication "doubtful reception" is entered on the copy delivered to the addressee, and the doubtful words or groups of words are underlined. If words are missing, blanks are left in the places where these words should be.
- 2127      **2150**      (3) In the long-distance radiocommunication service with deferred acknowledgment of receipt, when the transmitting land station has not, within a period of 5 days, received the acknowledgment of receipt of a radiotelegram sent by it, the station notifies the office of origin. The reimbursement of the land station and ship or aircraft station charges must be postponed until the office of origin has ascertained from the land station in question that an acknowledgment of receipt has not been received subsequently, within a period not exceeding one month.
- 2128      **2151**      (4) Each administration designates the long-distance land station or stations for which its mobile stations keep watch.

## ARTICLE 10

**Retransmission by Mobile Stations****Section I. Retransmission at the Request of the Sender**

- 2129                    **2152** § 1.      Mobile stations must if the sender so requests serve as intermediaries for the exchange of radiotelegrams originated in or destined for other stations of the mobile service; the number of intermediary mobile stations is, however, limited to two.
- 2130                    **2153** § 2.      Radiotelegrams forwarded as described in No. 2152 above must bear, before the address, the paid service indication = RM = (retransmission).
- 2131                    **2154** § 3.      The transit charge, whether two intermediary stations are concerned or only one, is fixed uniformly at o fr. 40 (forty centimes) per word, with the collection of a minimum charge for seven words. When two mobile stations have participated this charge is divided equally between them.

**Section II. Routine Retransmission**

- 2132                    **2155** § 4. (1) When a land station cannot reach the mobile station for which a radiotelegram is destined and no payment for retransmission of the radiotelegram has been deposited by the sender, the land station may, in order to forward the radiotelegram to its destination, have recourse to the help of another mobile station provided that the latter consents. The radiotelegram is then transmitted to this other mobile station. The help of the latter is given free of charge.
- 2133                    **2156**          (2) The same provision is also applicable to traffic from mobile stations to land stations, when necessary.
- 2134                    **2157**          (3) The station assisting in the free retransmission in accordance with the provisions of Nos. 2155 and 2156 must enter the service abbreviation QSP . . . . . (name of the mobile station) in the preamble of the radiotelegram.

2135

**2158** (4) In order that a radiotelegram thus forwarded may be considered as having reached its destination, the station which has made use of this indirect route must have obtained the regular acknowledgment of receipt, either direct or by an indirect route, from the mobile station for which the radiotelegram was destined or from the land station to which it was to be forwarded, as the case may be.

## ARTICLE 11

### Advice of Non-Delivery

2136

**2159** § 1. When, for any reason, a radiotelegram originating in a mobile station and destined for a place on land cannot be delivered to the addressee, an advice of non-delivery is addressed to the land station which received the radiotelegram. After checking the address, the land station forwards the advice, when possible, to the mobile station, if necessary, by way of another land station of the same country or of a neighbouring country, as far as existing conditions or special agreements permit.

2137

**2160** § 2. When a radiotelegram received at a mobile station cannot be delivered, that station so informs the office or mobile station of origin by a service advice. In the case of a radiotelegram originating on land, this service advice is sent, whenever possible, to the land station through which the radiotelegram passed or, if necessary, to another land station of the same country or of a neighbouring country, as far as existing conditions or special agreements permit.

## ARTICLE 12

### Radiotelegrams Originating in or Destined for Aircraft

2138

**2161** In the absence of special arrangements the provisions of the Additional Radio Regulations are applicable generally to public correspondence radiotelegrams originating in or destined for aircraft.

## ARTICLE 13

**Radiocommunications for Multiple Destinations**

- 2139                    **2162**                    Radiocommunications for multiple destinations shall be carried on in accordance with the provisions of the Telegraph Regulations.

## ARTICLE 14

**Effective Date of the Additional Radio Regulations**

- 2140                    **2163**                    These Additional Radio Regulations shall come into force on first January, 1961.
- 2141                    **2164**                    In witness whereof the delegates of the following countries, represented at the Administrative Radio Conference of Geneva, 1959, have signed in the names of their respective Administrations, Members of the Union the present Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to every Administration, Member of the Union.

Done at Geneva, the 21st of December 1959.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 859-E  
11 December, 1959

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PLENARY MEETING

A G E N D A

Twenty-third Plenary Meeting

Saturday, 12 December, 1959 at 10 a.m.

1. Eighteenth series of texts submitted by the Drafting Committee (Document No. 803).
2. Proposal No. 5574 (Document No. 807).
3. Approval of the Minutes of the Fourteenth Plenary Meeting (Document No. 821).
4. Letter addressed to the Secretary-General by the Delegation of the Kingdom of Morocco (Document No. 806).
5. Miscellaneous.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 860-E  
11 December, 1959

## PLENARY MEETING

### Memorandum by the Secretariat

#### COMPOSITION OF THE NEW INTERNATIONAL FREQUENCY REGISTRATION BOARD

##### Region A (The Americas) - 3 seats :

Argentine Republic - Mr. Fioravanti Dellamula  
Cuba - Mr. Alfonso Hernandez-Cata  
United States of America - Mr. John H. Gayer

##### Region B (Western Europe) - 2 seats :

France - Mr. René Petit  
United Kingdom of Great Britain and Northern Ireland -  
- Mr. John A. Gracie

##### Region C (Eastern Europe and Northern Asia) - 2 seats:

Poland (People's Republic of) - Mr. Mieczyslaw Flisak  
Union of Soviet Socialist Republics - Mr. Nicolai  
Ivanovich Krasnosselski

##### Region D (Africa) - 1 seat :

Union of South Africa and Territory of South West Africa  
- Mr. Noel Roberts

##### Region E (Asia and Australasia) - 3 seats :

China - Mr. Tai-Kuang Wang  
Japan - Mr. Shin-Ichi Hase  
Pakistan - Mr. M.N. Mirza

E

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 861-E  
12 December, 1959**

**SERIES 23 and last.**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source              | Document No.                       | Reference                    | Page           | Remarks |
|---------------------|------------------------------------|------------------------------|----------------|---------|
| Com. 4, 5, 6, 7     | 593, 595, 631,<br>654, 685 and 838 | Act 9                        | 23—01          |         |
| Com. 5 and 8        | DT 865                             | Act 47                       | 23—12          |         |
| Com. 7              | 614                                | Appendix 10                  | 23—13          |         |
| Com. 7              | 808                                | Recommendation               | 23—15          |         |
| Com. 4              | 653                                | Recommendation               | 23—16          |         |
| Com. 7              | 775                                | Resolution                   | 23—17          |         |
| Com. 4              | 774                                | Resolution<br>Recommendation | 23—20<br>23—25 |         |
| Com. 5              | 685                                | Recommendation               | 23—28          |         |
| Plenary<br>Assembly | 807                                | Recommendation               | 23—29          |         |
|                     |                                    | Appendix 16                  | 23—30          |         |





## Former reference

Chap.: III  
Art.: 9  
Nos.: 242-283

## Source

Committee: 4, 5, 6, 7  
Doc. Nos.: 593, 595,  
631, 654, 685  
and 838

## New reference

Chap.:  
Art.:  
Nos.:

## ARTICLE 9

Title NOC

**Special Rules Relating to Particular Services**

Title NOC

**Section I. Broadcasting Service**

242 NOC

**1. General**

242a ADD

(0) The establishment and use of broadcasting stations (sound broadcasting and television broadcasting stations) on board ships, aircraft or any other floating or airborne objects outside national territories is prohibited.

243 MOD

(1) In principle, except in the frequency band 3 900-4 000 kc/s, broadcasting stations using frequencies below 5 060 kc/s or above 41 Mc/s shall not employ power exceeding that necessary to maintain economically an effective national service of good quality within the frontiers of the country concerned.

244 (MOD)

(2) The use by the broadcasting service of the bands listed below is restricted to the Tropical Zone as defined in No. 252 :

2 300 - 2 498 kc/s (Region 1)  
2 300 - 2 495 kc/s (Regions 2 and 3)  
3 200 - 3 400 kc/s (All Regions)  
4 750 - 4 995 kc/s (All Regions)  
5 005 - 5 060 kc/s (All Regions)

245 to  
249 SUP  
and  
245.1 SUP

250 NOC

**§ 3. Broadcasting in the Tropical Zone**

251 MOD

(1) In these Regulations, the expression "broadcasting in the Tropical Zone" indicates a type of broadcasting for internal national use in countries in the zone defined in No. 107a, where it may be shown that because of the difficulty of high atmospheric noise level

252 SUP  
(see 107b)

253\* (MOD)

253a\* ADD

254 (MOD)

2540a ADD

Title NOC

256 (MOD)

257 (MOD)

and propagation it is not possible to provide economically a more satisfactory service by using low, medium, or very high frequencies.

(3) Within the Tropical Zone, the broadcasting service has priority over the other services with which it shares the bands listed in No. 244.

(3a) However, in that part of Libya north of parallel 30° North the broadcasting service in the bands listed in No. 244 has equal rights to operate with all services in the Tropical Zone with which it shares these bands.

(4) The broadcasting service operating inside the Tropical Zone, and other services operating outside the Zone, are subject to the provisions of No. 90.

4(a) In Region 2, before putting into operation broadcasting stations in the Tropical Zone, the administrations responsible for such stations will conclude special arrangements with administrations of interested countries within and outside the Tropical Zone, whenever there is a possibility of harmful interference to the broadcasting service or the other services involved.

## Section II. Aeronautical Mobile Service

§ 3a. Frequencies in any band allocated to the aeronautical mobile (R) service are reserved for communications between any aircraft and those aeronautical station primarily concerned with the safety and regularity of flight along national or international civil air routes.

§ 3b. Frequencies in any band allocated to the aeronautical mobile (OR) service are reserved for communications between any

\* Committee 8 considers that these provisions should be transferred as footnotes to the Table at the appropriate places.

aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.

257a ADD

§ 3c. Frequencies in the bands allocated to the aeronautical mobile service between 2 850 and 18 030 kc/s (see Article 5) shall be assigned in conformity with the provisions of Appendix 16a and the other relevant provisions of these Regulations.

255 MOD

§ 4. Administrations shall not permit public correspondence in the frequency bands allocated exclusively to the aeronautical mobile service, unless permitted by special aeronautical regulations adopted by a Conference of the Union to which all interested Members and Associate Members of the Union are invited. Such regulations shall recognize the absolute priority of safety and control messages.

Title SUP

258 SUP

259 SUP

260 SUP

261 SUP

### Section III.

Title ADD

#### Section IIIa. Aeronautical Radiobeacons

261a ADD

§ 4a (1) The assignment of frequencies to aeronautical radiobeacons operating in the bands between 160 and 415 kc/s shall be based on a protection ratio against interference of at least 10db for each beacon throughout its service area.

261b ADD

(2) It is agreed that, to provide the protection ratio required, the radiated power is to be kept to the minimum necessary to give the desired field strength at the service range.

261c ADD

(3) The daylight range of radiobeacons referred to in No. 261a shall be based on the following field strengths :

261d ADD

*(4) Regions 1 and 2*

- 70 microvolts per metre for radiobeacons north of 30°N.
- 120 microvolts per metre for radiobeacons between 30°N and 30°S.
- 70 microvolts per metre for radiobeacons south of 30°S.

261e ADD

*(5) Region 3*

- 70 microvolts per metre for radiobeacons north of 40°N.
- 120 microvolts per metre for radiobeacons between 40°N and 50°S.
- 120 microvolts per metre for radiobeacons south of 50°S.

Title NOC

**Section IV. Maritime Mobile Service**

262 MOD

§ 8. (1) Except as provided in No. 238, ship stations authorized to work in the bands between 415 and 535 kc/s shall transmit on the frequencies indicated in Article 33 (see No. 730).

2620a ADD

(1a) In the band 405 - 415 kc/s in Region 1, no frequency is assigned to coast stations, in order to protect the frequency 410 kc/s which is designated for the maritime radionavigation service (radio direction-finding).

262a ADD

(2) In the African Area of Region 1, in the bands 415 - 490 kc/s and 510 - 525 kc/s, the separation between adjacent channels used by coast stations is, as a general rule, 3 kc/s. However, in order that the channels may coincide with those used in the European Area in these bands this spacing is reduced in certain cases.

262b ADD

(3) The separation between adjacent channels used respectively by coast stations and by ship stations is 4 kc/s.

262c ADD

§ 8. (1) In Region 1, frequencies assigned to stations of the maritime mobile service, operating in the bands between 1 605 and 3 800 kc/s (see Article 5) should, whenever possible, be in accordance with the following sub-division :

1 605 - 1 625 kc/s : Radio telegraphy exclusively.

1 625 - 1 670 kc/s : Low-power radio telephony.

1 670 - 1 950 kc/s : Coast stations.

1 950 - 2 045 kc/s : Ship stations working to coast stations.

2 065 - 2 170 kc/s : Ship stations working to coast stations.

2 170 - 2 194 kc/s : *Guard-band for the distress frequency*  
2 182 kc/s.

2 194 - 2 440 kc/s : Intership working.

2 440 - 2 578 kc/s : Ship stations working to coast stations.

2 578 - 2 850 kc/s : Coast stations.

3 155 - 3 340 kc/s : Ship stations working to coast stations.

3 340 - 3 400 kc/s : Intership working.

3 500 - 3 600 kc/s : Intership working.

3 600 - 3 800 kc/s : Coast stations.

262d ADD

(2) In these bands, the frequencies assigned to the maritime mobile service are spaced, as far as possible by :

7 kc/s when two adjacent frequencies are used for radio telephony ;

3 kc/s when two adjacent frequencies are used for radio telegraphy ;

5 kc/s when one frequency is used for radio telephony and the adjacent frequency is used for radio telegraphy.

262e ADD

(3) However, in the case of intership bands, the spacing is reduced to 5 kc/s for adjacent frequencies used for radio telephony.

262f ADD

(4) In Region 3, in the bands between 1 605 and 2 850 kc/s, in addition to the specific frequencies prescribed for common use in certain services, the following frequencies are used :

2 091 kc/s : as an exclusive ship radiotelegraph calling frequency ; this frequency is protected by a guard-band between 2 088.5 and 2 093.5 kc/s.

2 638 kc/s : as an intership radiotelephony working frequency ; this frequency is protected by a guard-band between 2 634 and 2 642 kc/s.

263 MOD

§ 9. (1) The bands exclusively allocated to the maritime mobile service between 4 000 and 27 500 kc/s (see Articles 5, 33 and 34) are sub-divided into the following categories :

264 NOC

*(a) Ship stations, telephony*

4 063 - 4 133 kc/s  
8 195 - 8 265 kc/s  
12 330 - 12 400 kc/s  
16 460 - 16 530 kc/s  
22 000 - 22 070 kc/s

265 NOC

*(b) Coast stations, telephony*

4 368 - 4 438 kc/s  
8 745 - 8 815 kc/s  
13 130 - 13 200 kc/s  
17 290 - 17 360 kc/s  
22 650 - 22 720 kc/s

- 265a ADD (ba) *Ship stations*, telephony (single side band only)
- 4 133 - 4 140 kc/s
  - 6 200 - 6 211 kc/s
  - 8 273 - 8 280 kc/s
  - 12 407 - 12 421 kc/s
  - 16 537 - 16 562 kc/s
  - 22 078 - 22 100 kc/s
- 265b ADD (bb) *Ship stations*, telephony (double side band calling channel)
- 8 265 - 8 273 kc/s
  - 12 400 - 12 407 kc/s
  - 16 530 - 16 537 kc/s
  - 22 070 - 22 078 kc/s
- 265c ADD (bc) *Ship stations*, wideband telegraphy and special transmission systems
- 4 140 - 4 160 kc/s
  - 6 211 - 6 240 kc/s
  - 8 280 - 8 320 kc/s
  - 12 421 - 12 471 kc/s
  - 16 562 - 16 622 kc/s
  - 22 100 - 22 148 kc/s
- 266 MOD (c) *Ship stations*, telegraphy
- 4 160 - 4 238 kc/s
  - 6 240 - 6 357 kc/s
  - 8 320 - 8 476 kc/s
  - 12 471 - 12 714 kc/s
  - 16 622 - 16 952 kc/s
  - 22 148 - 22 400 kc/s
  - 25 070 - 25 110 kc/s<sup>1</sup>
- 267 NOC (d) *Coast stations*, telegraphy
- 4 238 - 4 368 kc/s
  - 6 357 - 6 525 kc/s
  - 8 476 - 8 745 kc/s

266.1 ADD

The frequencies in the band 25 070 - 25 110 kc/s shall be used as working frequencies in addition to frequencies in the band 22 148 - 22 400 kc/s.

12 714 - 13 130 kc/s

16 952 - 17 290 kc/s

22 400 - 22 650 kc/s<sup>1</sup>

268 NOC

2) Within the bands listed in No. 266, the following bands are reserved exclusively for calling :

4 177 - 4 187 kc/s

6 265.5 - 6 280.5 kc/s

8 354 - 8 374 kc/s

12 531 - 12 561 kc/s

16 708 - 16 748 kc/s

22 220 - 22 270 kc/s

269 MOD

3) In Regions 2 and 3 the band 2 088.5 - 2 093.5 kc/s is reserved exclusively for calling (telegraphy only).

269a ADD

§ 9a. (1) Appendix 12 shows the two-way radiotelephone channels of the maritime mobile service in the frequency bands listed in Nos. 264 and 265.

269b ADD

(2) Appendix 12-0 contains the allotment plan for radio-telephone coast stations in the bands listed in No. 265. If necessary, an Extraordinary Administrative Radio Conference to which all the Members and Associate Members of the Union would be invited could be convened in accordance with the provisions of Article 10 of the International Telecommunication Convention for the purpose of revising Appendix 12-0 and if required, Appendix 12, as well as the relevant provisions of the Radio Regulations.

270 SUP

271 SUP

272 SUP

273 SUP

274 SUP

275 SUP

276 SUP

277 SUP

267.1 ADD

<sup>1</sup> Frequencies in the bands 25 010 - 25 070 kc/s, 25 110 - 25 600 kc/s, and 26 100 - 27 500 kc/s may be assigned to coast stations. They are then considered as frequencies additional to those in the band 22 400 - 22 650 kc/s.



Title NOC

**Section IVa. Maritime Radiobeacons**

277a ADD

§ 12a. (1) The protection ratio required for maritime radiobeacons operating in the bands between 285 and 325 kc/s is based on the radiated power being kept to the minimum necessary to give the shall desired field strength at the service range.

277b ADD

(2) The daylight range of the radiobeacons referred to in No. 277a shall be based on the following field strengths :

277c ADD

(3) *Region 1*

50 microvolts per metre for radiobeacons north of 43°N.

75 microvolts per metre for radiobeacons between 30°N and 43°N.

100 microvolts per metre for radiobeacons between 30°N and 30°S.

75 microvolts per metre for radiobeacons between 30°S and 43°S.

50 microvolts per metre for radiobeacons south of 43°S.

277d ADD

(4) *Region 2*

50 microvolts per metre for radiobeacons north of 40°N.

75 microvolts per metre for radiobeacons between 31°N and 40°N.

100 microvolts per metre for radiobeacons between 31°N and 30°S.

75 microvolts per metre for radiobeacons between 30°S and 43°S.

50 microvolts per metre for radiobeacons south of 43°S.

277e ADD

(5) *Region 3*

75 microvolts per metre for radiobeacons north of 40°N.  
 100 microvolts per metre for radiobeacons between 40°N and 50°S.  
 75 microvolts per metre for radiobeacons south of 50°S.

277f ADD

(6) In Region 1, for maritime radiobeacons in these bands, the assignment of frequencies is based on a separation of 2.3 kc/s between adjacent channels used for class A2 emissions.

277g ADD

(7) In Region 1, for maritime radiobeacons, the depth of modulation should be at least 70 %.

Title NOC

**Section V. Fixed Service**

277h ADD

(00) Administrations are earnestly requested to discontinue, in the fixed service, the use of double side band radiotelephone transmissions in the bands below 30 Mc/s, if possible as from 1st January, 1970.

277i ADD

(0) Class F3 emissions are prohibited in the fixed service in the bands below 30 Mc/s.

278 NOC

§ 13. *Selection of Frequencies for the International Exchange of Police Information.*

279 MOD

(1) The frequencies necessary for the international exchange of information to assist in the apprehension of criminals shall be selected from the bands of frequencies allocated to the fixed service, if necessary by special arrangement among interested administrations, in accordance with Article 41 of the Convention.

280 MOD

(2) To obtain economy in the use of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

281 NOC

§ 14. *Selection of Frequencies for the International Exchange of Synoptic Meteorological Information.*

282 MOD

(1) The Frequencies necessary for the international exchange of synoptic meteorological information shall be selected from the bands of frequencies allocated to the fixed service if necessary by special arrangement among interested administrations, in accordance with Article 41 of the Convention.

283 MOD

(2) To obtain economy in the use of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

**Former reference****Source****New Reference**

|                 |
|-----------------|
| Chap.: XVIII    |
| Art.: 47        |
| Nos.: 1076-1078 |

Committee: 5 and 8  
Doc. No.: DT 865

|        |
|--------|
| Chap.: |
| Art.:  |
| Nos.:  |

**CHAPTER XVIII****ARTICLE 47**

|       |     |
|-------|-----|
| Title | NOC |
|-------|-----|

**Effective Date of the Radio Regulations**

|      |       |
|------|-------|
| 1076 | 45-01 |
|------|-------|

§ 1. These Regulations which are annexed to the International Telecommunication Convention, shall come into force on first January 1, 1961, except for Appendices 12 and 12.0, which shall come into force on July 1, 1961.

|      |       |
|------|-------|
| 1077 | 45-02 |
|------|-------|

§ 2. The provisions of the Extraordinary Administrative Radio Conference Agreement, Geneva, 1951, shall be abrogated upon the coming into force of the provisions of the Radio Regulations, except for Annexes 5 and 7 to this Agreement, which shall be abrogated on July 1, 1961.

|      |       |
|------|-------|
| 1078 | 45-03 |
|------|-------|

§ 3. In witness whereof the delegates of the Administrations, Members of the Union represented at the Administrative Radio Conference of Geneva, 1959, have signed in the names of their respective countries the present Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to every Administration Member of the Union.

Done at Geneva, 21st of December, 1959.

## APPENDIX 10

**Section A. Frequencies assignable to Ship Radiotelegraph Stations  
using the Maritime Mobile Service Bands between 4 and 23 Mc/s**

| BAND<br>(Mc/s) |        | LIMITS  |  | kHz  |   |  |        | LIMITS |  |
|----------------|--------|---|--|--|---|--|--------|--------|--|
|                |        | Assignable Frequencies<br>Wide-Band Telegraphy and<br>facsimile and<br>Special Transmission Systems | Assignable Working Frequencies<br>for High Traffic Ships             | Assignable<br>Calling Frequencies              | Assignable Working Frequencies<br>for Low Traffic Ships |  |        |        |  |
|                |        |   |  |  | GROUP A   | GROUP B  |        |        |  |
| 4              | 4 140  | 4 142-----4 158<br>5 Freqs.<br>spaced 4 kc/s  | 4 161-----4 176<br>11 Freqs.<br>spaced 1.5 kc/s                      | 4 178-----4 186<br>9 Freqs.<br>spaced 1 kc/s   | 4 188---4 212   | 4 212.5-4 236.5<br>98 Freqs.<br>spaced 0.5 kc/s    | 4 238  |        |  |
| 6              | 6 211  | 6 213-----6 237<br>7 Freqs.<br>spaced 4 kc/s  | 6 241.5-----6 264<br>11 Freqs.<br>spaced 2.25 kc/s                   | 6 267-----6 279<br>9 Freqs.<br>spaced 1.5 kc/s | 6 282---6 318   | 6 318.75-6 354.75<br>98 Freqs.<br>spaced 0.75 kc/s | 6 357  |        |  |
| 8              | 8 280  | 8 282-----8 318<br>10 Freqs.<br>spaced 4 kc/s   | 8 322-----8 352<br>11 Freqs.<br>spaced 3 kc/s                        | 8 356---*-8 372<br>9 Freqs.<br>spaced 2 kc/s   | 8 376---8 424   | 8 425---8 473<br>98 Freqs.<br>spaced 1 kc/s        | 8 476  |        |  |
| 12             | 12 421 | 12 424-----12 468<br>12 Freqs.<br>spaced 4 kc/s   | 12 474 12 478.5 12 483-----12 528<br>11 Freqs.<br>spaced 4.5 kc/s    | 12 534-----12 558<br>9 Freqs.<br>spaced 3 kc/s | 12 564---12 636   | 12 637.5-12 709.5<br>98 Freqs.<br>spaced 1.5 kc/s  | 12 714 |        |  |
| 16             | 16 562 | 16 564-----16 620<br>15 Freqs.<br>spaced 4 kc/s   | 16 626 16 632 16 638 16 644-----16 704<br>11 Freqs.<br>spaced 6 kc/s | 16 712-----16 744<br>9 Freqs.<br>spaced 4 kc/s | 16 752---16 848   | 16 850---16 946<br>98 Freqs.<br>spaced 2 kc/s      | 16 952 |        |  |
| 22             | 22 100 | 22 102-----22 146<br>12 Freqs.<br>spaced 4 kc/s   | 22 151 22 157-----22 217<br>11 Freqs.<br>spaced 6 kc/s               | 22 225-----22 265<br>9 Freqs.<br>spaced 5 kc/s | 22 272.5-22 332.5                                       | 22 335---22 395<br>50 Freqs.<br>spaced 2.5 kc/s    | 22 400 |        |  |
| 25             | 25 070 | Assignable Working Frequencies to Ships of all Categories   |  |  |   |  |        | 25 110 |  |
|                |        | 25 075-----25 105<br>11 Freqs. spaced 3 kc/s  |  |  |   |  |        |        |  |

\* For particular conditions concerning the use of 8364 kc/s see No. 780.

## APPENDIX 10

**Section B. Carrier Frequencies in Kc/s for Ship Radiotelephone Stations  
using the Maritime Mobile Service Bands between 4 and 23 Mc/s**

| LIMITS         |        | kc/s                             |  | LIMITS |
|----------------|--------|----------------------------------|--|--------|
| BAND<br>(Mc/s) |        | R/T (DSB calling<br>frequencies) | R/T (SSB) Upper sideband<br>Assignnable working frequencies      |        |
| 4              | 4 133  |                                  | 4 133- .....-and- .....-4 136.5                                  | 4 140  |
| 6              | 6 200  |                                  | 6 200- ..... (*)- .....-6 207<br><br>3 Freqs.<br>spaced 3.5 kc/s | 6 211  |
| 8              | 8 265  | 8 269                            | 8 273- .....-and- .....-8 276.5                                  | 8 280  |
| 12             | 12 400 | 12 403.5                         | 12 407- .....-12 417.5<br><br>4 Freqs.<br>spaced 3.5 kc/s        | 12 421 |
| 16             | 16 530 | 16 533.5                         | 16 537.5- .....-16 558.5<br><br>7 Freqs.<br>spaced 3.5 kc/s      | 16 562 |
| 22             | 22 070 | 22 074                           | 22 078- .....-22 095.5<br><br>6 Freqs.<br>spaced 3.5 kc/s        | 22 100 |

\* For particulars concerning the use of 6203.5 kc/s see No. 827b.

Source : Committee 7  
Doc. No. : 808

RECOMMENDATION No. ...

**to the Safety of Life at Sea Conference  
Relating to Distress, Urgency and Safety Communications**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the frequency 2 182 kc/s is the international radiotelephone distress frequency for the maritime mobile service ;
- b) that the provision of the Radio Regulations relating to the maritime mobile service of radiotelephony have been revised to take account of the considerable development of this service ;

*invites*

the Safety of Life at Sea Conference, to be held in London May/June 1960 to take note of

- 1. the provisions of the Radio Regulations, Geneva, 1959, concerning distress, urgency and safety communications ;
- 2. the following Recommendations of the C.C.I.R. :
  - No. 45 : Avoidance of interference from ships' radar to other radiocommunication apparatus on board ;
  - No. 218 : Prevention of interference to radio reception on ships ;
  - No. 219 : Alarm signal for use on the maritime radiotelephony distress frequency of 2 182 kc/s ;
  - No. 224 : Testing of 500 kc/s radiotelegraph auto alarm receiving equipment on board ships.

Source : Committee 4  
Doc. No. : 653

RECOMMENDATION No. . . .

**to Administrations Relating to the Meteorological Aids Service  
in the Band 27.5-28 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*recommends :*

that administrations whose stations in the meteorological aid service operate in the band 27.5-28 Mc/s should arrange, as soon as possible, for the transfer of these operations to higher frequency bands which are allocated to the meteorological aids service ;

*invites :*

the World Meteorological Organization to study this question and to proceed with such co-ordination among administrations as appears necessary.



Source : Committee 7  
Doc. No. : 775

RESOLUTION No. ...

**Relating to the Preparation of a Manual for Use by the Mobile Services**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the provisions of the Radio Regulations Atlantic City, 1947, applicable to the mobile services include, in particular :
  - provisions directly related to the operation of the mobile services,
  - other provisions not directly related to these services ;
- b) that certain administrations have submitted to the Administrative Radio Conference, Geneva, 1959, proposals to revise and re-classify those provisions directly related to the operation of the mobile services ;
- c) that those administrations have found a new layout for said provisions necessary to facilitate the understanding of the technical stipulations and service procedure regulations concerning radiotelegraphy and radiotelephony, as well as the rules regarding radiotelegrams, radiotelephone calls, and distress traffic ;
- d) that this new layout would be of great value to the mobile services and would enable administrations to issue, if they wish to do so, national regulations based upon internationally self-contained sets of rules for the different services ;
- e) that a complete rearrangement of certain parts of the Radio Regulations and the Additional Radio Regulations cannot, for practical reasons, be achieved during the Conference ;

f) that those provisions directly related to the mobile services will not be presented in the new Radio Regulations in the form recommended and that in consequence the final reclassification of those provisions should be carried out after the close of the Conference ;

g) that it would however, be very useful to rearrange and to publish in a manual those provisions relating directly to the operation of the mobile services ;

h) that the Secretary General should be requested to undertake these tasks ;

i) that, in the future, those provisions not related directly to the mobile services should be reclassified by the next Administrative Radio Conference if this is considered useful ;

j) that this reclassification would require a preliminary study which should be undertaken by the Secretary General and the results communicated to administrations ;

k) that finally, the Secretary General in carrying out these tasks mentioned in h) above should consult a small group of experts from different administrations.

*resolves :*

1. The provisions of the Radio Regulations and its Appendices, together with those of the Additional Radio Regulations, Geneva, 1959, which deal with the operation of the mobile services, shall be assembled in the order indicated in Document No. 775 of the Conference and published in a manual, drawn up in accordance with Article 14, paragraphs 2 and 4, of the Convention \* ;

2. that the Secretary General shall, as soon as possible after the publication of the Radio Regulations, Geneva, 1959, proceed to the rearrangement and the issue of the Manual as mentioned in para-

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\* References to be aligned with Geneva Convention.

graph 1 above, after approval by the experts named in paragraph 4, below ;

3. that the Secretary General shall also undertake a study with a view to the insertion, in the appropriate places, in the next Radio Regulations, of those regulations contained in the Manual and also those other regulations mentioned in paragraph *i*) above. The results of this study shall be communicated to administrations well in advance of the next Administrative Radio Conference ;

4. that the following six persons named below, or the substitutes for each, are subject to the consent of the respective governments, designated experts to advise the Secretary General in questions relating to the tasks entrusted to him in accordance with paragraph 2 above, and approve the Manual before publication :

United States of America : Mr. Arthur J. Costigan ;

France : Mr. Jean Bès ;

Italy : Mr. Andrea Caruso ;

Netherlands : Mr. C. J. Westerterp ;

United Kingdom of Great Britain  
and Northern Ireland : Mr. Reginald M. Billington ;

Sweden : Mr. Arne Råberg.

5. that the Secretary General may invite the experts to meet if necessary for the fulfilment of their task, and he shall provide such assistance as may be necessary for the organization of any meeting or meetings of the experts ;

6. that the salaries of the experts shall be paid by their administrations ; their travel expenses and living allowances by the Union, and the Secretary General shall provide the requisite secretarial assistance.

Source.: Committee 4  
Doc. No. : 774

RESOLUTION No. ...

**Relating to a Study by a Panel of Experts of Measures to Reduce  
Congestion in the Bands between 4 and 27.5 Mc/s**

The Administrative Conference, Geneva, 1959,

*considering*

the trend towards congestion and saturation in the radio frequency spectrum between the bands 4 and 27.5 Mc/s ;

*realizing*

- a) that if this trend continues, this portion of the radio frequency spectrum will become progressively less useful to administrations for purposes for which it is indispensable ;
- b) that there are uses of the bands between 4 and 27.5 Mc/s that could, from a technical and operational point of view, be satisfied by other means ;
- c) that before administrations will be willing to undertake a programme to relieve congestion in the bands between 4 and 27.5 Mc/s they will need a clear statement of the issues involved and of the measures that need to be taken ;
- d) that the ability of administrations to undertake such a programme is intimately linked to the financial implications involved ;

*resolves*

1. that a Panel of Experts should be convened for the purpose of devising ways and means of relieving the pressure on the bands between 4 and 27.5 Mc/s ;

2. that the preparatory work as set out in Annex 1 should be undertaken by the I.F.R.B. in collaboration with the other permanent organs of the Union before this Panel of Experts is convened ;

*invites*

the Administrative Council

1. 1.1 in the light of the progress made in the above preparatory work to convene the Panel of Experts to undertake the tasks covered in the terms of reference set out in Annex 2. The Panel would include the Heads of the permanent organs, or their representatives, and should not be more than eleven in number ;
- 1.2 to request administrations to nominate highly qualified technical experts to serve on the Panel and, when nominating, to submit a biographical sketch of the qualifications and professional experience of each nominee ;
- 1.3 to select, from those nominated, a maximum of seven experts, taking into consideration the need to obtain very highly qualified individuals drawn from the various parts of the world. The experts, as a Group, should have a broad overall knowledge covering the following :
  - the world-wide aspects of telecommunication planning
  - the economic factors involved in the development of telecommunications
  - high frequency communications
  - land and submarine cables
  - broadcasting techniques
  - radio-relay systems
  - scatter propagation
  - space communications

1.4 to set the date on which the Panel should meet and request the Chairman of the I.F.R.B., to convene the meeting in Geneva ;

2. To decide, after considering the final report and recommendations of the Panel of Experts, and after consulting administrations, whether any further action should be taken and whether or not an Administrative Conference should be called for the purpose of taking the necessary decisions.



## ANNEX 1

### **Preliminary Study to be Made before Convening the Panel of Experts**

1. The I.F.R.B. shall group the existing uses of the bands between 4 and 27.5 Mc/s into appropriate categories.
2. The I.F.R.B. shall study and analyse each such category of use with a view to determining those categories which might be satisfied by means other than the use of these bands. However, they shall not consider possible amendments to the Table of Frequency Allocations.
3. The I.F.R.B. shall invite administrations, at the appropriate time, to submit any general proposals they may have for relieving the pressure on the bands in question.
4. The I.F.R.B. shall also, through the Secretary General, obtain all pertinent facts relating to the provision of economic assistance to countries which would need such assistance to carry out a programme for relieving the pressure on the bands between 4 and 27.5 Mc/s.
5. The I.F.R.B. shall submit a report, to be prepared in collaboration with the Secretary General and the Directors of the C.C.I.R. and the C.C.I.T.T., to the Administrative Council at its 1961 Session, on the results of their study. The report shall include the information and proposals called for in paragraphs 3 and 4 above, together with suitable recommendations, to the Administrative Council, so that the meeting of the Panel of Experts can be convened to undertake its tasks. Copies of this report shall also be sent to all administrations.

## **ANNEX 2**

### **Terms of Reference for a Panel of Experts to Study Measures to Reduce Congestion in the Bands Between 4 and 27.5 Mc/s.**

1. The Panel at each session shall elect its own chairman. The Chairman of the I.F.R.B. shall convene the first meeting of each session and act as co-ordinator between sessions.
2. The Panel shall first consider the report on the preparatory study forwarded to it by the Administrative Council and shall make any further investigations and studies deemed appropriate.
3. The Panel shall determine those categories of use of the bands between 4 and 27.5 Mc/s that could be satisfied by other means, and analyse the implications of utilizing such other means from the technical, practical and, in particular, economic consequences, in consultation with administrations when necessary. Due consideration shall be given to estimated traffic growth.
4. The Panel shall take account of the different degrees of technical development of countries as well as their differing needs in relation to the various telecommunication services concerned.
5. The Panel shall, through the Secretary General, obtain any necessary additional information about the facilities available for affording economic assistance to those countries that might need such aid in proceeding with any programme envisaged by the Panel, as well as any other specific information required from administrations or other sources.
6. The Panel shall study the best method of informing the administrations of the problems that exist.



7. The Panel shall then prepare a report to the Administrative Council together with recommendations as to the steps that should be taken for the purpose of relieving the pressure on the bands in question.
8. The recommendations of the Panel shall include a detailed and specific agenda which, when approved by the Administrative Council, would be the agenda of whatever body, Administrative Conference or otherwise, is to consider the policy decisions necessary to relieve the pressure on the bands concerned.

Source : Committee 4  
Doc. No. : 774

RECOMMENDATION No. . . .

**To the Plenipotentiary Conference**

**Relating to a Study by a Panel of Experts of Measures  
to Reduce Congestion in the Bands Between 4 and 27.5 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) the trend towards congestion in the bands between 4 and 27.5 Mc/s ;
- b) the need for adopting new policies for the solution of the frequency problems confronting administrations in the use of these bands ;

*realizing*

- a) that before administrations will be willing to undertake a programme to relieve congestion in the bands between 4 and 27.5 Mc/s they will require a clear statement of the issues involved and of the measures that need to be taken ;
- b) that the ability of administrations to undertake such a programme is intimately linked to the financial implication involved ;

*considers*

- a) that the first step in the direction of reform should be a review of possibilities before taking the necessary policy decisions ;
- b) that this could best be done by a Panel of Experts convened for the sole purpose of devising ways and means of relieving the pressure on the bands concerned ;

*recommends*

1. that a Panel of experts should be convened for the sole purpose of devising ways and means to relieve the pressure on the bands between 4 and 27.5 Mc/s. This Panel should prepare a report on its work which should be submitted with a detailed and specific agenda which, when approved by the Administrative Council, would be the agenda for whatever body is to consider the policy decisions necessary to relieve the pressure on these bands ;
2. that the Panel meet in Geneva for a period of approximately 30 days in 1961 and approximately 30 days in 1962 ;
3. that each administration making one or more experts available, be invited to make suitable arrangements for payment of the salaries of such experts ; these salaries shall not be a charge to the Union ;

*invites*

the Plenipotentiary Conference

1. to allocate a sum not exceeding 100 000 Swiss francs for each of the years 1961 and 1962 to cover the estimated expenses of the Panel ;
2. to make arrangements for the members of the Panel to be paid their travel and living allowances at the same rate as for the Members of the Administrative Council.

Source : Committee 5  
Doc. No. : 685

RECOMMENDATION No. ...

**Relating to the Planning for Maritime Radiobeacons in the African Area**

The Administrative Radio Conference, Geneva, 1959,

*considering*

the need to facilitate the planning for new maritime radio-beacons in the band 285 - 315 kc/s particularly in the neighbouring localities of the European and African areas,

*recommends*

that the administrations of the countries of the African area adopt provisions similar to those contained in the "Regional Arrangement for Maritime Radiobeacons in the European Area of Region 1" (Paris, 1951).

Source : Plenary Assembly  
Doc. No. : 807

RECOMMENDATION No. . . .

**Relating to the Pronunciation of Words in the Spelling Table**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) that agreement has been reached on a world-wide spelling table ;
- b) that the pronunciation of the words in the table may vary according to the language habits of the speakers ;
- c) that in order to minimize the wide variations in pronunciation, a record has been prepared by the International Civil Aviation Organization which gives the pronunciation desired of the words in the newly adopted spelling table ;
- d) that this record contains preambles in English, French and Spanish, and is readily available ;

*considering*

that a similar record would be very useful ;

*recommends*

1. that the Secretary General be instructed to make similar records available as one of the publications of the Union ;
2. that for this purpose the Secretary General may investigate the possibility of making use of records that already exist.

APPENDIX 16

**Chart of Regions as Defined in Table of Frequency Allocations**

The shaded part represents the Tropical Zone as defined in No. 252.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 862-E  
12 December, 1959COMMITTEE 4

## SUMMARY RECORD

Thirty-ninth Meeting - Committee 4

Thursday, 10 December 1959 at 9.30 a.m.

1. In the unavoidable absence of Mr. Pedersen, the Vice-Chairman, Mr. Stewart opened the final meeting of Committee 4 at 9.30 a.m. when the Agenda Document No. DT 874 was adopted without amendment.
2. Summary Records of the 33rd, 34th, 35th, 36th, 37th and 38th Meetings.
  - a) The Chairman invited comments on Document No. 741, Summary Record of the Thirty-Third Meeting.

The Delegate of the Federal Republic of Germany asked that, in paragraph 3 the spelling of his name be corrected to read Mr. MOHR.

The Delegate of Cuba drew attention to the record, on Pages 3 and 4, of his reservations on the 5.8, 8.8 and 9.2 Gc/s bands. He asked for the inclusion in the Summary Record of the following statement:

"The Delegation of Cuba formally protests against the way in which the Secretariat of this Conference has overstepped its duty when speaking of the interventions of the Delegate of Cuba at the thirty-third meeting of Committee 4, in Document No. 741. The drafting of the Summary Record has, distorted, with intent to discredit, the real sense of our position and the meaning behind it.

" On page 3 of the Record we read: "The Delegate of Cuba made his usual reservation in respect of ..."

" On page 4 of the same Document we read: "The Delegate of Cuba made his usual reservation ...."

" This high-handed behaviour is an attempt to strengthen the stone-walling which is the obvious attitude of those who are disturbed by the liberated position of our small country, which exercises its right to insist on the clarity of truth and the reign of justice in a world-wide community, where the predominance of an idea should not inevitably derive from the power attributed to the size of the country from which it springs.



" The fact that a majority is indifferent to our interests or against them does not authorize anyone to speak in ambiguous terms of our policy which is firm; though it is flexible it is yet legitimate and worthy of respect."

The Chairman expressed regret that the Delegate for Cuba considered the references to his interventions to be unsatisfactory and explained that it was necessary to present the Record in an abbreviated form except where delegates handed written statements to the rapporteur.

The Delegate of the U.S.S.R. referred to the statement recorded on Page 5 of Document No. 741 in the name of his Delegation. He pointed out that the second paragraph of the record did not reflect accurately the views expressed. He asked that the following statement be included in the Summary Record to replace this paragraph:

"In a number of instances, despite the fact that the interests of a large group of countries were identical the needs of these countries have not been recognised in the Frequency Allocation Table and there is no sound basis for this which represents an unjust and wrongful solution."

With these amendments Document No. 741 was adopted

b) Document No. 743 was adopted with the following amendment:

In Paragraph 1 the numerical references in the statements by the Delegate of the U.S.S.R. should be corrected to read "Proposals Nos. 919 and 927."

c) Document No. 744 was adopted without amendment.

d) In Document No. 745 the Delegate of Switzerland drew attention to Paragraph 1 which, he said, would more accurately record the action of Committee 4 if altered to read:

"..... and, after some discussion, the following footnote, proposed by the Delegate of Switzerland, was adopted unanimously.....

He pointed to an important difference between the English and French texts of the second sentence of this footnote which, whilst satisfactory in the English, should read in French as follows:

"En assignant des fréquences à des stations d'autres services autorisés dans cette bande, les administrations prendront, autant que possible, toutes mesures pour éviter de causer de brouillages nuisibles à la radioastronomie."

With these amendments the Document No. 745 was adopted.

e) Document No. 746 was adopted without amendment.

f) Document No. 777 was adopted without amendment.



### 3. Other Business

The Chairman invited discussion on any outstanding subject whereon the Delegate of the United States of America took the floor to express, on behalf of the meeting, deep appreciation to Mr. Stewart as acting Chairman of the Committee for his efforts through many difficult phases of the work. In response, the Delegates rose to their feet and acclaimed Mr. Stewart with a hearty round of applause.

Acknowledging this, the Chairman then asked for the following statement to be included in the Record.

"Having concluded our business I, in turn, have the pleasant duty of expressing our appreciation to all those who have done so much to help this Committee complete its work.

" I sincerely regret that Mr. Pedersen is not present on this occasion because he did so much to guide the work of Committee 4 in its difficult task. I feel that by comparison my own contribution has been insignificant.

" It is interesting to note that the Committee has had 39 meetings over a period of 16 weeks which gives some measure of the effort expended.

" At this point we must recognise the results achieved by the Working Groups and sub-Groups in which the greater part of the work has been done. Then there are all those people who assist the proceedings even though they may not always be conspicuous. We must gratefully acknowledge the help of the interpreters who, confined in their cabins, have had many tiring sessions and without whom a Committee such as this could not function at all. We must not overlook the operators in the gallery who, by switching the microphones so efficiently have greatly contributed to the smoothness of the operations. Also, we must not forget all of those backroom people who labour so long behind the scenes translating documents, printing them and finally arranging their distribution to delegates.

" This brings us to those who sit at this rostrum. I must make special mention of the assistance given to this Committee and to me by the Members and staff of the I.F.R.B. In this respect delegates will no doubt recall the green documents which were produced early in the proceedings of Committee 4 and upon which our work so heavily depended. Our Rapporteur, Mr. Bourne, unfortunately had to leave before this and we had an opportunity of saying farewell to him at the thirty-eighth meeting.

" I would like to express my personal thanks to all of the people I have mentioned and to the Committee itself for its tolerance to me during the few meetings which I have conducted."

In reply to the Chairman, Mr. John Gayer, Member of the I.F.R.B., made the following remarks:-

"I thank you most sincerely, Mr. Chairman, for your very kind remarks made relating to the participation of the members of the I.F.R.B. and its staff. Your recognition of our effort is very much appreciated.

" I would also like to take the opportunity, on behalf of the I.F.R.B., especially Mr. Gracie, Mr. Iastrebov and Messrs. Matthey, Kari, Smirnov, Smith and myself, who have participated in the work of Committee 4, its Working Groups and Sub-Working Groups, to thank you Mr. Stewart, Mr. Pedersen and the Chairmen of the Working Groups, and the Sub-Working Groups for your kind invitation to participate in every phase of your work. We have at all times tried to be objective in our participation and to show total impartiality. I assure you that such was our intent at all times.

" I want you to know that the experience gained in such participation will be most helpful. We now have a complete background on the allocation of each band and the details on the problems related thereto. The efforts and leadership shown by you and Mr. Pedersen have provided an inspiration for the future work of the Board."

In the absence of other business the Meeting concluded at 10.15 it being agreed that in accordance with Rule 20 this final Summary Record would be approved by the Chairman.

Rapporteur:  
J.T. Penwarden

Acting Chairman:  
E.J. Stewart.

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 863-E  
12 December, 1959PLENARY MEETING

ITALY

ProposalNumber of  
Proposal

5576

At the last Administrative Telegraph and Telephone Conference, to avoid overburdening the Telegraph Regulations and the Telephone Regulations by reproducing in them all the counter-reservations made by Delegations wanting to protect themselves with regard to reservations made by other Delegations, the following text was, on the basis of a proposal by Italy, added to the last Articles of the above two sets of Regulations.

With the same purpose in view, Italy submits a similar proposal to the Plenary Assembly of the Radio Conference:

Radio RegulationsArticle 47

Add the following new number: 1077a

The Delegates signing these Regulations hereby declare that, should an Administration make reservations about the application of one or more provisions of these Regulations, no other Administration shall be obliged to observe that provision or those provisions in its relations with that particular Administration.

Additional Radio RegulationsArticle 13

Add the following new number: 2140 a (Same text as above)

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 864-E  
12 December, 1959

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PLENARY MEETING

A G E N D A

Twenty-fourth Plenary Meeting

Sunday, 13 December, 1959, at 3. p.m.

1. Eighteenth Series of Texts submitted by the Drafting Committee - Page 18-12 (Document No. 803).
2. Nineteenth Series of Texts submitted by the Drafting Committee (Document No. 813).
3. Twenty-Second Series of Texts submitted by the Drafting Committee (Document No. 856).
4. Miscellaneous.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 397-E (CP)  
Document No. 865-E (CAR)  
12 December, 1959.

PLENARY MEETING

## FINAL REPORT

BY COMMITTEE C3 TO PLENARY ASSEMBLIES  
OF PLENIPOTENTIARY AND ADMINISTRATIVE RADIO CONFERENCES

1. Committee C3 held its final meeting on 9 December.
2. At that meeting the Committee had before it Document No. 328 (Plenipotentiary), 767 (Radio), the Annex to which showed expenditure for both Conferences as at 30 November. This was considered to be the latest that a statement could be prepared to permit of detailed examination by the Committee. A copy of the statement is attached as Annex 1 to this Document.
3. The statement shows that expenditure (actual and estimated) on the two Conferences will be less than the figure budgeted for by 82,450 Swiss francs. In addition 100,000 Swiss francs is provided for contingencies. The budget figure is, however, based on the assumption that both Conferences will end on 17 December. The General Secretariat has estimated that for each additional day beyond the 17th the cost will be 20,000 - 25,000 Swiss francs. If, therefore, the Radio Conference continues until 21 December, the additional cost would be approximately 100,000 Swiss francs. This sum would consume the whole of the contingency sum previously referred to. The cost of any extension of the Conference beyond 21 December would be offset against any surplus which might be available. There may be some small surpluses under a number of other sub-headings in the budget but the extent of these cannot be stated at this stage.
4. It is proposed that apart from costs of preparatory work and other unshared costs for the two Conferences shall be borne, one third by the Plenipotentiary Conference and two thirds by the Radio Conference. On this basis the approximate costs to each Conference would be:

|                            |                               |
|----------------------------|-------------------------------|
| Radio Conference           | 2,826,000 Swiss francs        |
| Plenipotentiary Conference | <u>1,040,000 Swiss francs</u> |
|                            | <u>3,866,000 Swiss francs</u> |

This proposal is placed before the Plenaries of both Conferences for their approval.



5. Annex 2 to this Document shows the countries and organizations which will share in defraying the total costs of the two Conferences.
6. Another matter which has to be decided by the Plenaries of both Conferences is the portion of the cost of type-setting of the Final Acts which is to be charged against Conference expenditure. An endeavour has been made by the Secretariat to obtain a firm estimate of costs but in view of the piecemeal way in which the work is of necessity being handled and the urgency which is being stressed the printer is not prepared at this stage to give firm estimates. Earlier estimates of the costs were:

|                            | <u>Typesetting</u> | <u>Printing</u> |
|----------------------------|--------------------|-----------------|
|                            | Swiss francs       | Swiss francs    |
| Plenipotentiary Conference | 20,000             | 40,000          |
| Radio Conference           | 60,000             | 120,000         |

In previous conference documents, No. 78 (Plenipotentiary) and No. 283 (Radio), the figures had been based on the supposition that one third of the typesetting costs should be borne by the Conferences. In view, however, of the present somewhat uncertain budgetary situation it is suggested by Committee C3 that only one quarter of actual costs should be so charged. There is precedent for this - it was followed at the T and T Conference last year.

7. A further matter which Committee C3 decided to bring to the notice of both Plenaries for such action as they may deem necessary was that the cost of producing the printed "List of Participants" at the Conference is to date 15,858 Swiss francs. The suggestion was made by some Members of that Committee that a simpler and cheaper form of publication such as a rounded list would suffice in future.
8. The Committee considered the question of putting forward detailed suggestions concerning possible future conference arrangements but decided that as conditions by the time the next conference takes place may have changed considerably, suggestions made now may by then be of little practical use.

Chairman:  
J.B. Darnoll

EXPENSES ON 30 NOVEMBER, 1959, AND APPROXIMATE ESTIMATES OF THE EXPENSES  
OF THE INTERNATIONAL TELECOMMUNICATION CONFERENCES (GENEVA, 1959)

1. ADMINISTRATIVE RADIO CONFERENCE - PREPARATORY WORK BY THE GENERAL SECRETARIAT

| POSITION ON 30 NOVEMBER 1959  | B U D G E T<br>1958 - 1959 | Expenditure<br>on<br>30.11.1959 | Estimated<br>Expenditure | T O T A L  |
|---|----------------------------|---------------------------------|--------------------------|------------|
| <u>I Staff expenses</u>   |                            |                                 |                          |            |
| .1 Administration.....  | -                          | -                               | -                        | -          |
| .2 Languages.....   | -                          | -                               | -                        | -          |
| .3 Roneo.....   | -                          | -                               | -                        | -          |
| .4 Insurance.....   | -                          | -                               | -                        | -          |
| <u>II Premises and equipment</u>  |                            |                                 |                          |            |
| .5 Premises, furniture, machines.....                                   | -                          | -                               | -                        | -          |
| .6 Document production.....   | -                          | -                               | -                        | -          |
| .7 Office supplies and overheads.....                                   | 780.35                     | 780.35                          | -                        | 780.35     |
| .8 Simultaneous interpretation and other<br>technical equipment         | -                          | -                               | -                        | -          |
| .9 Unforeseen.....  | -                          | -                               | -                        | -          |
| <u>III Financial management expenses</u>                                |                            |                                 |                          |            |
| .10 Interest on advances.....   | 132.30                     | 132.30                          | 12,100                   | 12,232.30  |
| <u>Expenses of an exceptional nature</u>                                |                            |                                 |                          |            |
| <u>VI Preparatory work</u>  |                            |                                 |                          |            |
| .13 Publication and distribution of reports<br>(Book of proposals)..... | 328,882.85                 | 412,915.39                      |                          | 412,915.39 |
|   | 329,795.50                 | 413,828.04                      | 12,100                   | 425,928.04 |

2. ADMINISTRATIVE RADIO CONFERENCE - PREPARATORY WORK BY THE I.F.R.B.

| POSITION ON 30 NOVEMBER, 1959  | B U D G E T<br>1955 - 1959 | Expenditure<br>on<br>30.11.1959 | Estimated<br>Expenditure | T O T A L     |
|--|----------------------------|---------------------------------|--------------------------|---------------|
| <u>I. Staff expenses</u>   |                            |                                 |                          |               |
| .1 Administration.....   | 300,899.20                 | 284,537.30                      | -                        | 284,537.30 *) |
| .2 Languages.....  | -                          | -                               | -                        | -             |
| .3 Roneo.....  | -                          | -                               | -                        | -             |
| .4 Insurance.....  | 30,218.35                  | 37,447.50                       | -                        | 37,447.50 **) |
| <u>II. Premises and equipment</u>                                    |                            |                                 |                          |               |
| .5 Premises, furniture, machines.....                                | -                          | -                               | -                        | -             |
| .6 Document production.....  | -                          | -                               | -                        | -             |
| .7 Office supplies and overheads                                     | -                          | -                               | -                        | -             |
| .8 Simultaneous interpretation and other<br>technical equipment..... | -                          | -                               | -                        | -             |
| .9 Unforeseen  | -                          | -                               | -                        | -             |
| <u>III. Financial management expenses</u>                            |                            |                                 |                          |               |
| .10 Interest on advances   | 16,286.05                  | 16,286.05                       | 18,300                   | 34,586.05     |
| <u>Expenses of an exceptional nature</u>                             |                            |                                 |                          |               |
| <u>VI. Preparatory work</u>  |                            |                                 |                          |               |
| .13 Publication and distribution of reports                          | 66,781.79                  | 70,602.69                       | -                        | 70,602.69     |
|  | 414,185.39                 | 408,873.54                      | 18,300.--                | 427,173.54    |

\*) For six months only (January to June, 1959). From 1 July 1959, see "Assistance for technical work" Table 5

\*\*) Excess expenditure covered by credit transfer from Item 1.



3. PLENIPOTENTIARY CONFERENCE - PRELIMINARY WORK BY THE GENERAL SECRETARIAT

| <u>Position on 30 November 1959</u>   | BUDGET<br>1959 | Expenses<br>at<br>30.11.59 | Estimated<br>Expenditure | T O T A L  |
|---|----------------|----------------------------|--------------------------|------------|
| 1. <u>Staff expenses</u>  |                |                            |                          |            |
| .1 Administration . . . . .   | -              | -                          | -                        | -          |
| .2 Languages . . . . .  | -              | -                          | -                        | -          |
| .3 Roneo . . . . .  | -              | -                          | -                        | -          |
| .4 Insurance . . . . .  | -              | -                          | -                        | -          |
| II. <u>Premises and equipment</u>   |                |                            |                          |            |
| .5 Premises, furniture, machines . . . . .  | -              | -                          | -                        | -          |
| .6 Document production . . . . .  | -              | -                          | -                        | -          |
| .7 Office supplies and overheads . . . . .  | -              | -                          | -                        | -          |
| .8 Simultaneous interpretation and other<br>equipment . . . . .   | -              | -                          | -                        | -          |
| .9 Unforeseen . . . . .   | -              | -                          | -                        | -          |
| III. <u>Financial management expenses</u>   |                |                            |                          |            |
| .10 Interest on advances . . . . .  | -              | -                          | 3,200.—                  | 3,200.—    |
| <u>Expenses of an exceptional nature</u>  |                |                            |                          |            |
| VI <u>Preparatory work</u>  |                |                            |                          |            |
| .13 Publication and distribution of<br>reports (Book or proposals and<br>Administrative Council Report) . . . . . | 146,300.—      | 110,385.05                 | -                        | 110,385.05 |
|   | 146,300.—      | 110,385.05                 | 3,200                    | 113,585.05 |

4. INTERNATIONAL TELECOMMUNICATION CONFERENCES

POSITION ON 30 NOVEMBER 1959

| Items and Subheads                                      | B U D G E T  | Expenditure<br>by<br>30.11.59. | Estimated<br>Expenditure | Provision<br>for future<br>contingencies | T O T A L    | Credit Transfers               |                                   | BALANCE |
|---|--------------|--------------------------------|--------------------------|--|--------------|--------------------------------|-----------------------------------|---------|
|   |              |                                |                          |  |              | from one<br>item to<br>another | from one<br>subhead to<br>another |         |
| 1   | 2            | 3                              | 4                        | 5  | 6            | 7                              | 8                                 | 9       |
| 1. <u>Staff expenses</u>                                |              |                                |                          |  |              |                                |                                   |         |
| 1. <u>Administrative Services</u>                       |              |                                |                          |  |              |                                |                                   |         |
| Secretariat.....  |              | 31,725.25                      | 10,432.--                |  | 42,157.25    |                                |                                   |         |
| Administration.....                                     |              | 10,956.85                      | 4,550.--                 |  | 15,506.85    |                                |                                   |         |
| Delegates' service.....                                 |              | 29,188.70                      | 8,757.--                 |  | 37,945.70    |                                |                                   |         |
| Document service.....                                   |              | 51,194.35                      | 19,756.--                |  | 70,950.35    |                                |                                   |         |
| Messengers.....   |              | 39,333.85                      | 13,540.--                |  | 52,873.85    |                                |                                   |         |
| Public relations.....                                   | 289,000.--   | 20,193.65                      | 25,333.--                |  | 45,526.65    |                                |                                   |         |
| Sundry staff.....                                       |              | 16,885.85                      | 7,680.--                 |  | 24,565.85    |                                |                                   |         |
| Travel expenses (Recruit)...                            |              | 1,911.--                       | 4,580.--                 |  | 6,491.--     |                                |                                   |         |
| Overtime.....   |              | 11,257.--                      | 10,000.--                |  | 21,257.--    |                                |                                   |         |
| Compensation for extra<br>expenses.....                 |              | 246.35                         | 1,000.--                 |  | 1,246.35     |                                |                                   |         |
| Sundry.....   |              | --.--                          | 1,479.15                 | 10,000.--                                | 11,479.15    |                                |                                   |         |
|   | 289,000.--   | 212,892.85                     | 107,107.15               | 10,000.--                                | 330,000.--   | +41,000.-                      |                                   | --.--   |
| 2. <u>Language services</u>                             |              |                                |                          |  |              |                                |                                   |         |
| Interpreters' service and<br>for the order of the day.. |              | 527,788.--                     | 90,700.--                |  | 618,488.--*  |                                |                                   |         |
| Translators.....  |              | 212,350.60                     | 75,025.--                |  | 287,375.60   |                                |                                   |         |
| Shorthand-typists & typists                             |              | 151,345.65                     | 77,758.--                |  | 229,103.65   |                                |                                   |         |
| Technical operators.....                                |              | 26,714.90                      | 12,434.--                |  | 39,148.90*   |                                |                                   |         |
| Travel expenses (Recruit) ..                            |              | 17,627.50                      | 8,500.--                 |  | 26,127.50    |                                |                                   |         |
| Overtime .....  |              | 14,415.10                      | 17,000.--                |  | 31,415.10    |                                |                                   |         |
| Compensation for extra<br>expenses.....                 |              | 4,819.25                       | 10,000.--                |  | 14,819.25    |                                |                                   |         |
| Sundry .....  |              | 190.65                         | 1,331.35                 | 80,000.--                                | 81,522.--    |                                |                                   |         |
|   | 1,442,000.-- | 955,251.65                     | 292,748.35               | 80,000.--                                | 1,328,000.-- | -70,000.-                      | -44,000.-                         | --.--   |

\* For the two notes, see page 10.

4. INTERNATIONAL TELECOMMUNICATION CONFERENCES (continued)

| Articles and items                      | BUDGET     | Expenses<br>at<br>30.11.59 | Estimated<br>Expendi-<br>ture | Provision<br>for fut.<br>contin-<br>gencies | T O T A L     | Transfer of credits  |                              | BALANCE     |
|---|------------|----------------------------|-------------------------------|---|---------------|----------------------|------------------------------|-------------|
|   |            |                            |                               |   |               | from item<br>to item | from sub-head<br>to sub-head |             |
| 1                                       | 2          | 3                          | 4                             | 5   | 6             | 7                    | 8                            | 9           |
| <u>.3 Document Reproduction</u>         |            |                            |                               |   |               |                      |                              |             |
| Roneo .....                             |            | 62,733.85                  | 24,174.--                     |   | 86,907.85     |                      |                              |             |
| Draftsmen .....                         |            | 9,738.35                   | 2,700.--                      |   | 12,438.35     |                      |                              |             |
| Proof readers .....                     | 133,750.-- | 2,609.--                   | 6,633.--                      |   | 9,242.--      |                      |                              |             |
| Travel expenses (Recruit) ..            |            | 131.60                     | 140.--                        |   | 271.60        |                      |                              |             |
| Overtime .....                          |            | 14,855.--                  | 13,000.--                     |   | 27,855.--     |                      |                              |             |
| Compens. for extra exp. ....            |            | 3,697.86                   | 7,000.--                      |   | 10,697.86     |                      |                              |             |
| Sundry .....                            |            | --                         | 587.34                        | 10,000.--                                   | 10,587.34     |                      |                              |             |
|   | 133,750.-- | 93,765.66                  | 54,234.34                     | 10,000.--                                   | 158,000.--    | +25,000.--           |                              | + 750.--    |
| <u>.4 Insurance</u>                     |            |                            |                               |   |               |                      |                              |             |
| Contrib. to S.S. and<br>B. Funds .....  | 18,000.--  | 6,553.10                   | 1,800.--                      |   | 8,333.10      |                      |                              |             |
| Other insurance .....                   |            | 677.30                     | 12,969.60                     |   | 13,646.90     |                      |                              |             |
|   | 18,000.--  | 7,230.40                   | 14,769.60                     |   | 22,000.--     | + 4,000.--           |                              | --          |
| <u>II PREMISES AND SUPPLIES</u>         |            |                            |                               |   |               |                      |                              |             |
| <u>.5 Premises, furniture, machines</u> |            |                            |                               |   |               |                      |                              |             |
| Premises - rents .....                  |            | 143,317.40                 | 97,910.--                     |   | 241,227.40*)  |                      |                              |             |
| Premises - rearrangement ...            | 265,000.-- | 34,185.35                  | 5,300.--                      |   | 39,485.35     |                      |                              |             |
| Furniture .....                         |            | 7,239.65                   | 4,000.--                      |   | 11,239.65     |                      |                              |             |
| Machines .....                          |            | 14,067.85                  | 18,979.75                     |   | 33,047.60     |                      |                              |             |
|   | 265,000.-- | 198,810.25                 | 126,189.75                    |   | 325,000.--    | +32,000.--           | +28,000.--                   | --          |
| <u>.6 Document Production</u>           |            |                            |                               |   |               |                      |                              |             |
| Cyclostyle paper .....                  |            | 113,178.90                 | 11,500.--                     |   | 124,678.90    |                      |                              |             |
| Stencils .....                          |            | 9,074.05                   | 4,400.--                      |   | 13,474.05     |                      |                              |             |
| Ink, other roneo req. ....              | 250,000.-- | 13,082.55                  | 900.--                        |   | 13,982.55     |                      |                              |             |
| Printing .....                          |            | 31,310.45                  | 6,000.--                      |   | 37,310.45     |                      |                              |             |
| Final Acts, A.R.C. ....                 |            | --                         | 140,000.--                    |   | 140,000.--**) |                      |                              |             |
| Final Acts, P.C. ....                   |            | --                         | 46,700.--                     |   | 46,700.--**)  |                      |                              |             |
| Sundry .....                            |            | 3,360.--                   | 14,494.05                     |   | 17,854.05     |                      |                              |             |
|   | 250,000.-- | 170,005.95                 | 223,994.05                    |   | 394,000.--    |                      |                              | -144,000.-- |
| For the two notes see page 10           |            |                            |                               |   |               |                      |                              |             |

4. INTERNATIONAL TELECOMMUNICATION CONFERENCES (continued)

| Articles and items   | BUDGET       | Expenses<br>at<br>30.11.59 | Estimated<br>Expendi-<br>ture | Provision<br>for fut.<br>contin-<br>gencies | T O T A L    | Transfer of credits  |                              | B A L A N C E |
|--|--------------|----------------------------|-------------------------------|---|--------------|----------------------|------------------------------|---------------|
|  |              |                            |                               |   |              | from item<br>to item | from sub-head<br>to sub-head |               |
| 1  | 2            | 3                          | 4                             | 5   | 6            | 7                    | 8                            | 9             |
| <u>.7 Office supplies and overheads</u>  |              |                            |                               |   |              |                      |                              |               |
| Office supplies .....  |              | 36,761.75                  | 3,500.--                      |   | 40,261.75    |                      |                              |               |
| Taxis .....  |              | 4,987.75                   | 4,000.--                      |   | 8,987.75     |                      |                              |               |
| Transport of supplies .....  |              | 4,338.75                   | 6,000.--                      |   | 10,338.75    |                      |                              |               |
| idem - I.T.U. car .....  |              | 698.45                     | 5,700.--                      |   | 6,398.45     |                      |                              |               |
| Postal charges .....   | 60,000.--    | 373.70                     | 500.--                        |   | 873.70       |                      |                              |               |
| Telegrams .....  |              | 1,068.45                   | 3,000.--                      |   | 4,068.45     |                      |                              |               |
| Telephones .....   |              | 4,725.95                   | 5,000.--                      |   | 9,725.95     |                      |                              |               |
| Medical .....  |              | 254.25                     | --                            |   | 254.25       |                      |                              |               |
| Sundry .....   |              | 7,304.55                   | 6,786.40                      |   | 14,090.95    |                      |                              |               |
|  | 60,000.--    | 60,513.60                  | 34,486.40                     |   | 95,000.--    |                      | + 16,000.--                  | -19,000.--    |
| <u>.8 Simultaneous interpretation and other technical equipment</u>              |              |                            |                               |   |              |                      |                              |               |
| S.I. - I.T.U. ....   |              | 7,057.80                   | 80,500.--                     |   | 87,557.80    |                      |                              |               |
| S.I. - others .....  | 140,000.--   | 4,264.30                   | 10,600.--                     |   | 14,864.30*)  |                      |                              |               |
| Sundry .....   |              | 1,289.30                   | 4,288.60                      |   | 5,577.90     |                      |                              |               |
|  | 140,000.--   | 12,611.40                  | 95,388.60                     |   | 108,000.--   | -32,000.--           |                              |               |
| <u>.9 Unforeseen</u> .....   | 20,000.--    | 4,790.50                   | 15,209.50                     |   | 20,000.--    |                      |                              |               |
| <u>III. FINANCIAL MANAGEMENT EXPENSES</u>  |              |                            |                               |   |              |                      |                              |               |
| <u>.10 Interest on advances</u> .....  | 50,000.--    | 6.15                       | 36,993.85                     |   | 37,000.--    |                      |                              | +13,000.--    |
| <u>Budget approved by the<br/>Administrative Council,<br/>14th Session</u> ..... | 2,667,750.-- |                            |                               |   |              |                      |                              |               |
| Carried forward :  |              | 1,715,878.41               | 1,001,121.59                  | 100,000.--                                  | 2,817,000.-- | --                   | --                           | -149,250.--   |

\*) For the two notes, see page 10

4. INTERNATIONAL TELECOMMUNICATION CONFERENCES (continued)

| Articles and items  | BUDGET       | Expenditure<br>at<br>30.11.59 | Estimated<br>Expenditure | Provision for<br>future con-<br>tingencies | T O T A L    | Transfer of credits  |                              | BALANCE     |
|---|--------------|-------------------------------|--------------------------|--|--------------|----------------------|------------------------------|-------------|
|   |              |                               |                          |  |              | from item<br>to item | from sub-head<br>to sub-head |             |
| 1   | 2            | 3                             | 4                        | 5  | 6            | 7                    | 8                            | 9           |
| Brought forward:  |              | 1,715,878.41                  | 1,001,121.59             | 100,000.--                                 | 2,817,000.-- | --                   | --                           | -149,250.-- |
| <u>Budget approved by the<br/>Administrative Council,<br/>14th Session</u>  | 2,667,750.-- |                               |                          |  |              |                      |                              |             |
| Amount indicated by the<br>Acting Secretary-General to<br>the Administrative Council<br>as possible additional ex-<br>penditure resulting from<br>the printing of the Final<br>Acts of the Administrative<br>Radio Conference and for<br>the use of a seventh<br>conference room equipped<br>for simultaneous inter-<br>pretation ..... | 200,000.--   |                               |                          |  |              |                      |                              | +200,000.-- |
| Amount indicated by the<br>Acting Secretary-General<br>to the Plenipotentiary<br>Conference as possible<br>additional expenditure<br>resulting from the prin-<br>ting of the Final Acts of<br>that Conference .....   | 31,700.--    |                               |                          |  |              |                      |                              | + 31,700.-- |
|   | 2,899,450.-- | 1,715,878.41                  | 1,001,121.59             | 100,000.--                                 | 2,817,000.   | --                   | --                           | + 82,450.-- |

DISTRIBUTION OF CREDITS AND EXPENDITURE FOR THE INTERNATIONAL TELECOMMUNICATION CONFERENCE  
 BETWEEN THE ADMINISTRATIVE RADIO CONFERENCE AND THE PLENIPOTENTIARY CONFERENCE:

|  | Total              | Administrative<br>Radio Conference | Plenipotentiary<br>Conference |
|--|--------------------|------------------------------------|-------------------------------|
| <u>C R E D I T S :</u>   |                    |                                    |                               |
| Budget approved by the Administrative Council<br>of which 2/3 to be charged to the ARC<br>and 1/3 to be charged to the PC              | 2,667,750.—        | 1,778,500                          | 889,250.—                     |
| <u>Supplementary estimates:</u>  |                    |                                    |                               |
| a) equipping of a 7th conference room<br>of which 2/3 to be charged to the ARC<br>and 1/3 to be charged to the PC                      | 105,000.—          | 70,000.—                           | 35,000.—                      |
| b) printing of the Final Acts of the ARC<br>(an amount of 45,000.— is included in<br>the budget approved by the Administrative Council | 95,000.—**)        | 95,000.—**)                        |                               |
| c) printing of the Final Acts of the PC<br>(an amount of 15,000.— is included in<br>the budget approved by the Administrative Council  | 31,700.—**)        |                                    | 31,700.—**)                   |
|  | <u>2,899,450.—</u> | <u>1,943,500.—</u>                 | <u>955,950.—</u>              |
| <u>EXPENDITURE :</u>   |                    |                                    |                               |
| Total (see page 7)   | 2,817,000.—        |                                    |                               |
| Expenses to be shared:   | 2,817,000          |                                    |                               |
| ./.. Final Acts ARC/PC   | <u>186,700</u>     |                                    |                               |
|  | 2,630,300          |                                    |                               |
| of which 2/3 to be charged to the ARC<br>and 1/3 to be charged to the PC   |                    | 1,753,533.—*)                      | 876,767.—*)                   |
| Final Acts ARC   |                    | 140,000.—**)                       |                               |
| Final Acts PC  |                    |                                    | 46,700.—**)                   |
|  | <u>2,817,000.—</u> | <u>1,893,533.—</u>                 | <u>923,467.—</u>              |

Notes

- \*) Including the cost of using an additional conference room.  
 \*\*) Assuming that the Conferences assume responsibility for 1/3 of the type-setting costs.

5. SPECIAL EXPENSES

POSITION ON 30 NOVEMBER, 1959

| Articles and items                                       | B U D G E T | Expenditures<br>at<br>30.11.1959 | Estimated<br>expenditures | Provision for<br>future contin-<br>gencies | T O T A L | Transfer of credits<br>from item<br>to item | from sub-<br>head to<br>subhead | BALANCE     |
|--|-------------|----------------------------------|---------------------------|--|-----------|---|---------------------------------|-------------|
| 1  | 2           | 3                                | 4                         | 5  | 6         | 7   | 8                               | 9           |
| <u>ADMINISTRATIVE RADIO CONFERENCE</u>                   |             |                                  |                           |  |           |   |                                 |             |
| Assistance for technical<br>work                         | 150,000.--  | 51,849.80                        | 18,150.20                 | 10,000.--                                  | 80,000.-- |   |                                 | + 70,000.-- |
| <u>PLENIPOTENTIARY CONFERENCE</u>                        |             |                                  |                           |  |           |   |                                 |             |
| Extra staff for the<br>Personnel and Finance<br>Services | 18,700.--   | 3,241.90                         | --                        | --   | 3,241.90  |   |                                 | + 15,458.10 |

RECAPITULATION

POSITION ON 30 NOVEMBER, 1959

|  | INTERNATIONAL<br>TELECOMMUNICATION<br>CONFERENCES |                               | Administrative Radio<br>Conference |                               | Plenipotentiary<br>Conference |                               |
|--|---|-------------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|
|  | Budget  | Expenses and<br>est. expenses | Budget                             | Expenses and<br>est. expenses | Budget                        | Expenses and<br>est. expenses |
| 1. Administrative Radio Conference<br>Preparatory work by the General<br>Secretariat (Book of Proposals)                                 | 329,795.50  | 425,928.04                    | 329,795.50                         | 425,928.04                    |                               |                               |
| 2. Administrative Radio Conference<br>Preparatory work by the I.F.R.B.<br>(preparation of plans and<br>reports)                          | 414,185.39  | 427,173.54                    | 414,185.39                         | 427,173.54                    |                               |                               |
| 3. Plenipotentiary Conference<br>Preparatory work by the General<br>Secretariat (Book of Proposals<br>and Administrative Council report) | 146,300.—   | 113,585.05                    |                                    |                               | 146,300.—                     | 113,585.05                    |
| 4. International Telecommunication<br>Conferences (see page 8)   |   |                               |                                    |                               |                               |                               |
| Budget   | 2,667,750.—                                       | 2,817,000.—                   | 1,778,500.—                        | 1,893,533.—                   | 889,250.—                     | 923,467.—                     |
| Supplementary estimates  | 231,700.—   |                               | 165,000.—                          |                               | 66,700.—                      |                               |
| 5. Special expenses:   |   |                               |                                    |                               |                               |                               |
| Assistance for technical work  | 150,000.—   | 80,000.—                      | 150,000.—                          | 80,000.—                      |                               |                               |
| Extra staff for the Personnel<br>and Finance Services  | 18,700.—  | 3,241.90                      |                                    |                               | 18,700.—                      | 3,241.90                      |
|  | 3,958,430.89                                      | 3,866,928.53                  | 2,837,480.89                       | 2,826,634.58                  | 1,120,950.—                   | 1,040,293.95                  |



A N N E X 2

LIST OF PARTICIPANTS IN THE EXPENSES OF THE INTERNATIONAL  
TELECOMMUNICATION CONFERENCES, GENEVA, 1959

| 1. <u>Members of the Union</u>   | <u>Number of con-</u><br><u>tributary units</u> | <u>Participants</u> |               |
|--|---|---------------------|---------------|
|  |   | <u>A.R.C.</u>       | <u>P.C.</u>   |
| Afghanistan .....  | 1   | 1                   | 1             |
| Albania (People's Republic of) .....   | $\frac{1}{2}$                                   | $\frac{1}{2}$       | $\frac{1}{2}$ |
| Saudi Arabia (Kingdom of) .....  | 1   | 1                   | 1             |
| Argentine Republic .....   | 25  | 25                  | 25            |
| Australia (Commonwealth of) .....  | 20  | 20                  | 20            |
| Austria .....  | $\frac{1}{2}$                                   | $\frac{1}{2}$       | $\frac{1}{2}$ |
| Belgium .....  | 8   | 8                   | 8             |
| The Bielorussian Soviet Socialist<br>Republic .....                              | 3   | 3                   | 3             |
| Burma .....  | 3   | 3                   | 3             |
| Bolivia .....  | 3   | 3                   | 3             |
| Brazil .....   | 25  | 25                  | 25            |
| Bulgaria (People's Republic of) .....  | 1   | 1                   | 1             |
| Cambodia (Kingdom of) .....  | 1   | 1                   | -             |
| Canada .....   | 20  | 20                  | 20            |
| Ceylon .....   | 1   | 1                   | 1             |
| Chile .....  | 3   | -                   | -             |
| China .....  | 15  | 15                  | 15            |
| Vatican City State .....   | $\frac{1}{2}$                                   | $\frac{1}{2}$       | $\frac{1}{2}$ |
| Colombia (Republic of) .....   | 3   | 3                   | 3             |
| Belgian Congo and Territory of<br>Ruanda-Urundi .....                            | 2   | 2                   | 2             |
| Korea (Republic of) .....  | 1   | 1                   | 1             |
| Costa Rica .....   | 3   | 3                   | 3             |
| Cuba .....   | 2   | 2                   | 2             |
| Denmark .....  | 5   | 5                   | 5             |
| Dominican Republic .....   | 3   | 3                   | 3             |
| El Salvador (Republic of) .....  | 3   | 3                   | 3             |
| Ecuador .....  | 1   | 1                   | -             |
| Spain .....  | 3   | 3                   | 3             |
| Overseas States of the French Community<br>and French Overseas Territories ..... | 20  | 20                  | 20            |
| United States .....  | 30  | 30                  | 30            |
| Ethiopia .....   | 1   | 1                   | 1             |
| Finland .....  | 3   | 3                   | 3             |
| France .....   | 30  | 30                  | 30            |
| Ghana .....  | $\frac{1}{2}$                                   | $\frac{1}{2}$       | $\frac{1}{2}$ |
| Greece .....   | 3   | 3                   | 3             |
| Guatemala .....  | 1   | 1                   | 1             |
| Guinea (Republic of) .....   | 1   | -                   | 1             |
| Haiti (Republic of) .....  | 1   | -                   | -             |
| Honduras (Republic of) .....   | 2   | -                   | -             |
| Hungarian People's Republic .....  | 1   | 1                   | 1             |
| India (Republic of) .....  | 20  | 20                  | 20            |
| Indonesia (Republic of) .....  | 10  | 10                  | 10            |
| Iran .....   | 1   | 1                   | 1             |

|  | Number of con-<br>tributory units |       | Participants  |               |
|--|-----------------------------------|-------|---------------|---------------|
|  |                                   |       | A.R.C.        | P.C.          |
| Iraq (Republic of) .....   | 1                                 | ..... | 1             | 1             |
| Ireland .....  | 3                                 | ..... | 3             | 3             |
| Iceland .....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Israel .....   | 1                                 | ..... | 1             | 1             |
| Italy .....  | 20                                | ..... | 20            | 20            |
| Japan .....  | 25                                | ..... | 25            | 25            |
| Jordan (Hashemite Kingdom of) .....  | 1                                 | ..... | 1             | 1             |
| Kuwait .....   | 1                                 | ..... | 1             | 1             |
| Laos (Kingdom of) .....  | $\frac{1}{2}$                     | ..... | -             | $\frac{1}{2}$ |
| Lebanon .....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Liberia .....  | 3                                 | ..... | 3             | 3             |
| Libya (United Kingdom of) .....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Luxembourg .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Malaya (Federation of) .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Kingdom of Morocco .....   | 1                                 | ..... | 1             | 1             |
| Mexico .....   | 8                                 | ..... | 8             | 8             |
| Monaco .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Nepal .....  | $\frac{1}{2}$                     | ..... | -             | $\frac{1}{2}$ |
| Nicaragua .....  | 3                                 | ..... | 3             | 3             |
| Norway .....   | 5                                 | ..... | 5             | 5             |
| New Zealand .....  | 5                                 | ..... | 5             | 5             |
| Pakistan .....   | 15                                | ..... | 15            | 15            |
| Panama .....   | 3                                 | ..... | -             | -             |
| Paraguay .....   | 1                                 | ..... | 1             | 1             |
| Netherlands,<br>(Kingdom of the) .....   | 10                                | ..... | 10            | 10            |
| Peru .....   | 2                                 | ..... | 2             | 2             |
| Philippines (Republic of the) .....  | 1                                 | ..... | 1             | 1             |
| Poland (People's Republic of) .....  | 10                                | ..... | 10            | 10            |
| Portugal .....   | 8                                 | ..... | 8             | 8             |
| Spanish Provinces in Africa .....  | 1                                 | ..... | -             | -             |
| Portuguese Oversea Provinces .....   | 8                                 | ..... | 8             | 8             |
| United Arab Republic .....   | 5 + 1                             | ..... | 6             | 6             |
| Federal Republic of Germany .....  | 20                                | ..... | 20            | 20            |
| Federal People's Republic of<br>Yugoslavia .....   | 1                                 | ..... | 1             | 1             |
| Ukrainian Soviet Socialist Republic ...  | 5                                 | ..... | 5             | 5             |
| Rhodesia and Nyasaland (Federation) ...  | $\frac{1}{2}$                     | ..... | -             | $\frac{1}{2}$ |
| Roumanian People's Republic .....  | 1                                 | ..... | 1             | 1             |
| United Kingdom of Great Britain and<br>Northern Ireland .....  | 30                                | ..... | 30            | 30            |
| Sudan (Republic of) .....  | 1                                 | ..... | 1             | 1             |
| Sweden .....   | 10                                | ..... | 10            | 10            |
| Switzerland .....  | 10                                | ..... | 10            | 10            |
| Czechoslovakia .....   | 8                                 | ..... | 8             | 8             |
| Territories of the United States of<br>America .....   | 25                                | ..... | 25            | 25            |
| The Overseas Territories for the Inter-<br>national Relations of which<br>the Government of the United<br>Kingdom of Great Britain and Northern<br>Ireland are responsible ..... | 8                                 | ..... | 8             | 8             |
| Thailand .....   | 5                                 | ..... | 5             | 5             |
| Tunisia .....  | 1                                 | ..... | 1             | 1             |
| Turkey .....   | 5                                 | ..... | 5             | 5             |
| Union of South Africa and Territory of<br>South-West Africa .....  | 13                                | ..... | 13            | 13            |

|  | Number of con-<br>tributory units |       | Participants<br>A.R.C. | P.C.          |
|--|-----------------------------------|-------|------------------------|---------------|
| Union of Soviet Socialist Republics ..   | 30                                | ..... | 30                     | 30            |
| Uruguay (Oriental Republic of) .....   | 3                                 | ..... | 3                      | 3             |
| Venezuela (United States of) .....   | 10                                | ..... | 10                     | 10            |
| Viet-Nam (Republic of) .....   | 1                                 | ..... | -                      | 1             |
| Yemen .....  | 1                                 | ..... | -                      | -             |
| <br>II. <u>Associate Members of the Union</u>  |                                   |       |                        |               |
| British West Africa .....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | -             |
| British East Africa .....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | $\frac{1}{2}$ |
| British Bermuda - Caribbean Group ....   | $\frac{1}{2}$                     | ..... | -                      | -             |
| Singapore - British Borneo Group .....   | $\frac{1}{2}$                     | ..... | -                      | -             |
| Trust Territory of Somaliland under<br>Italian Administration .....                      | $\frac{1}{2}$                     | ..... | -                      | -             |
|  | <u>619</u>                        |       |                        |               |
| <br>III. <u>Recognized private operating agencies</u>                                    |                                   |       |                        |               |
| Compagnie générale de télégraphie sans fil .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| Société Radio-Orient .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| Compagnie portugaise Radio Marconi .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| Transradio Espanola S.A. ....  | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| France Cables et Radio .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| British Broadcasting Corporation .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| Cable and Wireless Limited .....   | 1                                 | ..... | 1                      | .....         |
| Independent Television Authority .....   | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| Marconi International Marine Communication Company Limited ...                           | $\frac{1}{2}$                     | ..... | $\frac{1}{2}$          | .....         |
| <br>IV. <u>United Nations and Specialized Agencies</u>                                   |                                   |       |                        |               |
| United Nations Organization (U.N.O.) .....   | exonerated                        |       |                        | exonerated    |
| Intergovernmental Maritime Consultative Organization<br>(I.M.C.O.) .....                 | "                                 | ..... | "                      | .....         |
| International Civil Aviation Organization (I.C.A.O.) .....                               | "                                 | ..... | exonerated             | .....         |
| United Nations Educational, Scientific and Cultural<br>Organization (U.N.E.S.C.O.) ..... | "                                 | ..... | "                      | .....         |
| World Meteorological Organization (W.M.O.) .....   | "                                 | ..... | "                      | .....         |
| World Health Organization (W.H.O.) .....   | "                                 | ..... | -                      | .....         |
| Universal Postal Union (U.P.U.) .....  | -                                 | ..... | exonerated             | .....         |
| <br>V. <u>International Organizations</u>  |                                   |       |                        |               |
| International Amateur Radio Union (I.A.R.U.) .....                                       | exonerated                        | ..... | -                      | .....         |
| International Radio Maritime Committee (C.I.R.M.) .....                                  | "                                 | ..... | -                      | .....         |
| International Broadcasting and Television Organization<br>(I.B.T.O.) .....               | "                                 | ..... | -                      | .....         |
| Committee on Space Research (COSPAR) .....   | $\frac{1}{2}$                     | ..... | -                      | .....         |
| International Federation of Shipping (I.S.F.) .....                                      | exonerated                        | ..... | -                      | .....         |
| International Chamber of Shipping .....  | "                                 | ..... | -                      | .....         |
| International Radio Air Safety Association (I.R.A.S.A.) ..                               | "                                 | ..... | -                      | .....         |
| International Air Transport Association (I.A.T.A.) .....                                 | "                                 | ..... | -                      | .....         |

|   | <u>Number of con-<br/>tributory units</u> | <u>Participants</u>                |             |
|---|---|------------------------------------|-------------|
|   |   | <u>A.R.C.</u>                      | <u>P.C.</u> |
| European Broadcasting Union (E.B.U.) .....                                  | exonerated                                | .....                              | -           |
| International Committee of the Red Cross (I.C.R.C.) .....                   | "   | .....                              | -           |
| International Astronautical Federation (I.A.F.) .....                       | "   | .....                              | -           |
| International Astronomical Union .....                                      | "   | .....                              | -           |
| International Scientific Radio Union (U.R.S.I.) .....                       | "   | .....                              | -           |
| International Association of Radio-Maritime Interests<br>(A.I.I.R.M.) ..... | "   | .....                              | -           |
| International Criminal Police Organization (INTERPOL) .....                 | "   | .....                              | -           |
|   |   | <u>608<math>\frac{1}{2}</math></u> | <u>604</u>  |

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

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**Document No. 866-E  
14 December, 1959**

**SERIES C**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Blue Document No. | Series No. | Pages | Former Article | New Article | Pages | Remarks    |
|-------------------|------------|-------|----------------|-------------|-------|------------|
| 803               | 18         | 18-01 | 1              | 1           | C-01  | Chap. I    |
| 573               | 2          | 2-01  | 2              | 2           | C-12  |            |
| 796               | 17         | 17-01 | 10             | 8           | C-19  | Chap. III  |
| "                 | "          | 17-04 | 11             | 9           | C-21  |            |
| "                 | "          | 17-30 | 11a            | 10          | C-46  |            |
| "                 | "          | 17-35 | 12             | 11          | C-51  |            |
| 747               | 13         | 13-08 | 26             | 22          | C-53  | Chap. VI   |
| 791               | 15         | 15-01 | 24             | 23          | C-53  |            |
| 747               | 13         | 13-06 | 25             | 24          | C-63  |            |
| 645               | 5          | 5-01  | 35             | 25          | C-65  |            |
| 747               | 13         | 13-06 | 24a            | 26          | C-68  |            |
| 695               | 9          | 9-24  | 37             | 36          | C-69  | Chap. VIII |



| Former reference                        | Source   | New reference                                  |
|---|--|--|
| Chap.: I<br>Art.: 1 and 2<br>Nos.: 1-85 | Committee: 6<br>Doc. No.: 326, 409 Rev., 429 and 488 | Chap.: I<br>Art.: 1 and 2<br>Nos.: 1-01 to 209 |

## CHAPTER I

### Terminology

#### ARTICLE 1

#### Terms and Definitions

##### Preamble

- 1 **1-01** For the purposes of these Regulations the following terms shall have the meanings defined below. These terms and definitions do not, however, necessarily apply for other purposes.

##### Section I. General Terms

- 2 **1-02** *Telecommunication*: Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.
- 3 **1-03** *General Network of Telecommunication Channels*: The whole of the existing telecommunication channels open to public correspondence, with the exception of the telecommunication channels of the mobile service.
- 16d **1-04** *Simplex Operation*: Operating method in which transmission is made possible alternately in each direction, for example, by means of manual control.<sup>1</sup>
- 16e **1-05** *Duplex Operation*: Operating method in which transmission is possible simultaneously in both directions.<sup>1</sup>
- 16f **1-06** *Semi-duplex Operation*: Operating method which is simplex at one end of the circuit and duplex at the other.<sup>1</sup>

16d.1 **1-04.1** <sup>1</sup> In general, duplex and semi-duplex operation require two frequencies in radio-communication; simplex may use either one or two.

- 5                    **1-07**    *Radio Waves (or Hertzian Waves)*: Electromagnetic waves of frequencies lower than 3 000 Gc/s, propagated in space without artificial guide.
- 6                    **1-08**    *Radio*: A general term applied to the use of radio waves.
- 4                    **1-09**    *Radiocommunication*: Telecommunication by means of radio waves.
- 7        MOD        **1-10**    *Telegraphy*: A system of telecommunication which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form. The foregoing definition appears in the Convention, but, for the purposes of these Regulations, telegraphy shall mean, unless otherwise specified, "A system of telecommunication for the transmission of written matter by the use of a signal code".
- 73g                **1-11**    *Frequency-Shift Telegraphy*: Telegraphy by frequency modulation in which the telegraph signal shifts the frequency of the carrier between predetermined values. There is phase continuity during the shift from one frequency to the other.
- 73i                **1-12**    *Four-Frequency Duplex Telegraphy*: Frequency-shift telegraphy in which each of the four possible signal combinations corresponding to two telegraph channels is represented by a separate frequency.
- 17                **1-13**    *Telegram*: Written matter intended to be transmitted by telegraphy for delivery to an addressee; this term also includes radiotelegram unless otherwise specified. In this definition the term Telegraphy has the meaning defined in the Convention.
- 18                **1-14**    *Radiotelegram*: Telegram originating in or intended for a mobile station transmitted, on all or part of its route, over the radio-communication channels of a mobile service.
- 7a                **1-15**    *Telemetry*: The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.

- 16c                    **1-16**    *Radiotelemetering*: Telemetering by means of radio waves.
- 8                      **1-17**    *Telephony*: A system of telecommunication set up for the transmission of speech or, in some cases, other sounds.
- 18a                   **1-18**    *Radiotelephone Call*: A telephone call, originating in or intended for a mobile station, transmitted on all or part of its route over the radiocommunication channels of a mobile service.
- 9                      **1-19**    *Television*: A system of telecommunication for the transmission of transient images of fixed or moving objects.
- 10                     **1-20**    *Facsimile*: A system of telecommunication for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form.

## Section II. Radio Systems, Services and Stations

- 35                    **1-21**    *Station*: One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service. Each station shall be classified by the service in which it operates permanently or temporarily.
- 19                    **1-22**    *Fixed Service*: A service of radiocommunication between specified fixed points.
- 37                    **1-23**    *Fixed Station*: A station in the fixed service.
- 20                    **1-24**    *Aeronautical Fixed Service*: A fixed service intended for the transmission of information relating to air navigation, preparation for and safety of flight.
- 38                    **1-25**    *Aeronautical Fixed Station*: A station in the aeronautical fixed service.
- 18k                   **1-26**    *Tropospheric Scatter*: The propagation of radio waves by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.



- 18L                    **1-27**    *Ionospheric Scatter* : The propagation of radio waves by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.
- 21                    **1-28**    *Broadcasting Service* : A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmissions.
- 39                    **1-29**    *Broadcasting Station* : A station in the broadcasting service.
- 23                    **1-30**    *Mobile Service* : A service of radiocommunication between mobile and land stations, or between mobile stations.
- 40                    **1-31**    *Land Station* : A station in the mobile service not intended to be used while in motion.
- 44                    **1-32**    *Mobile Station* : A station in the mobile service intended to be used while in motion or during halts at unspecified points.
- 25                    **1-33**    *Aeronautical Mobile Service* : A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may also participate.
- 42                    **1-34**    *Aeronautical Station* : A land station in the aeronautical mobile service. In certain instances an aeronautical station may be placed on board a ship.
- 46                    **1-35**    *Aircraft Station* : A mobile station in the aeronautical mobile service on board an aircraft.
- 26                    **1-36**    *Land Mobile Service* : A mobile service between base stations and land mobile stations, or between land mobile stations.
- 43                    **1-37**    *Base Station* : A land station in the land mobile service carrying on a service with land mobile stations.
- 47                    **1-38**    *Land Mobile Station* : A mobile station in the land mobile service capable of surface movement within the geographical limits of a country or continent.

- 24                    **1-39**    *Maritime Mobile Service* : A mobile service between coast stations and ship stations, or between ship stations, in which survival craft stations may also participate.
- 24a    MOD           **1-40**    *Port Operations Service* : A maritime mobile service in or near a port, between coast stations and ship stations, or between ship stations, in which messages are restricted to those relating to the movement and the safety of ships and, in emergency to the safety of persons.
- 41                    **1-41**    *Coast Station* : A land station in the maritime mobile service.
- 45                    **1-42**    *Ship Station* : A mobile station in the maritime mobile service located on board a vessel, other than a survival craft, which is not permanently moored.
- 69L                  **1-43**    *Ship's Emergency Transmitter* : A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes.
- 45a                  **1-44**    *Survival Craft Station* : A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.
- 11                   **1-45**    *Radiodetermination* : The determination of position, or the obtaining of information relating to position, by means of the propagation properties of radio waves.
- 27                   **1-46**    *Radiodetermination Service* : A service involving the use of radiodetermination.
- 48                   **1-47**    *Radiodetermination Station* : A station in the radiodetermination service.
- 12                   **1-48**    *Radionavigation* : Radiodetermination used for the purposes of navigation, including obstruction warning.
- 28                   **1-49**    *Radionavigation Service* : A radiodetermination service involving the use of radionavigation.

- 50                    **1-50**     *Radionavigation Land Station* : A station in the radionavigation service not intended to be used while in motion.
- 51                    **1-51**     *Radionavigation Mobile Station* : A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.
- 30                    **1-52**     *Aeronautical Radionavigation Service* : A radionavigation service intended for the benefit of aircraft.
- 29                    **1-53**     *Maritime Radionavigation Service* : A radionavigation service intended for the benefit of ships.
- 12a                   **1-54**     *Radiolocation* : Radiodetermination used for purposes other than those of radionavigation.
- 28a                   **1-55**     *Radiolocation Service* : A radiodetermination service involving the use of radiolocation.
- 51a                   **1-56**     *Radiolocation Land Station* : A station in the radiolocation service not intended to be used while in motion.
- 51b                   **1-57**     *Radiolocation Mobile Station* : A station in the radiolocation service intended to be used while in motion or during halts at unspecified points.
- 13                    **1-58**     *Radar* : A radiodetermination system based on the comparison of reference signals with radio signals reflected, or re-transmitted, from the position to be determined.
- 14                    **1-59**     *Primary Radar* : A radiodetermination system based on the comparison of reference signals with radio signals reflected from the position to be determined.
- 15                    **1-60**     *Secondary Radar* : A radiodetermination system based on the comparison of reference signals with radio signals re-transmitted from the position to be determined.
- 70                    **1-61**     *Instrument Landing System (ILS)* : A radionavigation system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing.

- 70a                    **1-62**    *Instrument Landing System Localizer* : A system of horizontal guidance embodied in the instrument landing system which indicates the horizontal deviation of the aircraft from its optimum path of descent along the axis of the runway.
- 70b                    **1-63**    *Instrument Landing System Glide Path* : A system of vertical guidance embodied in the instrument landing system which indicates the vertical deviation of the aircraft from its optimum path of descent.
- 70c                    **1-64**    *Marker Beacon* : A transmitter in the aeronautical radio-navigation service which radiates vertically a distinctive pattern for providing position information to aircraft.
- 70d                    **1-65**    *Radio Altimeter* : A radionavigation equipment, on board an aircraft, which makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the ground.
- 16                     **1-66**    *Radio Direction Finding* : Radiodetermination using the reception of radio waves for the purpose of determining the direction of a station or object.
- 52                     **1-67**    *Radio Direction-Finding Station* : A radiodetermination station using radio direction-finding.
- 53                     **1-68**    *Radiobeacon Station* : A station in the radionavigation service the emissions of which are intended to enable a mobile station to determine its bearing or direction in relation to the radiobeacon station.
- 33b                    **1-69**    *Safety Service* : A radiocommunication service used permanently or temporarily for the safeguarding of human life and property.
- 20b                    **1-70**    *Space Service* : A radiocommunication service between space stations.
- 20a                    **1-71**    *Earth-Space Service* : A radiocommunication service between earth stations and space stations.
- 39b                    **1-72**    *Space Station* : A station in the earth-space service or the space service located on an object which is beyond, or intended to go

beyond, the major portion of the earth's atmosphere and which is not intended for flight between points on the earth's surface.

- 39a      **1-73**      *Earth Station* : A station in the earth-space service located either on the earth's surface or on an object which is limited to flight between points on the earth's surface.
- 6a      **1-74**      *Radio Astronomy* : Astronomy based on the reception of radio waves of cosmic origin.
- 32a      **1-75**      *Radio Astronomy Service* : A service involving the use of radio astronomy.
- 32      **1-76**      *Meteorological Aids Service* : A radiocommunication service used for meteorological, including hydrological, observations and exploration.
- 73      **1-77**      *Radiosonde* : An automatic radio transmitter in the meteorological aids service usually carried on an aircraft, free balloon, kite or parachute, and which transmits meteorological data.
- 31      **1-78**      *Amateur Service* : A service of self-training, intercommunication and technical investigations carried on by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.
- 56      **1-79**      *Amateur Station* : A station in the amateur service.
- 33      **1-80**      *Standard Frequency Service* : A radiocommunication service for scientific, technical and other purposes, providing the transmission of specified frequencies of stated high precision, intended for general reception.
- 54      **1-81**      *Standard Frequency Station* : A station in the standard frequency service.
- 33c      **1-82**      *Time Signal Service* : A radiocommunication service for the transmission of time signals of stated high precision, intended for general reception.

55                    **1-83**     *Experimental Station* : A station utilizing radio waves in experiments with a view to the development of science or technique. This definition does not include amateur stations.

34                    **1-84**     *Special Service* : A radiocommunication service, not otherwise defined in this Article, carried on exclusively for specific needs of general utility, and not open to public correspondence.

### Section III. Technical Characteristics

57                    **1-85**     *Assigned Frequency* : The centre of the frequency band assigned to a station.

57b                   **1-86**     *Characteristic Frequency* : A frequency which can be easily identified and measured in a given emission.

57c                   **1-87**     *Reference Frequency* : A frequency having a fixed and specified position with respect to the assigned frequency. The displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the centre of the frequency band occupied by the emission.

59                    **1-88**     *Frequency Tolerance* : The maximum permissible departure by the centre frequency of the frequency band occupied by an emission from the assigned frequency or, by the characteristic frequency of an emission from the reference frequency. The frequency tolerance is expressed in parts in  $10^6$  or in cycles per second.

57a                   **1-89**     *Assigned Frequency Band* : The frequency band the centre of which coincides with the frequency assigned to the station and the width of which equals the necessary bandwidth plus twice the absolute value of the frequency tolerance.

58                    **1-90**     *Occupied Bandwidth* : The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 % of the total mean power radiated by a given emission. In some cases, for example multi-channel frequency-division systems, the percentage of 0.5 % may

lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful.

58a

**1-91** *Necessary Bandwidth*: For a given class of emission, the minimum value of the occupied bandwidth sufficient to ensure the transmission of information at the rate and with the quality required for the system employed, under specified conditions. Emissions useful for the good functioning of the receiving equipment as, for example, the emission corresponding to the carrier of reduced carrier systems, shall be included in the necessary bandwidth.

58d

**1-92** *Spurious Emission*: Emission on a frequency or frequencies which are outside the necessary band, and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions and intermodulation products, but exclude emissions in the immediate vicinity of the necessary band, which are a result of the modulation process for the transmission of information.

69

**1-93** *Harmful Interference*: Any emission, radiation or induction which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with these Regulations.

60

**1-94** *Power*: Whenever the power of a radio transmitter etc. is referred to, it shall be expressed in one of the following forms:

- peak envelope power ( $P_p$ );
- mean power ( $P_n$ );
- carrier power ( $P_c$ ).

For different classes of emissions, the relationships between peak envelope power, mean power and carrier power, under the condi-



tions of normal operation and no modulation, are contained in Recommendations of the C.C.I.R., which may be used as a guide.

- 61      **1-95**      *Peak Envelope Power of a Radio Transmitter*: The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the highest crest of the modulation envelope, taken under conditions of normal operation.
- 63      **1-96**      *Mean Power of a Radio Transmitter*: The power supplied to the antenna transmission line by a transmitter during normal operation, averaged over a time sufficiently long compared with the period of the lowest frequency encountered in the modulation. A time of 1/10 second during which the mean power is greatest will be selected normally.
- 63a      **1-97**      *Carrier Power of a Radio Transmitter*: The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle under conditions of no modulation. This definition does not apply to pulse modulated emissions.
- 64d      **1-98**      *Effective Radiated Power*: The power supplied to the antenna multiplied by the relative gain of the antenna in a given direction.
- 65      **1-99**      *Gain of an Antenna*: The ratio of the power required at the input of a reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field at the same distance. When not specified otherwise, the figure expressing the gain of an antenna refers to the gain in the direction of the radiation main lobe. In services using scattering modes of propagation the full gain of an antenna may not be realizable in practice and the apparent gain may vary with time.
- 65c      **1-100**      *Isotropic or Absolute Gain of an Antenna*: The gain ( $G_{is}$ ) of an antenna in a given direction when the reference antenna is an isotropic antenna isolated in space.



- 65b **1-101** *Relative Gain of an Antenna*: The gain ( $G_d$ ) of an antenna in a given direction when the reference antenna is a half-wave loss free dipole isolated in space and the equatorial plane of which contains the given direction.
- 65a **1-102** *Gain Referred to a Short Vertical Antenna*: The Gain ( $G_v$ ) of an antenna in a given direction when the reference antenna is a perfect vertical antenna, much shorter than one quarter of the wavelength, placed on the surface of a perfectly conducting plane earth.
- 67 **1-103** *Antenna Directivity Diagram*: A curve representing, in polar or Cartesian co-ordinates, a quantity proportional to the gain of an antenna in the various directions in a particular plane or cone.

68b SUP

## ARTICLE 2

## Designation of Emissions

- 74 **2-01** § 1. Emissions are designated according to their classification and their necessary bandwidth.

## Section I. Classification

- 75 **2-02** § 2. Emissions are classified and symbolized according to the following characteristics <sup>1</sup>:

- (1) Type of modulation of main carrier
- (2) Type of transmission
- (3) Supplementary characteristics

- 76 **2-03** § 3. (1) *Types of modulation of main carrier*: *Symbol*
- |                         |   |
|-------------------------|---|
| a) Amplitude            | A |
| b) Frequency (or Phase) | F |
| c) Pulse                | P |

- 75.1 **2-02.1** <sup>1</sup> As an exception to the provisions of 2-03 to 2-05, damped waves are designated by B.

|    |           |  |               |
|----|-----------|--|---------------|
| 77 | 2-04      | (2) <i>Types of transmission :</i>   | <i>Symbol</i> |
|    |           | a) Absence of any modulation intended to carry information   | 0             |
|    |           | b) Telegraphy without the use of a modulating audio frequency  | 1             |
|    |           | c) Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission. (Special case : an unkeyed modulated emission) | 2             |
|    |           | d) Telephony (including sound broadcasting)  | 3             |
|    |           | e) Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)   | 4             |
|    |           | f) Television (vision only)  | 5             |
|    |           | g) Four-frequency duplex   | 6             |
|    |           | h) Multichannel voice-frequency telegraphy   | 7             |
|    |           | i) Cases not covered by the above  | 9             |
| 78 | 2-05      | (3) <i>Supplementary characteristics :</i>   |               |
|    |           | a) Double sideband   | (none)        |
|    |           | b) Single sideband :   |               |
|    |           | — reduced carrier  | A             |
|    |           | — full carrier   | H             |
|    |           | — suppressed carrier   | J             |
|    |           | c) Two independent sidebands   | B             |
|    |           | d) Vestigial sideband  | C             |
|    |           | e) Pulse :   |               |
|    |           | — amplitude modulated  | D             |
|    |           | — width (or duration) modulated  | E             |
|    |           | — phase (or position) modulated  | F             |
|    |           | — code modulated   | G             |
| 80 | 2-06 § 4. | The classification of typical emissions is tabulated as follows :  |               |

| Type of Modulation of Main Carrier | Type of Transmission   | Supplementary Characteristics       | Symbol |
|------------------------------------|--|-------------------------------------|--------|
| Amplitude Modulation               | With no modulation   | —                                   | A0     |
|                                    | Telegraphy without the use of a modulating audio frequency (by on-off keying)  | —                                   | A1     |
|                                    | Telegraphy by the on-off keying of an amplitude-modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission (special case: an unkeyed emission amplitude modulated) | —                                   | A2     |
|                                    | Telephony  | Double sideband                     | A3     |
|                                    |  | Single sideband, reduced carrier    | A3A    |
|                                    |  | Single sideband, suppressed carrier | A3J    |
|                                    |  | Two independent sidebands           | A3B    |
|                                    | Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)  | —                                   | A4     |
|                                    |  | Single sideband, reduced carrier    | A4A    |
|                                    | Television   | Vestigial sideband                  | A5C    |
|                                    | Multichannel voice-frequency telegraphy  | Single sideband, reduced carrier    | A7A    |
|                                    | Cases not covered by the above, e.g. a combination of telephony and telegraphy   | Two independent sidebands           | A9B    |

| Type of Modulation of Main Carrier | Type of Transmission   | Supplementary Characteristics | Symbol |
|------------------------------------|--|-------------------------------|--------|
| Frequency (or Phase) Modulation    | Telegraphy by frequency shift keying without the use of a modulating audio frequency: one of two frequencies being emitted at any instant  | —                             | F1     |
|                                    | Telegraphy by the on-off keying of a frequency modulating audio frequency or by the on-off keying of a frequency modulated emission (special case: an unkeyed emission, frequency modulated) | —                             | F2     |
|                                    | Telephony  | —                             | F3     |
|                                    | Facsimile by direct frequency modulation of the carrier  | —                             | F4     |
|                                    | Television   | —                             | F5     |
|                                    | Four-frequency duplex telegraphy   | —                             | F6     |
|                                    | Cases not covered by the above, in which the main carrier is frequency modulated   | —                             | F9     |
| Pulse Modulation                   | A pulsed carrier without any modulation intended to carry information (e.g. radar)   | —                             | P0     |
|                                    | Telegraphy by the on-off keying of a pulsed carrier without the use of a modulating audio frequency  | —                             | P1D    |

| Type of Modulation of Main Carrier | Type of Transmission  | Supplementary Characteristics   | Symbol |
|------------------------------------|---|---|--------|
| Pulse Modulation                   | Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of a modulated pulsed carrier (special case: an unkeyed modulated pulsed carrier) | Audio frequency or audio frequencies modulating the amplitude of the pulses           | P2D    |
|                                    |   | Audio frequency or audio frequencies modulating the width (or duration) of the pulses | P2E    |
|                                    |   | Audio frequency or audio frequencies modulating the phase (or position) of the pulses | P2F    |
|                                    | Telephony   | Amplitude modulated pulses  | P3D    |
|                                    |   | Width (or duration) modulated pulses  | P3E    |
|                                    |   | Phase (or position) modulated pulses  | P3F    |
|                                    | Cases not covered by the above in which the main carrier is pulse modulated   | Code modulated pulses (after sampling and quantization)                               | P3G    |
|                                    |   | —   | P9     |

## Section II. Bandwidth

81            **2-07** § 5.        Whenever the full designation of an emission is necessary, the symbol for that emission, as given above, shall be preceded by a number indicating in kilocycles per second the necessary bandwidth of the emission. Bandwidths shall generally be expressed to a maximum of three significant figures, the third figure being almost always a nought or a five.

83            **2-08** § 6.        The necessary bandwidths of various classes of emissions and examples of the designation of emissions are given in Appendix 5.

## Section III. Nomenclature of the Frequency and Wavelength Bands Used in Radiocommunication

85            **2-09** § 7.        The radio spectrum shall be subdivided into nine frequency bands, which shall be designated by progressive whole numbers in accordance with the following Table. Frequencies shall be expressed :

- in kilocycles per second (kc/s) up to and including 3 000 kc/s
- in megacycles per second (Mc/s) thereafter up to and including 3 000 Mc/s
- in gigacycles per second (Gc/s) thereafter up to and including 3 000 Gc/s.

However, where adherence to these provisions would introduce serious difficulties, for example in connection with the notification and registration of frequencies, the lists of frequencies and related matters, reasonable departures may be made.

| Band Number | Frequency Range (lower limit exclusive, upper limit inclusive) | Corresponding Metric Subdivision |
|-------------|--|----------------------------------|
| 4           | 3 to 30 kc/s (kHz)   | Myriametric waves                |
| 5           | 30 to 300 kc/s (kHz)   | Kilometric waves                 |
| 6           | 300 to 3 000 kc/s (kHz)  | Hectometric waves                |
| 7           | 3 to 30 Mc/s (MHz)   | Decametric waves                 |
| 8           | 30 to 300 Mc/s (MHz)   | Metric waves                     |
| 9           | 300 to 3 000 Mc/s (MHz)  | Decimetric waves                 |
| 10          | 3 to 30 Gc/s (GHz)   | Centimetric waves                |
| 11          | 30 to 300 Gc/s (GHz)   | Millimetric waves                |
| 12          | 300 to 3 000 Gc/s (GHz) or<br>3 Tc/s (THz)                     | Decimillimetric waves            |

*Note 1:* "Band Number N" extends from  $0.3 \times 10^n$  to  $3 \times 10^n$  c/s (Hz).

*Note 2:* Abbreviations:

c/s = cycles per second, Hz = hertz

k = kilo ( $10^3$ ), M = mega ( $10^6$ ), G = giga ( $10^9$ ), T = tera ( $10^{12}$ )

*Note 3:* Abbreviations for adjectival band designations:

|              |               |
|--------------|---------------|
| Band 4 = VLF | Band 8 = VHF  |
| Band 5 = LF  | Band 9 = UHF  |
| Band 6 = MF  | Band 10 = SHF |
| Band 7 = HF  | Band 11 = EHF |

| Former reference  | Source   | New reference   |
|---|--|---|
| <div> Chap.: IV<br/> Art.: 10 to 12<br/> Nos.: 284-371 </div> | Committee: 5<br>Doc. No.: 669-725-<br>739-776-DT 848-<br>DT 863-DT 866 | <div> Chap.: III<br/> Art.: 8 to 11<br/> Nos.: 8-01 to 11-08 </div> |

### CHAPTER III

## Notification and Registration of Frequencies. International Frequency Registration Board

### ARTICLE 8

#### General Provisions

|      |             |      |  |
|------|-------------|------|--|
| 284  | <b>8-01</b> | § 1. | The constitution and the essential duties of the International Frequency Registration Board are defined in the Convention.   |
| 287  | <b>8-02</b> | § 2. | The functions of the Board shall include :   |
| 288  | <b>8-03</b> | a)   | the processing of frequency assignment notices received from administrations for recording in the Master International Frequency Register ;  |
| 288a | <b>8-04</b> | b)   | the processing and co-ordination of seasonal schedules of high frequency broadcasting with a view to accommodating requirements of all administrations for that service ;  |
| 289  | <b>8-05</b> | c)   | the compilation, for publication in suitable form and at appropriate intervals by the Secretary General, of frequency lists reflecting the data recorded in the Master International Frequency Register, as well as other material relating to the assignment and use of frequencies ; |
| 291  | <b>8-06</b> | d)   | the review of entries in the Master International Frequency Register with a view to amending or eliminating, as appropriate, those which do not reflect actual frequency usage, in agreement with the administrations which notified the assignments concerned ;                       |
| 291a | <b>8-07</b> | e)   | the study, on a long-term basis, of the usage of the radio spectrum, particularly the portion concerning   |



|      |      |  |
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|      |      | high frequencies, with a view to making recommendations for its more effective use ;   |
| 292  | 8-08 | f) the investigation, at the request of one or more of the interested administrations, of harmful interference and the formulation of recommendations with respect thereto ;   |
| 293  | 8-09 | g) the provision of assistance to administration in the field of radio spectrum utilization, in particular to those administrations in need of special assistance, and the recommendation to administrations, where appropriate, of adjustments in their frequency assignments in order to obtain a better use of the radio spectrum ; |
| 293a | 8-10 | h) the collection of such results of monitoring observations as administrations and organizations may be able to supply and the making of arrangements, through the Secretary General, for their publication in suitable form ;  |
| 294  | 8-11 | i) the formulation and reference to the C.C.I.R. of all general technical questions arising from the Board's examination of frequency assignments ;  |
| 294a | 8-12 | j) the technical planning for radio conferences with a view to reducing their duration ; and   |
| 295  | 8-13 | k) the participation in an advisory capacity, upon invitation by the organizations or countries concerned, in conferences and meetings where questions relating to the assignment and utilization of frequencies are discussed.  |
| 295a | 8-14 | § 3. The working arrangements of the Board are set forth in the remaining articles of this Chapter.  |
| 308  | 8-15 | § 4. The Board shall have the assistance of an adequate specialized secretariat of the requisite qualifications and experience, which shall work under the immediate direction of the Board to enable it to discharge its prescribed duties and functions.   |

## ARTICLE 9

**Notification and Recording of Frequencies  
in the Master International Frequency Register**

**Section I. Notification of Frequency Assignments**

- 314 **9-01** § 1. (1) Any *frequency assignment*<sup>1, 2</sup> to a fixed, land, broad-  
casting<sup>3</sup>, earth radionavigation land, radiolocation land, or standard  
frequency station, or to a ground-based station in the meteorological  
aids service, shall be notified to the International Frequency Registra-  
tion Board,
- a) if the use of the frequency concerned is capable of  
causing harmful interference to any service of another  
administration ; or
  - b) if the frequency is to be used for international radio-  
communication ; or
  - c) if it is desired to obtain international recognition of  
the use of the frequency.
- 315 **9-02** (2) Similar notice shall be given for any frequency to be used  
for the reception of mobile or space stations by a particular land or  
earth station in each case where one or more of the conditions  
specified in No. 9-01 are applicable.
- 316 **9-03** (3) Specific frequencies prescribed by these Regulations for  
common use by stations of a given service (for example, international  
distress frequencies 500 kc/s and 2 182 kc/s, frequencies of ship
- 313a.1 **9-01-1** <sup>1</sup> The expression *frequency assignment*, wherever it appears in this Article,  
shall be understood to refer either to a new frequency assignment or to a change  
in an assignment already recorded in the Master International Frequency Register  
(hereinafter called *Master Register*).
- 314.1 **9-01-2** <sup>2</sup> In the case where a frequency is used by numerous stations under the jurisdic-  
tion of the same administration, see Appendix 1 (Section D, Column 5a, para-  
graphs 2c and 2d).
- 314.2 **9-01-3** <sup>3</sup> With respect to assignments to broadcasting stations in the bands allocated  
exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s (see  
Article 10).

radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board.

318

**9-04** § 2. (1) For any notification under Nos. 9-01 or 9-02 an individual notice for each frequency assignment shall be drawn up as prescribed in Sections A or B of Appendix 1, which specifies the basic characteristics to be furnished. It is recommended that the notifying administration should also supply the additional data called for in that Appendix, together with such further data as it may consider appropriate.

318a

**9-05** (2) When stations of the same service, such as the land mobile service, use a band of frequencies above 28 000 kc/s in a specific area or areas, an individual notice should be drawn up, as prescribed in Section C of Appendix 1, for each frequency on which there are assignments within the band, but the particulars should relate only to a typical station. This does not apply to broadcasting stations.

317

**9-06** § 3. (1) Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than ninety days before the date on which it is to be brought into use, but in any case not later than thirty days after the date it is actually brought into use.

317a

**9-07** (2) Any frequency assignment, the notice of which reaches the Board more than thirty days after the notified date of putting into use shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. 9-06.

319a

**9-08** (3) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.

320

**9-09** (4) Complete notices shall be considered by the Board in the order of their receipt.

- 320a                    **9-10 § 4.**        When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.

**Section II. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register**

- 320b                    **9-11 § 5.**        Any notice which is incomplete shall be returned by the Board immediately, by airmail, to the notifying administration with the reasons therefor.

- 321                     **9-12 § 6.**        Upon receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in a weekly circular sent by airmail to Administrations, Members and Associate Members of the Union ; this circular shall contain the particulars of all such notices received since the publication of the previous circular.

- 322                     **9-13 § 7.**        The circular shall constitute the acknowledgment to the notifying administration of the receipt of a complete notice.

- 322a                    **9-14 § 8.**        Complete notices shall be considered by the Board in the order specified in No. 9-09. The Board cannot postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith ; moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board until it has reached a finding with respect to such earlier notice.

- 326                     **9-15 § 9.**        (1) Except for notices referred to in Nos. 9-56, 9-62, 9-67, 9-76 and 9-83, the Board shall examine each notice with respect to

- 328a                    **9-16**            a) its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the probability of harmful interference) ;

329

9-17

b) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register :

- 1) bears a date in Column 2a (see No. 9-122) ; or
- 2) is in conformity with the provisions of No. 9-16 and bears a date in Column 2b (see No. 9-123), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 9-16 with an earlier date in Column 2b ; or .

329a

9-18

c) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register :

- 1) is in conformity with the provisions of No. 9-16 and either bears a symbol<sup>1</sup> in Column 2d (see No. 9-125), or was recorded in the Master Register with a date in this column as a result of a favourable finding with respect to No. 9-18 ; or
- 2) is in conformity with the provisions of No. 9-16 and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to No. 9-18, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 9-16.

329a.1

9-18.1 <sup>1</sup> This symbol indicates an assignment notified pursuant to No. 272 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951, or, in the frequency bands above 27 500 kc/s, an assignment for which the notice was received by the Board before 1 April 1952.

- 329b      **9-19**      (2) The Board shall not make the examination specified in No. 9-17 where the notice refers to a broadcasting station in Region 2 in the band 535-1 605 kc/s. When the notice relates to a frequency above 28 000 kc/s, the Board shall only make the examination specified in No. 9-18 at the request of an administration directly concerned or affected when co-ordination has not been possible between the administrations involved.
- 330      **9-20**      (3) Where appropriate, the Board shall also examine the notice with respect to its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in Nos. 9-16 and 9-17 or 9-18 except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement. Similarly, the Board shall not consider the probability of harmful interference to the assignments of any administration with which co-ordination has been effected.
- 333      **9-21** § 10.      Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 9-16 and 9-17 or 9-18, further action shall be as follows :
- 333a      **9-22** § 11. (1) *Finding Favourable with Respect to No. 9-16 in cases where the Provisions of Nos. 9-17 and 9-18 are not applicable (see No. 9-19).*
- 333b      **9-23**      (2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article, shall be the date of receipt of the notice by the Board.
- 334      **9-24** § 12. (1) *Finding Favourable with Respect to Nos. 9-16 and 9-17 or 9-18.*
- 334a      **9-25**      (2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt of the notice by the Board.

- 334b                    **9-26**            (3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods of solar activity is slightly greater than is considered desirable, a remark shall be included in the Master Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.
- 336                    **9-27** § 13. (1) *Finding Favourable with Respect to No. 9-16 but Unfavourable with Respect to Nos. 9-17 or 9-18.*
- 336a                   **9-28**            (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.
- 337                    **9-29**            (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to Nos. 9-17 or 9-18, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.
- 338                    **9-30**            (4) Should the notifying administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 9-29 to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of



Section III of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

338a

- 9-31** (5) In the case of a frequency assignment recorded in accordance with the provisions of No. 9-30, the Board shall investigate the assignments that contributed to the unfavourable finding, using such means at its disposal as are appropriate in the circumstances, and, with the agreement of the notifying administration concerned, shall effect any cancellations or amendments found to be necessary, in order that the recordings in the Master Register shall reflect the actual frequency usage. If, as a result, the Board is able to reach a favourable finding with respect to Nos. 9-17 or 9-18 with regard to any assignment recorded under the provisions of No. 9-30, the appropriate changes shall be made in respect of the entry of that assignment in the Master Register. If the finding remains unfavourable, the Board shall enter suitable remarks in the Master Register for the entry or entries concerned which describe the situation as it has been found by the Board to exist.

338b

- 9-32** (6) Moreover, if, as a result of investigations under No. 9-31 it is confirmed that an assignment recorded is being used in accordance with the notified basic characteristics, a symbol shall be entered in Column 13a of the Master Register to indicate this fact.

338c

- 9-33** (7) Should the notifying administration resubmit the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the re-submitted notice shall be treated under No. 9-28. If the notice is resubmitted again and subsequently recorded, the date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the notice submitted for the second time.



- 339aa                    **9-34** § 14. (1) *Finding Unfavourable with Respect to No. 9-16 in cases where the Provisions of Nos. 9-17 and 9-18 are not applicable (see No. 9-19).*
- 339ab    ADD            **9-35**            (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of 3-03 of these Regulations, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the notice.
- 339ac                    **9-36**            (3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3-03 of these Regulations, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.
- 339ad                    **9-37**            (4) If the notifying administration resubmits the notice, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the resubmitted notice.
- 339ae                    **9-38** § 15. (1) *Finding Unfavourable with Respect to No. 9-16 in cases where the Provisions of Nos. 9-17 or 9-18 are applicable.*
- 339b                    **9-39**            (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3-03 of these Regulations, it shall be examined immediately with respect to Nos. 9-17 or 9-18, and the provisions of Nos. 9-40 or 9-41 applied, as appropriate.
- 339c                    **9-40**            (3) If the finding is favourable with respect to Nos. 9-17 or 9-18 the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the notice.

339d

**9-41** (4) If the finding is unfavourable with respect to Nos. 9-17 or 9-18, the notice shall be returned immediately by airmail to the notifying administration. Should the administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

339e

**9-42** (5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3-03 of these Regulations, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339f

**9-43** (6) If the notifying administration resubmits the notice with modifications which result after re-examination in a favourable finding by the Board with respect to No. 9-16, the notice shall be examined with respect to Nos. 9-17 or 9-18 and treated subsequently according to the provisions of Nos. 9-25 or 9-26, or No. 9-28 as appropriate. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the modified notice.

339g

**9-44** (7) If, however, the notifying administration insists upon reconsideration of the notice, and should the Board's finding remain unchanged, the notice shall be examined with respect to Nos. 9-17 or 9-18 and the provisions of Nos. 9-45 or 9-46 applied, as appropriate.

- 339h                    **9-45**            (8) If the finding is favourable with respect to Nos. 9-17 or 9-18, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the resubmitted notice.
- 339i                    **9-46**            (9) If the finding is unfavourable with respect to Nos. 9-17 or 9-18, the notice shall be returned immediately by airmail to the notifying administration. Should the administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the first resubmitted notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.
- 339j                    **9-47** § 16. (1) *Change in the basis Characteristics of Assignments already recorded in the Master Register.*
- 339k                    **9-48**            (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Column 3, 4a and 11 of the Master Register), shall be examined by the Board according to Nos. 9-16 and 9-17, 9-18 or 9-19, as appropriate, and the provisions of Nos. 9-22 to 9-46 inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.
- 339L                    **9-49**            (3) However, in the case of a change in the basic characteristics of an assignment (except a change of the assigned frequency which exceeds half of the frequency band originally assigned, as defined in No. 1-89 which is in conformity with No. 9-16, should the Board reach a favourable finding with respect to Nos. 9-17 or 9-18, or find that the change does not increase the probability of

harmful interference to assignments already recorded, the amended assignment shall retain the original date in the appropriate part of Column 2. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

- 339la                    **9-50** § 17. In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than one hundred and eighty days after the date of its return by the Board shall be considered as a new notice.
- 339lb                    **9-51** § 18. (1) *Recording of Frequency Assignments notified before being brought into use.*
- 339m                    **9-52** (2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 9-16 and 9-17 or 9-18, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.
- 339n                    **9-53** (3) If, within the period of thirty days (see No. 9-16) after the projected date of bringing into use, the Board receives confirmation from the notifying administration of the date of putting into use, the special symbol shall be deleted from the Remarks Column. In the case where the Board, in the light of a request from the notifying administration received before the end of the thirty-day period, finds that exceptional circumstances warrant an extension of this period, the extension shall in no case exceed ninety days.
- 339o                    **9-54** (4) If the Board does not receive this confirmation within the period referred to in No. 9-53, the entry concerned shall be cancelled.
- 339p                    **9-55** (5) The provisions of Nos. 9-52 to 9-54 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25 and 26 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

- 339pl **9-56** § 19. (1) *Examination of Notices concerning Frequency Assignments to radiotelephone Coast Stations in the Bands allocated exclusively to the Maritime Mobile Service between 4 000 kc/s and 23 000 kc/s for radiotelephone Coast Stations (see No. 9-15).*
- 339p2 **9-57** (2) The Board shall examine each notice covered by No. 9-56 to determine whether the notified assignment is in conformity with an allotment in Section I or Section II of the Allotment Plan contained in Appendix 25 to these Regulations, i.e. whether the frequency, the area of allotment, the power and any limitations are those specified in that Appendix.
- 339p3 **9-58** (3) Any frequency assignment for which the finding is favourable with respect to 9-57 shall be recorded in the Master Register (see also No. 9-55). The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- 339p4 **9-59** (4) If a notice relates to an amendment to an assignment in conformity with an allotment in Section I or Section II of the Allotment Plan, which is only a change in the characteristics (including the frequency) of the emission of a radiotelephone coast station, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the Table in Appendix 17, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- 339p5 **9-60** (5) In the case of a notice which is not in conformity with the provisions of Nos. 9-57 or 9-59, the Board shall examine this notice with respect to the probability of harmful interference to the service rendered by a radiotelephone coast station for which a frequency assignment :
- a) is in conformity with one of the allotments in Section I or II of the Plan and is already recorded in the Master Register or may be so recorded in the future ; or

- b) was recorded in the Master Register on a frequency specified in Appendix 17 as a result of a favourable finding with respect to Nos. 9-59 or 9-60 ; or
- c) was recorded in the Master Register on a frequency specified in Appendix 17 after an unfavourable finding with respect to Nos. 9-59 or 9-60, but has not, in fact, caused harmful interference to any frequency assignment to a radiotelephone coast station previously recorded in the Master Register.
- 339p6      **9-61**      (6) According to the finding of the Board with respect to No. 9-60, further action shall be in accordance with the provisions of Nos. 9-24 to 9-30 inclusive, or Nos. 9-47 to 9-49 inclusive, as appropriate, it being understood that in those provisions No. 9-60 shall be read for Nos. 9-16 and 9-17.
- 339p7      **9-62**      § 20. (1) *Examination of Notices concerning Frequencies used for Reception by radiotelephone Coast Stations in the Bands allocated exclusively to the Maritime Mobile Service between 4 000 kc/s and 23 000 kc/s for radiotelephone Ship Stations (see Nos. 9-02 and 9-15).*
- 339p8      **9-63**      (2) The Board shall examine each notice covered by No. 9-62 to determine whether the notified assignment corresponds to a frequency associated, according to Appendix 17, with a frequency allotted to the notifying administration under Section I or Section II of the Allotment Plan contained in Appendix 25 to these Regulations.
- 339p9      **9-64**      (3) Any frequency assignment for which the finding is favourable with respect to No. 9-63 shall be recorded in the Master Register. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- 339p10      **9-65**      (4) Where a notice relates to an amendment to an assignment of a frequency which is associated, according to Appendix 17, with a frequency allotted to the notifying administration under Section I



or Section II of the Plan, and this amendment is only a change in the characteristics (including the frequency) of the emission of radio-telephone ship stations, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the Table in Appendix 17, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.

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| 339p11 | <b>9-66</b> | (5) Any assignment of a frequency for reception by a radio-telephone coast station which is not conformity with No. 9-63 shall be recorded in the Master Register. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section III of this Article.   |
| 339pa  | <b>9-67</b> | § 21. (1) <i>Examination of Notices concerning Frequency Assignments to Aeronautical Stations in the Aeronautical Mobile (R) Service in the Bands allocated exclusively to that Service between 2 850 kc/s and 17 970 kc/s (see No. 9-15).</i>   |
| 339pb  | <b>9-68</b> | (2) The Board shall examine each notice covered by No. 9-67 to determine whether :   |
| 339pc  | <b>9-69</b> | a) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 26 (Part II, Section IIB), or the assignment is the result of a permissive change from one class of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Appendix 26 (Part I, Section 4, paragraph 1) ; |
| 339pd  | <b>9-70</b> | b) the limitations of use set forth in Column 3 of the Plan have been appropriately observed ;   |
| 339pe  | <b>9-71</b> | c) the class of station, class of emission, power, and hours of use are in accordance with the General Notes which constitute the heading for the Plan ;   |
| 339pf  | <b>9-72</b> | d) the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of the Plan.   |

- 339pg      **9-73**      (3) In the case of a notice in conformity with the provisions of Nos. 9-69 to 9-71, but not with those of No. 9-72, the Board shall examine whether the protection specified in Appendix 26 (Part I, Section II A, paragraph 5) is afforded to the allotments in the Plan. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 26 (Part I, Section II B, paragraph 4).
- 339ph      **9-74**      (4) The technical criteria to be employed by the Board in its examination of these notices shall be those in Appendix 26 (Part I).
- 339pi      **9-75**      (5) All frequency assignments referred to in No. 9-67 shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- 339pj      **9-76**      § 22. (1) *Examination of Notices concerning Frequency Assignments to Aeronautical Stations in the Aeronautical Mobile (OR) Service in the Bands allocated exclusively to that Service between 3 025 kc/s and 18 030 kc/s (see No. 9-15).*
- 339pk      **9-77**      (2) The Board shall examine each notice covered by No. 9-76 to determine whether :
- 339pL      **9-78**      a) the assignment is in conformity with the primary allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 26 (Parts III and IV) ;
- 339pm      **9-79**      b) the assignment is in conformity with or satisfies the requirements for secondary allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 26 (Part III, Section II, paragraph 4, sub-paragraph 4, and Part IV). In applying these provisions, the Board shall assume that the frequency will be used on a day-time basis ;



- 339pn                    **9-80**                    c) the assignment is the result of a permissive change from one class of emission to another, its occupied bandwidth is within the channelling arrangement provided for in Appendix 26 (Part III, Section II, paragraphs 1 and 2), and it meets all the conditions for a primary or secondary allotment in the Plan, except that the assigned frequency does not correspond numerically with one of the frequencies specified therein.
- 339po                    **9-81**                    (3) The technical criteria to be employed by the Board in its examination of these notices shall be those in Appendix 26 (Part III).
- 339pp                    **9-82**                    (4) All frequency assignments referred to in No. 9-76 shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- 339pq                    **9-83** § 23. (1) *Frequency Assignments to Broadcasting Stations in the Bands allocated exclusively to the Broadcasting Service between 5 950 kc/s and 26 100 kc/s (see 9-15).*
- 339pr                    **9-84**                    (2) When the Board has prepared according to the provisions of Article 10 the High Frequency Broadcasting Schedule for a particular season, this Schedule shall be compared with the listings in the Master Register, to determine whether all the frequency assignments included in that Schedule correspond to frequency assignments recorded in the Master Register on behalf of the administrations concerned.
- 339ps                    **9-85**                    (3) In the case where a frequency assignment included in a Schedule for a particular season is not covered by any listing in the Master Register, that frequency assignment shall be considered as being notified, and the Board, without further examination, shall make an appropriate entry in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the projected seasonal schedule.

### Section III. Recording of Dates and Findings in the Master Register

- 339q **9-86** § 24. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.
- 339qa **9-87** § 25. The procedure for recording dates in the appropriate part of Column 2 of the Master Register which shall be applied according to the frequency bands and services concerned is described in the following Nos. 9-88 to 9-119.
- 339ra **9-88** § 26. (1) *Frequency Bands :*
- 10 - 2 850 kc/s  
 3 155 - 3 400 kc/s  
 3 500 - 3 900 kc/s in Region 1  
 3 500 - 4 000 kc/s in Region 2  
 3 500 - 3 950 kc/s in Region 3  
 4 238 - 4 368 kc/s  
 6 357 - 6 525 kc/s  
 8 476 - 8 745 kc/s  
 12 714 - 13 130 kc/s  
 16 952 - 17 290 kc/s  
 22 400 - 22 650 kc/s
- 339rb **9-89** (2) For any assignment to which the provisions of Nos. 9-25, 9-26 or 9-29 apply, the relevant date shall be entered in Column 2a of the Master Register.
- 339rc **9-90** (3) For any assignment to which the provisions of Nos. 9-30, 9-33, 9-35, 9-37, 9-40, 9-41, 9-43, 9-45 or 9-46 apply, the relevant date shall be entered in Column 2b of the Master Register.
- 339rd **9-91** (4) However, no date shall be entered in Column 2a or Column 2b in respect of frequency assignments to broadcasting stations in Region 2 in the band 535-1 605 kc/s. The date entered in Column 2c is given for information only.

- 339t1                    **9-92** § 27. (1) *Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 kc/s and 23 000 kc/s for radiotelephone Coast Stations.*
- 339t2                    **9-93**        (2) If the finding is favourable with respect to No. 9-57, the date of 3 December, 1951 shall be entered in Column 2a in the case of an allotment in Section I of the Plan ; in the case of an allotment in Section II, the date of 4 December, 1951 shall be entered in Column 2b.
- 339t3                    **9-94**        (3) If the provisions of No. 9-59 are found to be applicable, the date originally entered in Column 2a or 2b, as the case may be, shall be retained.
- 339t4                    **9-95**        (4) For all other cases referred to in No. 9-56, the relevant date shall be entered in Column 2b (see Nos. 9-25, 9-29, 9-30, 9-33, 9-48 and 9-49).
- 339t5                    **9-96**        (5) For assignments to stations other than radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 9-40, 9-41, 9-43, 9-45 and 9-46).
- 339t6                    **9-97** § 28. (1) *Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 kc/s and 23 000 kc/s for radiotelephone Ship Stations.*
- 339t7                    **9-98**        (2) If the finding is favourable with respect to No. 9-63, the date of 3 December, 1951 shall be entered in Column 2a if the associated allotment appears in Section I of the Plan ; if it appears in Section II, the date of 4 December, 1951 shall be entered in Column 2b.
- 339t8                    **9-99**        (3) If the provisions of 9-65 are found to be applicable, the date originally entered in Column 2a or 2b, as the case may be, shall be retained.
- 339t9                    **9-100**       (4) In all other cases covered by No. 9-62, the date of receipt of the notice by the Board shall be entered in Column 2b.
- 339t10                   **9-101**       (5) For assignments other than assignments of frequencies for reception by radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 9-40, 9-41, 9-43, 9-45 and 9-46).

- 339t11 **9-102** § 29. (1) *Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 kc/s and 25 110 kc/s for radiotelegraph Ship Stations (see No. 9-03).*
- 339t12 **9-103** (2) For assignments to stations other than radiotelegraph ship stations, the relevant date shall be entered in Column 2b (see Nos. 9-40, 9-41, 9-43, 9-45 and 9-46).
- 339ta **9-104** § 30. (1) *Frequency Bands allocated exclusively to the Aeronautical Mobile (R) Service between 2 850 kc/s and 17 970 kc/s.*
- 339tb **9-105** (2) If the finding is favourable with respect to Nos. 9-69 to 9-72, the date of 3 December, 1951 shall be entered in Column 2a.
- 339tc **9-106** (3) If the finding is favourable with respect to No. 9-73, the date of 3 December, 1951 shall be entered in Column 2b.
- 339td **9-107** (4) In all other cases covered by No. 9-67, the date of receipt of the notice by the Board shall be entered in Column 2b.
- 339te **9-108** (5) For assignments to stations other than aeronautical stations in the aeronautical mobile (R) service, the relevant date shall be entered in Column 2b (see Nos. 9-40, 9-41, 9-43, 9-45 and 9-46).
- 339ua **9-109** § 31. (1) *Frequency Bands allocated exclusively to the Aeronautical Mobile (OR) Service between 3 025 kc/s and 18 030 kc/s.*
- 339ub **9-110** (2) If the finding is favourable with respect to No. 9-78, the date of 3 December, 1951 shall be entered in Column 2a.
- 339uc **9-111** (3) If the finding is favourable with respect to No. 9-79 the date of 3 December, 1951 shall be entered in Column 2b.
- 339ud **9-112** (4) If the provisions of No. 9-80 are found to be applicable, the date of 3 December, 1951 shall be entered in Column 2a for a primary allotment, or in Column 2b for a secondary allotment.

|       |  |
|-------|--|
| 339ue | <b>9-113</b> (5) In all other cases covered by No. 9-76, the date of receipt of the notice by the Board shall be entered in Column 2b.   |
| 339uf | <b>9-114</b> (6) For assignments to stations other than aeronautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (see Nos. 9-40, 9-41, 9-43, 9-45 and 9-46).   |
| 339va | <b>9-115</b> § 32. (1) <i>Frequency Bands allocated exclusively to the Broadcasting Service between 5 950 kc/s and 26 100 kc/s.</i>  |
| 339vb | <b>9-116</b> (2) For any frequency assignment which is to be recorded under the provisions of No. 9-85, the relevant date shall be entered in Column 2d.   |
| 339vc | <b>9-117</b> (3) For assignments to stations other than broadcasting stations, the relevant date shall be entered in Column 2d.  |
| 339wa | <b>9-118</b> § 33. (1) <i>Frequency Bands between 3 950 kc/s (4 000 kc/s in Region 2) and 28 000 kc/s other than those allocated exclusively to the Aeronautical Mobile Service, Maritime Mobile Service, Broadcasting Service or Amateur Service, and Frequency Bands above 28 000 kc/s.</i>  |
| 339wb | <b>9-119</b> (2) For any frequency assignment which is to be recorded under the provisions of Section II of this Article, the relevant date shall be entered in Column 2d of the Master Register.  |
| 339za | <b>9-120</b> § 34. <i>Date to be entered in Column 2c.</i>   |
| 339zb | <b>9-121</b> The date to be entered in Column 2c shall be the date of putting into use notified by the administration concerned (see Nos. 9-06 and 9-07). However, in cases covered by No. 9-83, the date to be entered in this column shall be either the date of implementation of the schedule from which the assignment was extracted, or the notified date of putting into use, whichever is the later. |

#### Section IV. Categories of Frequency Assignments

- 339zc **9-122** § 35. (1) Any frequency assignment which bears a date in Column 2a of the Master Register shall have the right to international protection from harmful interference.
- 339zd **9-123** (2) Any frequency assignment which bears a date in Column 2b is recorded in the Master Register in order that administrations may take into account the fact that the frequency assignment concerned is in use. This recording shall not give the right to international protection to the frequency assignment concerned, except as provided for in No. 9-17, sub-paragraph 2).
- 339ze **9-124** (3) For frequency assignments having dates in two parts of Column 2, the date in Column 2c is given for information only.
- 339zf **9-125** (4) The existence of a symbol in Column 2d for a particular frequency assignment and of a date in that column for another assignment is not in itself to be considered as having any significance.
- 339zg **9-126** (5) If harmful interference to the reception of any station whose assignments is in accordance with No. 9-16 is actually caused by the use of a frequency assignment which is not in conformity with No. 9-16, the station using the latter frequency assignment must immediately cease operations upon receipt of advice of this harmful interference.

#### Section V. Review of Findings

- 340 **9-127** § 36. (1) The review of a finding by the Board may be undertaken :
- at the request of the notifying administration,
  - at the request of any other administration interested in the question, but only on the grounds of actual harmful interference,
  - on the initiative of the Board itself when it considers this is justified.

- 342           **9-128**       (2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account Nos. 9-16 and 9-17 or 9-18, and shall render an appropriate finding, informing the notifying administration prior either to the promulgation of its finding or to any recording action.
- 342a           **9-129** § 37.     If a review of an unfavourable finding has been requested by the notifying administration on the grounds of special assistance to meet an urgent and essential need in a case where harmful interference has been experienced, the Board shall consult immediately the administrations concerned and shall make such suggestions as will facilitate the operation of the assignment of the administration which asked for special assistance ; such amendments as result from this consultation shall be made to the Master Register.
- 343           **9-130** § 38. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 9-17 or 9-18, this administration may request the Board to review the finding. Thereupon the Board shall review the matter, first having consulted the administrations concerned.
- 344           **9-131**       (2) If the finding of the Board is then favourable, it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.
- 345           **9-132**       (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.
- 345a           **9-133** § 39.     In the case where a frequency assignment has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 9-17 or 9-18, and where the Board finds, after having consulted the administrations concerned, that harmful interference has not, in fact, occurred, although the assignment has been in actual use, according to the notified characteristics, during a period covering all the phases of a solar cycle in which the assignment could be



normally used, the Board shall amend the entry in the Master Register in such a way that it shall appear in the future as if the original finding had been favourable with respect to Nos. 9-17 or 9-18.

**Section VI. Modification, Cancellation and Review of Entries  
in the Master Register**

- 346a      **9-134** § 40. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master Register.
- 347      **9-135** § 41. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall either cancel or suitably modify the entry.
- 347a      **9-136** § 42. If, in connection with an enquiry by the Board under Nos. 9-31 or 9-135, the notifying administration has failed to supply the Board within ninety days with the necessary or pertinent information, the Board shall disregard the assignment concerned when acting upon any later notice, until such time as it has been informed that the assignment is being used as notified, or until it has received the information required. The Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation, and in particular the period when the assignment was not taken into account by the Board.
- 347b      **9-137** § 43. As far as possible, the Board shall maintain the entries in the Master Register under continuous review for those bands for which technical examination by the Board is prescribed in this Article, with a view to determining whether or not the assignments are being used in accordance with the notified basic characteristics, and shall take action under No. 9-135.



## Section VII. Studies and Recommendations

352

**9-138§ 44.** If it is requested by any administration, particularly by an administration of a country in need of special assistance, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of the following problems of frequency utilization :

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**9-139** a) in cases arising under No. 9-27 as to a possible alternative frequency assignment to avoid probable harmful interference :

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**9-140** b) in cases where a need arises for additional frequency assignments within a specified portion of the radio spectrum ;

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**9-141** c) in cases where, due to harmful interference, two or more frequencies of the same megacycle order are being used alternately to maintain communication on a circuit requiring only one frequency of that order ; and

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9-142 d) in cases of alleged contravention or non-observance of these Regulations, or of harmful interference.

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**9-143** The Board shall thereupon prepare and forward to the administrations concerned a report containing its finding and recommendations for the solution of the problem.

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**9-144 § 45.** If the Board finds, in particular following a request from an administration of a country in need of special assistance, that a change in the basic characteristics, including a change of frequency within a specific frequency range, of one or more assignments in conformity with the provisions of No. 9-16 will :

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**9-145.** a) accommodate a new assignment ; or

358

**9-146**      b) facilitate the solution of a problem of harmful interference ; or

- 359                    **9-147**            c) otherwise facilitate the more effective use of a particular portion of the radio spectrum ; and
- 359a                  **9-148** if such change is acceptable to the administration or administrations concerned, the change in basic characteristics shall be recorded in the Master Register without change in the original date or dates.
- 359b                  **9-149** § 46.      In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of thirty days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer. If it was the requesting administration which failed to answer within this period, the Board shall close the study.

#### Section VIII. Miscellaneous Provisions

- 359c                  **9-150** § 47.      The provisions of Sections V, VI (excepting No. 9-134) and VII of this Article shall not be applied to frequency assignments in conformity with the Allotment Plans contained in Appendices 25 and 26 to these Regulations.
- 359d                  **9-151** § 48.      The technical standards of the Board shall be based upon the relevant provisions of these Regulations and the Appendices thereto, the decisions of Administrative Conferences of the Union as appropriate, the Recommendations of the C.C.I.R., the state of the radio art, and the development of new transmission techniques.
- 360                    **9-152** § 49.      The Board shall promulgate to administrations its findings and reasons therefor, together with all changes made to the Master Register, through the weekly circular referred to in No. 9-12, which shall be published in the working languages of the Union as defined in the Convention. In carrying out the various procedures stipulated in this Article, the Board shall use the weekly circular as a means of communicating with administrations to the maximum extent practicable.

360a **9-153 § 50.** The Board shall inform administrations, at appropriate intervals, of the cases of special assistance which were studied under Nos. 9-129 and 9-138 to 9-149 inclusive of these Regulations.

361 **9-154 § 51.** In case a Member or Associate Member of the Union avails itself of the provisions of Article of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

## ARTICLE 10

### Procedure for the Bands Allocated Exclusively to the Broadcasting Service between 5 950 kc/s and 26 100 kc/s

#### Section I. Submission of Seasonal Broadcasting Schedules

361a **10-01 § 1.** Periodically, administrations shall submit to the International Frequency Registration Board the projected seasonal schedules of their broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s. These schedules shall cover each of the following seasonal propagation periods and shall be implemented at 0100 G.M.T. on the first Sunday of the period concerned :

|                    |   |
|--------------------|---|
| March Schedule     | — March and April                           |
| May Schedule       | — May, June, July and August                |
| September Schedule | — September and October                     |
| November Schedule  | — November, December, January and February. |

361b **10-02 § 2.** The first schedules, to become effective on 4 September, 1960, for the September-October period (1960), should be received by the Board by 1 March, 1960. The closure dates for the receipt of the subsequent schedules will be set by the Board in order to permit the advance period to be reduced gradually to the minimum found practicable by the Board. Those assignments in a schedule the

characteristics of which are not expected to change may be submitted up to a limit of one year in advance. Each such assignment shall be confirmed by the closing date for the submission of the schedules for the respective seasonal periods. The Board shall take appropriate steps to send reminders to administrations in carrying out this procedure.

- 361c **10-03 § 3.** Two or more administrations may submit co-ordinated schedules containing their agreed projected frequency usage.
- 361d **10-04 § 4.** The frequencies shown in the schedules shall be frequencies that actually will be used for that particular seasonal period and their number should be the minimum necessary to provide satisfactory reception of the particular programme in each of the areas for which it is intended. Each administration should prepare its schedule from season to season by using to the maximum extent practicable the same frequencies in each band as were used in previous schedules.
- 361e **10-05 § 5.** The schedules shall be submitted in the form prescribed in Appendix 2, which specifies the data to be furnished for each assignment.
- 361f **10-06 § 6.** The frequencies included in the schedules shall be in conformity with No. 9-16 of these Regulations. To the extent practicable, the frequencies selected should correspond to listings in the Master International Frequency Register. Those administrations not having suitable listings in the Master Register may suggest any frequency considered appropriate, or may, if they so desire, indicate only the frequency band.

## **Section II. Preliminary Examination and Preparation of Tentative High Frequency Broadcasting Schedule**

- 361g **10-07 § 7.** (1) Upon receipt of the seasonal schedules, including confirmation in appropriate cases of the continuing validity of assignments included in preceding schedules, the Board shall incorporate the

proposed frequency usage of all administrations into a combined schedule and make the appropriate preliminary examination required to prepare the Tentative High Frequency Broadcasting Schedule (hereafter called the *Tentative Schedule*) for the particular seasonal period. This Tentative Schedule shall include :

- a) all specific frequency assignments in cases where no alternatives were given by the administration concerned ;
- b) the selections made by the Board in cases where alternatives were given by the administration concerned ;
- c) frequencies suggested by the Board in respect of all services for which no specific frequency was included in the submitted schedule, such suggestions to be made with due overall consideration for No. 10-08 for compatibility within the Tentative Schedule, and for possible changes to the projected frequency usage which might be desirable to achieve more equitable satisfaction of administrations' requirements ;
- d) such apparent incompatibilities between frequency assignments which the Board can indicate within the time available.

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**10-08** (2) Upon the request of administrations, particularly those of countries in need of special assistance and which have no suitable listings in the Master Register, the Board shall give special consideration to the requirements of those administrations in preparing the Tentative Schedule.

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**10-09** (3) The Board shall begin the work outlined in No. 10-07 early enough for the Tentative Schedule to be issued to administrations not later than two months before the date when the particular seasonal period begins.

### **Section III. Technical Examination and Revision of the Tentative Schedule**

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**10-10 § 8.** (1) The Board shall continue its technical examination of the Tentative Schedule with a view not only to identifying further incompatibilities between frequency assignments which become apparent in

the technical examination, and correct them where possible, but also to improving the technical aspects of the Tentative Schedule by amendments to be agreed upon in consultation with the administrations concerned.

- 361k **10-11** (2) In preparing its recommendations to administrations the Board shall take into account monitoring observations and all other available data. However, when actual frequency usage is apparently not in conformity with the assignments in a submitted schedule, the Board shall seek from the administration concerned confirmation of this information.
- 361L **10-12** (3) Administrations, having considered the Tentative Schedule together with such recommendations as may have been furnished by the Board, should notify, as soon as possible, preferably before the date of commencement of the seasonal period concerned, any amendments to the Tentative Schedule which are intended for implementation.
- 361m **10-13** (4) Changes in the assignments of broadcasting stations which are implemented after the date on which the seasonal period begins shall be notified to the Board as soon as they can be forecast.
- 361n **10-14** (5) For changes notified in accordance with Nos. 10-12 and 10-13, the Board shall apply the same procedure as that specified in Nos. 10-08, 10-10 and 10-11. Such revisions to the Tentative Schedule as result from the application of the procedure in this Section shall be published in the Weekly Circulars of the Board in order that administrations can keep up to date their copies of the Tentative Schedule.

#### **Section IV. Publication of the High Frequency Broadcasting Schedule**

- 361o **10-15 § 9.** After the end of each seasonal period, the Board shall publish the High Frequency Broadcasting Schedule, which shall reflect the Tentative Schedule as amended by all the changes notified to the Board since the publication of the Tentative Schedule. This

High Frequency Broadcasting Schedule shall indicate by appropriate symbols :

- a) those assignments which administrations found in practice to be unsatisfactory and so notified to the Board ; and
- b) those assignments not included in the Tentative Schedule which were taken into account by the Board in the examination under Section III of this Article.

#### **Section V. Annual High Frequency Broadcasting Frequency List**

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**10-16 § 10.** A High Frequency Broadcasting Frequency List shall be published at the end of the first year of implementation of the procedure prescribed in this Article, including all frequency assignments which appear in the High Frequency Broadcasting Schedules for the year concerned. This list shall be issued as a supplement to the International Frequency List, and in the same general format. It shall also include symbols to indicate those assignments which were notified to the Board as being unsatisfactory in practice, as well as symbols to indicate the seasonal periods during which each assignment was used. A recapitulative list shall be issued annually thereafter.

#### **Section VI. Miscellaneous Provisions**

361q ADD

**10-17 § 11.** The Technical Standards used by the Board when applying the provisions of this Article should be based, not only on the factors listed in No. 9-151 but also on past experience in broadcasting planning and on the experience gained by the Board in the application of the provisions of this Article.

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**10-18 § 12.** With a view to the ultimate evolution of compatible technical plans for the frequency bands concerned, the Board shall take all necessary steps to carry out engineering studies on a long-



| Former reference                       | Source                        | New reference                                  |
|--|-------------------------------|--|
| Chap.: IV<br>Art.: 12<br>Nos.: 362-371 | Committee: 5<br>Doc. No.: 669 | Chap.: III<br>Art.: 11<br>Nos.: 11-01 to 11-08 |

term basis. For this purpose, the Board shall use all information made available to it on frequency usage in the application of the procedure prescribed in this Article. The Board shall also keep administrations informed of the progress and results of such studies at regular intervals.

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**10-19 § 13.** In applying the provisions of Article 15 of these Regulations, problems of harmful interference which may arise in frequency usage in the bands concerned shall be resolved by administrations by exercising the utmost goodwill and mutual co-operation and by giving due consideration to all the relevant technical and operational factors involved.

## ARTICLE 11

### Internal Regulations of the International Frequency Registration Board

362

**11-01 § 1.** The Board shall meet as frequently as necessary to deal expeditiously with its work and, normally, at least once a week.

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**11-02 § 2.** (1) The members of the Board shall elect from among their number a Chairman and a Vice-Chairman, each to hold office for a term of one year. Thereafter, the Vice-Chairman shall succeed annually to the Chairmanship and a new Vice-Chairman shall be elected.

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**11-03** (2) In the unavoidable absence of the Chairman and Vice-Chairman, the Board shall elect a temporary Chairman for the occasion from among its members.

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**11-04 § 3.** (1) Each member of the Board, including the Chairman, shall have one vote. Voting by proxy or by correspondence is not allowed.

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**11-05** (2) The minutes shall indicate whether a finding was unanimous or by a majority.

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**11-06** (3) A quorum of the Board shall be one-half of the number of members of the Board. If, however, the verdict of such a quorum



368(a)

on a question coming before it is not unanimous, the question shall be referred for decision at a later meeting at which at least two-thirds of the total number of members of the Board are present. If these calculations result in a fraction, the fraction shall be rounded up to a whole number.

370

**11-07** (4) The Board shall endeavour to reach its decisions by unanimous agreement. If the Board fails in that endeavour, it shall thereafter decide the problem on the basis of a two-thirds majority vote of the members present and voting for or against.

**11-08 § 4.** The documents of the Board, which shall comprise a complete record of its official actions and minutes of its meetings, shall be maintained by the Board in the working languages of the Union as defined in the Convention ; for this purpose, as well as for the meetings of the Board, the necessary linguistic personnel, and such other facilities as may be required, shall be provided by the Secretary General. A copy of all documents of the Board shall be available for public inspection at the offices of the Board.

**Former reference****Source****PINK PAGES**  
**New Reference**

Chap.: XII  
Art.: 26  
Nos.: 565-567

Committee: 7  
Doc. No.: 603

Chap.: VI  
Art.: 22  
Nos.: 22-01 to 22-03

Chap.: XI  
Art.: 24  
Nos.: 500-555

Committee: 7  
Doc. No.: 594

Chap.: VI  
Art.: 23  
Nos.: 23-01 to 23-64

**CHAPTER VI****Personnel of Mobile Service Stations****ARTICLE 22****Authority of the Master**

- 565                    **22-01** § 1.        The service of a mobile station is placed under the  
supreme authority of the master or of the person responsible for the  
ship, aircraft, or other vehicle carrying the mobile station.
- 566                    **22-02** § 2.        The person holding this authority shall require that each  
operator comply with these Regulations and that the mobile station  
for which the operator is responsible is used, at all times, in  
accordance with these Regulations.
- 567                    **22-03** § 3.        The master or the person responsible, as well as all persons  
who may have knowledge of the text or even of the existence of a  
radiotelegram, or of any information whatever obtained by means  
of the radiocommunication service, are placed under the obligation  
of observing and ensuring the secrecy of correspondence.

**ARTICLE 23****Operators' Certificates for Ship and Aircraft Stations****Section I. General Provisions**

- 500                    **23-01** § 1. (1) The service of every ship or aircraft radiotelegraph station  
shall be performed by an operator holding a certificate issued or  
recognized by the government to which the station is subject.
- 500a                   **23-02**        (2) The service of every ship or aircraft radiotelephone station  
shall be controlled by an operator holding a certificate issued or  
recognized by the government to which the station is subject.  
Provided the station is so controlled, other persons besides the holder  
of the certificate may use the radiotelephone equipment.

500b

**23-03** (3) The service of automatic communication devices<sup>1</sup> installed in ship or aircraft stations shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the devices are so controlled, they may be used by other persons. If such devices require for their basic function the use of Morse code signals specified in the Telegraph Regulations, the service shall be performed by an operator holding a radiotelegraph certificate. However, this latter requirement does not apply to automatic devices which may use Morse code signals solely for identification purposes.

501

**23-04** (4) Nevertheless, in the service of radiotelephone stations operating solely on frequencies above 30 Mc/s each government shall decide for itself whether a certificate is necessary and, if so, shall define the conditions for obtaining it.

502

**23-05** (5) The provisions of No. 23-04 shall not, however, apply to any ship or aircraft station working on frequencies assigned for international use.

503

**23-06 § 2.** (1) In the case of complete unavailability of the operator in the course of a sea passage, a flight or a journey, and solely as a temporary measure the master or the person responsible for the station may authorize, an operator holding a certificate issued by the government of another Member of the Union to perform the radiocommunication service.

504

**23-07** (2) When it is necessary to employ a person without a certificate or an operator not holding an adequate certificate as a temporary operator, his performance as such must be limited solely to signals of distress, urgency and safety, messages relating thereto, messages relating directly to the safety of life, urgent messages relating to the movement of the ship and essential messages relating to the navigation and safe movement of the aircraft. Persons employed in these cases are bound by the provisions of No. 23-11 regarding the secrecy of correspondence.

**23-03.1** <sup>1</sup> The term "automatic communication devices" is intended to include such equipment as teleprinters, data transfer systems, etc.

- 505                   **23-08**       (3) In all cases, such temporary operators must be replaced  
as soon as possible by operators holding the certificate prescribed in  
§ 1 of this Article.
- 506                   **23-09** § 3. (1) Each administration shall take the necessary steps to  
prevent, to the maximum extent possible, the fraudulent use of cer-  
tificates. For this purpose, such certificates shall bear the holder's  
signature and shall be authenticated by the issuing administration.  
Administrations may employ, if they wish, other means of identifica-  
tion such as photographs, fingerprints, etc.
- 507                   **23-10**       (2) To facilitate verification of certificates, these may carry, if  
necessary, in addition to the text in the national language, a trans-  
lation of this text in a working language of the Union.
- 508                   **23-11** § 4.     Each administration shall take the necessary steps to place  
operators under the obligation to preserve the secrecy of corres-  
pondence as provided for in No. 18-04.

## Section II. Classes and Categories of Certificates

- 509                   **23-12** § 5. (1) There are two classes of certificates, as well as a special  
certificate, for radiotelegraph operators.<sup>1</sup>
- 510                   **23-13**       (2) There are two categories of radiotelephone operators'  
certificates, general and restricted.<sup>1</sup>
- 511                   **23-14** § 6 (1) The holder of a first or second class radiotelegraph  
operator's certificate may perform the service of any ship or aircraft  
radiotelephone station.
- 512                   **23-15**       (2) The holder of a radiotelephone operator's general certifi-  
cate may carry out the radiotelephone service of any ship or aircraft  
station.
- 513                   **23-16**       (3) The holder of a radiotelephone operator's restricted certifi-  
cate may carry out the radiotelephone service of any ship or aircraft

509.1               **23-12.1** <sup>1</sup> As regards the employment of operators holding the different certificates, see  
Article 24.

station, when working on frequencies of the maritime mobile service, provided that :

- the carrier power of the transmitter does not exceed 50 watts, or
- the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements, with the stability of the frequencies maintained by the transmitter itself within the limits of tolerance specified by Appendix 3, and the carrier power of the transmitter does not exceed 250 watts.

513a

**23-17** (4) Nevertheless, the holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any aircraft station operating on frequencies allocated exclusively to the aeronautical mobile service, provided that the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements, and that the stability of the frequencies is maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.

514

**23-18** (5) The radiotelegraph service of ships for which a radiotelegraph installation is not made compulsory by international agreements, as well as the radiotelephone service of ship stations and aircraft stations for which only a restricted radiotelephone operator's certificate is required, may be carried out by an operator holding a radiotelegraph operator's special certificate.

515

**23-19** § 7. Exceptionally, the second class radiotelegraph operator's certificate as well as the radiotelegraph operator's special certificate may be limited exclusively to the radiotelegraph service. In such case the certificate shall be suitably endorsed.

### Section III. Conditions for the Issue of Operators' Certificates

516 **23-20** § 8. (1) The conditions to be imposed for obtaining the various  
certificates are contained in the following paragraphs and represent  
the minimum requirements.

517 **23-21** (2) Each administration is free to fix the number of examin-  
ations necessary to obtain each certificate.

518 **23-22** § 9. (1) The administration which issues a certificate may, before  
authorizing an operator to carry out the service on board a ship or  
aircraft, require the fulfilment of other conditions (for example :  
experience of automatic communication devices ; further technical  
and professional knowledge relating particularly to navigation ;  
physical fitness ; for an operator of the aeronautical mobile service,  
the completion as an operator of a certain number of flying hours,  
etc.).

518a **23-23** (2) Administrations should take whatever steps they consider  
necessary to ensure the continued proficiency of operators after pro-  
longed absences from operational duties.

#### *A. First Class Radiotelegraph Operator's Certificate*

519 **23-24** § 10. The first class certificate is issued to candidates who have  
given proof of the technical and professional knowledge and quali-  
fications enumerated below :

520 **23-25** a) Knowledge both of the general principles of electricity  
and of the theory of radio, knowledge of the adjust-  
ment and practical working of various types of radio-  
telegraph and radiotelephone apparatus used in the  
mobile service, including apparatus used for radio  
direction-finding and the taking of direction-finding  
bearings, as well as a general knowledge of the prin-  
ciples of operation of other apparatus generally used  
for radionavigation.

521 **23-26** b) Theoretical and practical knowledge of the operation  
and maintenance of apparatus, such as motor-  
generators, storage batteries, etc., used in the operation

- and adjustment of the radiotelegraph, radiotelephone and radio direction-finding apparatus mentioned in No. 23-25.
- |     |              |   |
|-----|--------------|---|
| 522 | <b>23-27</b> | c) Practical knowledge necessary to repair, with the means available on board, damage which may occur to the radiotelegraph, radiotelephone and radio direction-finding apparatus during a voyage.  |
| 523 | <b>23-28</b> | d) Ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks), at a speed of twenty groups a minute, and a plain-language text at a speed of twenty-five words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and of receiving shall be, as a rule, five minutes. |
| 524 | <b>23-29</b> | e) Ability to send correctly and to receive correctly by telephone.   |
| 525 | <b>23-30</b> | f) Detailed knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radio-navigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions.          |
| 526 | <b>23-31</b> | g) A sufficient knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.   |



- 527                      **23-32**                      h) Sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.

*B. Second Class Radiotelegraph Operator's Certificate*

- 528                      **23-33** § 11.        The second class certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

- 529                      **23-34**                      a) Elementary theoretical and practical knowledge of electricity and of radio, knowledge of the adjustment and practical working of the various types of radiotelegraph and radiotelephone apparatus used in the mobile service, including apparatus used for radio direction-finding and the taking of direction-finding bearings, as well as elementary knowledge of the principles of operation of other apparatus in general use for radionavigation.

- 530                      **23-35**                      b) Elementary theoretical and practical knowledge of the operation and maintenance of apparatus, such as motor-generators, storage batteries, etc., used in the operation and adjustment of the radiotelegraph, radiotelephone and radio direction-finding apparatus mentioned in No. 23-34.

- 531                      **23-36**                      c) Practical knowledge sufficient for effecting repairs in the case of minor damage which may occur to the radiotelegraph, radiotelephone and radio direction-finding apparatus during a voyage.

- 532                      **23-37**                      d) Ability to send correctly by hand and to receive correctly by ear in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups a minute, and a plain-language text at a speed of twenty words a minute. Each code group



- shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and of receiving shall, as a rule, be five minutes.
- |     |              |  |
|-----|--------------|--|
| 533 | <b>23-38</b> | e) Ability to send correctly and to receive correctly by telephone, except in the case provided for in No. 23-19.  |
| 534 | <b>23-39</b> | f) Knowledge of the Regulations applying to radio-communications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radio-navigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions. |
| 535 | <b>23-40</b> | g) A sufficient knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.  |
| 536 | <b>23-41</b> | h) If necessary, an elementary knowledge of one of the working languages of the Union. Candidates shall be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.   |

#### *C. Radiotelegraph Operator's Special Certificate*

- |      |              |  |
|------|--------------|--|
| 537  | <b>23-42</b> | § 12. (1) The radiotelegraph operator's special certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below : |
| 537a | <b>23-43</b> | a) Ability to send correctly by hand and receive correctly by ear in the Morse code, code groups (mixed letters,   |

- figures, and punctuation marks) at a speed of sixteen groups a minute, and a plain language text at a speed of twenty words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters.
- 537b                    **23-44**            b) Knowledge of the practical operation and adjustment of radiotelegraph apparatus.
- 537c                    **23-45**            c) Knowledge of the Regulations applying to radiotelegraph communications and specifically of that part of those Regulations relating to safety of life at sea.
- 538                    **23-46**            (2) Each administration concerned shall fix the other conditions for obtaining this certificate. However, except as provided for in No. 23-19, the conditions specified in Nos. 23-52, 23-53, 23-54, 23-55 or 23-56, as the case may be, shall be satisfied.

#### *D. Radiotelephone Operators' Certificates*

- 539                    **23-47 § 13.**    The general radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below (see also No. 23-14) :
- 540                    **23-48**            a) A knowledge of the elementary principles of radiotelephony.
- 541                    **23-49**            b) Detailed knowledge of the practical operation and adjustment of radiotelephone apparatus.
- 542                    **23-50**            c) Ability to send correctly and to receive correctly by telephone.
- 543                    **23-51**            d) Detailed knowledge of the Regulations applying to radiotelephone communications and specifically of that part of those Regulations relating to the safety of life.

- 544 **23-52** § 14. (1) The restricted radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below :
- 545 **23-53** a) Practical knowledge of radiotelephone operation and procedure.
- 546 **23-54** b) Ability to send correctly and to receive correctly by telephone.
- 547 **23-55** c) General knowledge of the Regulations applying to radiotelephone communications and specifically of that part of those Regulations relating to the safety of life.
- 548 **23-56** (2) For ship radiotelephone stations where the carrier power of the transmitter does not exceed 100 watts and for aircraft radiotelephone stations operating on frequencies allocated exclusively to the aeronautical mobile service, each administration may itself fix the conditions for obtaining a restricted radiotelephone operator's certificate, provided that the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements, and that the stability of the frequencies is maintained by the transmitter itself within the limits of tolerance specified in Appendix 3. However, in fixing the conditions, administrations shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 23-59.
- 548a **23-57** (3) Administrations in Region 1 do not issue certificates under No. 23-56.
- 549 **23-58** § 15. A radiotelephone operator's certificate shall show whether it is a general certificate or a restricted certificate and, in the latter case, if it has been issued in conformity with the provisions of No. 23-56.
- 550 **23-59** § 16. In order to meet special needs, special agreements between administrations may fix the conditions to be fulfilled in

## Former reference

## Source

## New reference

Chap.: XII  
Art. : 25  
Nos. : 556-564

Committee: 7  
Doc. No.: 604

Chap.: VI  
Art.: 24  
Nos.: 24-01 to 24-09

order to obtain a radiotelephone operator's certificate, intended to be used in radiotelephone stations complying with certain technical conditions and certain operating conditions. These agreements, if made, shall be on the condition that harmful interference to international services shall not result therefrom. These conditions and agreements shall be mentioned in the certificates issued to such operators.

## Section IV. Qualifying Service

- 551           **23-60** § 17. (1) A first class radiotelegraph operator is authorized to embark as chief operator of a ship station of the third category (see No. 25-12).
- 552           **23-61**       (2) Before becoming chief operator of a ship station of the second category (see No. 25-11), a first class radiotelegraph operator shall have had at least six months' experience as operator on board ship or in a coast station.
- 553           **23-62**       (3) Before becoming chief operator of a ship station of the first category (see No. 25-10), a first class radiotelegraph operator shall have had at least one year's experience as operator on board ship or in a coast station.
- 554           **23-63** § 18. (1) A second class radiotelegraph operator is authorized to embark as chief operator of a ship station of the third category (see No. 25-12).
- 555           **23-64**       (2) Before becoming chief operator of a ship station of the second category (see No. 25-11), a second class radiotelegraph operator shall have had at least six months' experience as an operator on board ship.

## ARTICLE 24

Class and Minimum Number of Operators  
for Ship and Aircraft Stations

- 556           **24-01** § 1.       In the public correspondence service, each government shall take the necessary steps to ensure that ship and aircraft stations

of its own nationality have personnel adequate to perform efficient service.

- |     |              |   |
|-----|--------------|---|
| 557 | <b>24-02</b> | § 2. The personnel of these stations shall, having regard to the provisions of Article 23, include at least :   |
| 558 | <b>24-03</b> | a) ship stations of the first category : one operator holding a first class radiotelegraph operator's certificate ;   |
| 559 | <b>24-04</b> | b) ship stations of the second category : one operator holding a first or second class radiotelegraph operator's certificate ;  |
| 560 | <b>24-05</b> | c) ship stations of the third category, except in the case provided for in No. 24-06 : one operator holding a first or a second class radiotelegraph operator's certificate ;   |
| 561 | <b>24-06</b> | d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements : one operator holding a radiotelegraph operator's special certificate or a first or second class radiotelegraph operator's certificate ;  |
| 562 | <b>24-07</b> | e) ship stations equipped with a radiotelephone installation : one operator holding either a radiotelephone operator's certificate or a radiotelegraph operator's certificate ;   |
| 563 | <b>24-08</b> | f) aircraft stations except in the cases provided for in No. 24-09 : one operator holding a first or second class radiotelegraph operator's certificate, according to the internal regulations of the governments to which the stations are subject ;   |
| 564 | <b>24-09</b> | g) aircraft stations equipped with a radiotelephone installation but not equipped for telegraphy : one operator holding, as the case may be, a radiotelephone operator's certificate or a radiotelegraph operator's certificate according to the internal regulations of the governments to which the stations are subject <sup>1</sup> . |

<sup>1</sup> See also Nos. 23-56 and 23-57.

| Former reference                         | Source                                 | New Reference                                 |
|--|--|---|
| Chap.: XIII<br>Art.: 35<br>Nos.: 835-859 | Committee: 7<br>Doc. Nos.: 476 and 575 | Chap.: VI<br>Art.: 25<br>Nos.: 25-01 to 25-27 |

## ARTICLE 25

Title **Working Hours of Stations in the Maritime and  
Aeronautical Mobile Services**

Title **Section I. Preamble**

835 **25-01 § 1.** In order to permit the application of the following rules on the subject of hours of watch, every station of the maritime and aeronautical mobile services shall have an accurate clock correctly regulated to Greenwich mean time (G.M.T.).

836 **25-02 § 2.** Greenwich mean time (G.M.T.) (reckoned from 0001 to 2400 hours beginning at midnight) shall be used for all entries in the radiocommunication service log and in all similar documents of ships compulsorily equipped with radiocommunication apparatus in compliance with an international agreement; this same provision will apply, as far as possible, to other ships.

Title **Section II. Coast Stations**

837 **25-03 § 3.** (1) The service of coast stations is, as far as possible, continuous (day and night). Certain coast stations, however, may have a service of limited duration. Each administration or recognized private operating agency duly authorized to that effect fixes the hours of service for coast stations under its jurisdiction.

837a **25-04** (2) These hours of service shall be notified to the Secretary General who shall publish them in the appropriate list.

838 **25-05 § 4.** Coast stations whose service is not continuous shall not close before :

839 **25-06** a) finishing all operations resulting from a distress call, urgency or safety signal ;

- 840                    **25-07**                    b) exchanging all traffic originating in or destined for mobile stations which are situated within their service area and have indicated their presence before the actual cessation of work.

Title

### Section III. Aeronautical Stations

- 841                    **25-08** § 5.                    The service of an aeronautical station shall be continuous throughout the period during which it bears responsibility for the radiocommunication service to aircraft in flight.

Title

### Section IV. Ship Stations

- 842                    **25-09** § 6. (1) For the international public correspondence service, ship radiotelegraph stations are divided into three categories :

- 843                    **25-10**                    — Stations of the first category : these stations maintain a continuous service.

- 844                    **25-11**                    — Stations of the second category : these stations maintain a service of limited duration as indicated in Nos. 25-14 and 25-15.

- 845                    **25-12**                    — Stations of the third category : these stations maintain a service the duration of which is either shorter than that of stations of the second category, or is not fixed by these Regulations.

- 846                    **25-13**                    (2) Each administration shall itself determine the rules under which ship radiotelegraph stations subject to it are to be placed in one or the other of the above three categories.

- 847                    **25-14** § 7. (1) Ship stations of the second category shall provide service at least during the hours fixed by Appendix 12. These hours shall be mentioned in the licence.

- 848                    **25-15**                    (2) In case of short voyages, these stations shall provide service during the hours fixed by the administrations to which they are subject.



- 849                    **25-16 § 8.**        When practicable, the hours of service of ship stations of  
the third category should be mentioned in the appropriate list.
- 850                    **25-17 § 9.**        As a general rule, when a coast station has traffic on hand  
for a ship station of the third category not having fixed hours of  
service and assumed to be within the service area of the coast station,  
the latter shall call the ship station during the first half-hour of the  
first and third periods of service for ships of the second category  
performing an eight-hour service, in accordance with the provisions  
of Appendix 12.
- 851                    **25-18 § 10.**        For the international public correspondence service, ship  
stations equipped exclusively for the use of radiotelephony constitute  
a single category. These stations shall carry on a service, the  
duration of which is determined by the administrations to which  
the stations are subject.
- 852                    **25-19 § 11.** (1) Ship stations whose service is not continuous shall not close  
before :
- 853                    **25-20**                *a)* finishing all operations resulting from a distress call,  
urgency or safety signal ;
- 854                    **25-21**                *b)* exchanging, so far as practicable, all traffic originating  
in or destined for coast stations situated within their  
service area and for mobile stations which, being  
within their service area, have indicated their presence  
before the actual cessation of work.
- 855                    **25-22**                (2) Any ship station not having fixed working hours shall  
inform the coast stations with which it is in communication of the  
time of closing and the time of reopening its service.
- 856                    **25-23 § 12.** (1) Any mobile station arriving in port, and whose service is  
therefore about to close, shall :



| Former reference                                       | Source                        | New reference   |
|--|-------------------------------|---|
| <div> Chap.: XII<br/> Art.: 24a<br/> Nos.: 555a </div> | Committee: 7<br>Doc. No.: 604 | <div> Chap.: VI<br/> Art.: 26<br/> Nos.: 26-01 </div> |

- |     |              |  |
|-----|--------------|--|
| 857 | <b>25-24</b> | <i>a)</i> notify accordingly the nearest coast station and, if appropriate, the other coast stations with which it generally communicates ;  |
| 858 | <b>25-25</b> | <i>b)</i> not close until after the disposal of traffic on hand, unless this conflicts with the regulations in force in the country of the port of call.   |
|     | <b>25-26</b> | (2) Upon departure from port the ship station shall notify the coast station or stations concerned that its service is reopening as soon as such reopening is permitted by the regulations in force in the country of the port of departure. However, a ship station not having hours of service fixed by these Regulations may defer such notification until the station first reopens its service after departure from port. |

## Title

## Section V. Aircraft Stations

859

- 25-27** § 13. For the international public correspondence service, aircraft stations constitute a single category. The duration of the service of such stations is not fixed by these Regulations.

## ARTICLE 26

## Personnel of Coast and Aeronautical Stations

555a

- 26-01** Administrations shall ensure that the staff on duty in coast and aeronautical stations shall be adequately qualified to operate the stations efficiently.

| Former reference                        | Source                        | New reference                                     |
|---|-------------------------------|---|
| Chap.: XIV<br>Art.: 37<br>Nos.: 864-949 | Committee: 7<br>Doc. No.: 623 | Chap.: VIII<br>Art.: 36<br>Nos.: 36-001 to 36-116 |

## CHAPTER VIII

### Distress, Alarm, Urgency and Safety

#### ARTICLE 36

#### Distress Signal and Traffic. Alarm Urgency and Safety Signals

##### Section I. General

- 864                    **36-01** § 1.        The procedure laid down in this Article is obligatory in the maritime mobile service and for communications between aircraft and stations of the maritime mobile service. The provisions of this Article are also applicable to the aeronautical mobile service except in the case of special arrangements between the governments concerned.
- 865                    **36-02** § 2.        (1) No provision of these Regulations prevents the use by a mobile station in distress of any means at its disposal to attract attention, make known its position, and obtain help.
- 865a                   **36-03**            (2) No provision of these Regulations prevents the use by a land station, in exceptional circumstances, of any means at its disposal to assist a mobile station in distress.
- 865b                   **36-04** § 3.        The distress call and message shall be sent only on the authority of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station.
- 866                    **36-05** § 4.        In cases of distress, urgency or safety, transmissions :
- 866a                   **36-06**            a) by radiotelegraphy, shall not in general exceed a speed of sixteen words a minute ;
- 866b                   **36-07**            b) by radiotelephony, shall be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

- 867                    **36-08** § 5. (1) The characteristics of the radiotelegraph alarm signal are given in No. 36-84.
- 867a                  **36-09**        (2) The characteristics of the radiotelephone alarm signal are given in No. 36-86.

## Section II. Distress Signal

- 872                    **36-10** § 6. (1) The radiotelegraph distress signal consists of the group  
                          . . . — — — . . . , symbolized herein by SOS, transmitted as a single  
                          signal in which the dashes are emphasized so as to be distinguished  
                          clearly from the dots.
- 873                    **36-11**        (2) The radiotelephone distress signal consists of the word  
                          MAYDAY pronounced as the French expression "m'aider".
- 874                    **36-12**        (3) These distress signals indicate that a ship, aircraft or other  
                          vehicle is threatened by grave and imminent danger and requests  
                          immediate assistance.

## Section III. Distress Call and Message

- Title
- 878                    **36-13** § 7. (1) The distress call sent by radiotelegraphy consists of :
- the distress signal SOS sent three times ;
  - the word DE ;
  - the call sign of the mobile station in distress, sent three times.
- 880                    **36-14**        (2) The distress call sent by radiotelephony consists of :
- the distress signal MAYDAY spoken three times ;
  - the words THIS IS ;
  - the call sign or other identification of the mobile station in distress, spoken three times.

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**36-15 § 8.** The distress call shall have absolute priority over all other transmissions. All stations which hear it shall immediately cease any transmission capable of interfering with the distress traffic and shall continue to listen on the frequency used for the emission of the distress call. This call shall not be addressed to a particular station and acknowledgment of receipt shall not be given before the distress message which follows it is sent.

882

**36-16 § 9.** (1) The radiotelegraph distress message consists of :

- the distress signal SOS ;
- the name, or other identification, of the mobile station in distress ;
- particulars of its position ;
- the nature of the distress and the kind of assistance desired ;
- any other information which might facilitate the rescue.

882a

**36-17** (2) The radiotelephone distress message consists of :

- the distress signal MAYDAY ;
- the name, or other identification, of the mobile station in distress ;
- particulars of its position ;
- the nature of the distress and the kind of assistance desired ;
- any other information which might facilitate the rescue.

883

**36-18 § 10.** (1) As a general rule, a ship shall signal its position in latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST. In radiotelegraphy, the signal - - - - - shall be used to separate the degrees from the minutes. When practicable, the true bearing and distance in nautical miles from a known geographical position may be given.

884

**36-19** (2) As a general rule, and if time permits, an aircraft shall transmit in its distress message the following information :

- estimated position and time of the estimate ;

- heading in degrees (state whether magnetic or true) ;
- indicated air speed ;
- altitude ;
- type of aircraft ;
- nature of distress and type of assistance desired ;
- any other information which might facilitate the rescue (including the intention of the person in command, such as forced alighting on the sea or crash landing) .

885

**36-20** (3) As a general rule, an aircraft in flight shall signal its position either in radiotelephony or radiotelegraphy :

- by latitude and longitude (Greenwich) using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST ; or
- by the name of the nearest place, and its approximate distance in relation thereto, together with one of the words NORTH, SOUTH, EAST or WEST, as the case may be, or when practicable, by words indicating intermediate directions.

885a

**36-21** (4) However, in radiotelegraphy, the words NORTH or SOUTH and EAST or WEST, indicated in Nos. 36-18 and 36-20, may be replaced by the letters N or S and E or W.

#### Section IV. Distress Call and Message Transmission Procedure

##### *A. Radiotelegraphy*

885b

**36-22** § 11. (1) The radiotelegraph distress procedure shall consist of :

885c

**36-23** — the alarm signal ; followed in order by :

885d

**36-24** — the distress call and an interval of two minutes ;

885e

**36-25** — the distress call ;

885f

**36-26** — the distress message ;

- 886 **36-27** — two dashes of ten to fifteen seconds duration each ;
- 886a **36-28** — the call sign of the station in distress.
- 886b **36-29** (2) However, when time is vital, the second step of this procedure (No. 36-24) or even the first and second steps (Nos. 36-23 and 36-24) may be omitted. These two steps of the distress procedure may also be omitted in circumstances where transmission of the alarm signal is considered unnecessary.
- 887 **36-30** § 12. (1) The distress message, preceded by the distress call, shall be repeated at intervals, especially during the periods of silence prescribed in No. 32-36 for radiotelegraphy, until an answer is received.
- 888
- 889 **36-31** (2) The intervals shall, however, be sufficiently long to allow time for stations preparing to reply to start their sending apparatus.
- 889a **36-32** (3) The alarm signal may also be repeated, if necessary.
- 889b **36-33** § 13. The transmissions under Nos. 36-27 and 36-28, which are to permit direction-finding stations to determine the position of the station in distress, may be repeated at frequent intervals if necessary.
- 890 **36-34** § 14. When the mobile station in distress receives no answer to a distress message sent on the distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.
- 891 **36-35** § 15. Immediately before a crash landing or a forced landing (on land or sea) of an aircraft, as well as before total abandonment of a ship or an aircraft, the radio apparatus should be set for continuous emission if considered necessary and circumstances permit.

#### *B. Radiotelephony*

- 891a **36-36** § 16. The radiotelephone distress procedure shall consist of :

- 891b                    **36-37**                    — the alarm signal (whenever possible), followed by :
- 891c                    **36-38**                    — the distress call ;
- 891d                    **36-39**                    — the distress message.
- 891e                    **36-40** § 17.            After the transmission by radiotelephony of its distress message, the mobile station may be requested to transmit suitable signals followed by its call sign or other identification, to permit direction-finding stations to determine its position. This request may be repeated at frequent intervals if necessary.
- 891f                    **36-41** § 18. (1) The distress message, preceded by the distress call, shall be repeated at intervals, especially during the periods of silence prescribed in No. 35-31 for radiotelephony, until an answer is received.
- 891g                    **36-42**                    (2) The intervals shall, however, be sufficiently long to allow time for stations preparing to reply to start their sending apparatus.
- 891h                    **36-43**                    (3) This repetition shall be preceded by the alarm signal whenever possible.
- 891i                    **36-44** § 19.            When the mobile station in distress receives no answer to a distress message sent on the distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.
- 891j                    **36-45** § 20.            Immediately before a crash landing or a forced landing (on land or sea) of an aircraft, as well as before total abandonment of a ship or an aircraft, the radio apparatus should be set for continuous emission if considered necessary and circumstances permit.

#### Section V. Acknowledgment of Receipt of a Distress Message

- 895                    **36-46** § 21. (1) Stations of the mobile service which receive a distress message from a mobile station which is, beyond any possible doubt, in their vicinity, shall immediately acknowledge receipt.

- 895a                    **36-47**    (2) However, in areas where reliable communications with one or more coast stations are practicable, ship stations may defer this acknowledgment for a short interval so that a coast station may acknowledge receipt.
- 896                    **36-48**    (3) Stations of the mobile service which receive a distress message from a mobile station which, beyond any possible doubt, is not in their vicinity, shall allow a short interval of time to elapse before acknowledging receipt of the message, in order to permit stations nearer to the mobile station in distress to acknowledge receipt without interference.
- 897a                    **36-49 § 22.**    The acknowledgment of receipt of a distress message shall be given in the following form :
- 897b                    **36-50**            a) Radiotelegraphy :  
                              — the call sign of the station sending the distress message, sent three times ;  
                              — the word DE ;  
                              — the call sign of the station acknowledging receipt, sent three times ;  
                              — the group RRR ;  
                              — the distress signal.
- 897c                    **36-51**            b) Radiotelephony :  
                              — the call sign or other identification of the station sending the distress message, spoken three times ;  
                              — the words THIS IS ;  
                              — the call sign or other identification of the station acknowledging receipt, spoken three times ;  
                              — the word RECEIVED ;  
                              — the distress signal.
- 897d                    **36-52 § 23.** (1) Every mobile station which acknowledges receipt of a distress message shall, on the order of the master or person responsible for the ship, aircraft or other vehicle, transmit, as soon as possible, the following information in the order shown :



- its name ;
- its position in the form prescribed in Nos. 36-18, 36-20 and 36-21 ;
- the speed at which it is proceeding towards, and the approximate time it will take to reach, the mobile station in distress.

897c                    **36-53**        (2) Before sending this message, the station shall ensure that it will not interfere with the emissions of other stations better situated to render immediate assistance to the station in distress.

#### Section VI. Distress Traffic

898                    **36-54** § 24.        Distress traffic consists of all messages relating to the immediate assistance required by the mobile station in distress.

899                    **36-55** § 25.        In distress traffic, the distress signal shall be sent before the call and at the beginning of the preamble of any radiotelegram.

900                    **36-56** § 26.        The control of distress traffic is the responsibility of the mobile station in distress or of the station which, by the application of the provisions of Section VII of the present Article, has sent the distress message. These stations may, however, delegate the control of the distress traffic to another station.

901                    **36-57** § 27.        The station in distress or the station in control of distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It shall address these instructions "to all stations" or to one station only, according to circumstances. In either case, it shall use :

901a                    **36-58**                — in radiotelegraphy, the abbreviation QRT, followed by the distress signal SOS ;

901b                    **36-59**                — in radiotelephony, the signal SEELONCE MAYDAY, pronounced as the French expression "silence m'aider".

- 902                    **36-60** § 28.     If it is believed to be essential, any station of the mobile service near the ship, aircraft or other vehicle in distress, may also impose silence. It shall use for this purpose :
- 902a                   **36-61**            a) *in* radiotelegraphy, the abbreviation QRT, followed by the word DISTRESS and its own call sign ;
- 902b                   **36-62**            b) *in* radiotelephony, the word SEELONCE, pronounced as the French word "silence", followed by the word DISTRESS and its own call sign.
- 903                   **36-63** § 29. (1) In radiotelegraphy, the use of the signal QRT SOS shall be reserved for the mobile station in distress and for the station controlling distress traffic.
- 903a                   **36-64**            (2) In radiotelephony, the use of the signal SEELONCE MAYDAY shall be reserved for the mobile station in distress and for the station controlling distress traffic.
- 905                   **36-65** § 30. (1) Any station of the mobile service which has knowledge of distress traffic and which cannot itself assist the station in distress shall nevertheless follow such traffic until it is evident that assistance is being provided.
- 906                   **36-66**            (2) Until they receive the message indicating that normal working may be resumed (see No. 36-70) all stations which are aware of the distress traffic, and which are not taking part in it, are forbidden to transmit on the frequencies on which the distress traffic is taking place.
- 909                   **36-67** § 31.     A station of the mobile service which, while following distress traffic, is able to continue its normal service, may do so when the distress traffic is well established and on condition that it observes the provisions of No. 36-66 and does not interfere with the distress traffic.
- 909a                   **36-68** § 32.     In cases of exceptional importance and provided that no interference or delay is caused to the handling of distress traffic, urgency and safety messages may be announced during a lull in the distress traffic, preferably by coast stations, on the distress frequencies. This announcement shall include an indication of the

working frequency on which the urgency or safety message will be transmitted. In this case, the signals provided for in Nos. 36-98, 36-99, 36-109 and 36-110 should only be sent once (e.g. XXX DE ABC QSW...).

- 910                    **36-69** § 33.     A land station receiving a distress message shall, without delay, take the necessary action to advise the appropriate authorities responsible for providing for the operation of rescue facilities.
- 911                    **36-70** § 34. (1) When distress traffic has ceased, or when silence is no longer necessary on a frequency which has been used for distress traffic, the station which has controlled this traffic shall transmit on that frequency a message addressed "to all stations" indicating that normal working may be resumed.
- 912                    **36-71**        (2) In radiotelegraphy, this message consists of :  
                              — the distress signal SOS ;  
                              — the call "to all stations" CQ, sent three times ;  
                              — the word DE ;  
                              — the call sign of the station sending the message ;  
                              — the time of handing in of the message ;  
                              — the name and call sign of the mobile station which was in distress ;  
                              — the service abbreviation QUM.
- 912a                   **36-72**        (3) In radiotelephony, this message consists of :  
                              — the distress signal MAYDAY ;  
                              — the call "to all stations", spoken three times ;  
                              — the words THIS IS ;  
                              — the call sign or other identification of the station sending the message ;  
                              — the time of handing in of the message ;  
                              — the name and call sign of the mobile station which was in distress ;  
                              — the words SEELONCE FEENEE pronounced as the French words "silence fini".

**Section VII. Transmission of a Distress Message by a Station  
not itself in Distress**

- 919a                    **36-73** § 35. A mobile station or a land station which learns that a mobile station is in distress shall transmit a distress message in any of the following cases :
- 919b                    **36-74**            a) when the station in distress is not itself in a position to transmit the distress message ;
- 919c                    **36-75**            b) when the master or person responsible for the ship, aircraft or other vehicle not in distress, or the person responsible for the land station, considers that further help is necessary ;
- 919d                    **36-76**            c) when, although not in a position to render assistance, it has heard a distress message which has not been acknowledged.
- 919e                    **36-77** § 36. (1) The transmission of a distress message under the conditions prescribed in Nos. 36-74 to 36-76 shall be made on either or both of the international distress frequencies (500 kc/s, 2 182 kc/s), or on any other frequency that may be used in case of distress (see Nos. 32-13, 32-14, 32-114, 35-03, 35-05, and 35-06).
- 919f                    **36-78**            (2) This transmission of the distress message shall always be preceded by the call indicated below, which shall itself be preceded whenever possible by the radiotelegraph or radiotelephone alarm signal.
- 919g                    **36-79**            (3) This call consists of :
- 919h                    **36-80**            a) Radiotelegraphy :  
                          — the signal  $\overline{DDD} \overline{SOS} \overline{SOS} \overline{SOS} \overline{DDD}$  ;  
                          — the word DE ;  
                          — the call sign of the transmitting station, sent three times ;

- 919i                    **36-81**                    b) Radiotelephony :
- the signal MAYDAY RELAY pronounced as the French expression “m’aider relais”, spoken three times ;
  - the words THIS IS ;
  - the call sign or other identification of the transmitting station, spoken three times.
- 919j                    **36-82** § 37.                    When the radiotelegraph alarm signal is used an interval of two minutes shall be allowed, whenever this is considered necessary, before the transmission of the call mentioned in No. 36-80.
- 919k                    **36-83** § 38.                    When a station of the mobile service transmits a distress message under the conditions mentioned in No. 36-76, it shall take all necessary steps to notify the authorities who may be able to render assistance.
- Title                    **Section VIII. Radiotelegraph and Radiotelephone Alarm Signals**
- 920                    **36-84** § 39. (1) The radiotelegraph alarm signal consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between consecutive dashes one second. It may be transmitted by hand but its transmission by means of an automatic instrument is recommended.
- 921                    **36-85**                    (2) Any ship station working in the bands between 405 and 535 kc/s, which is not provided with an automatic apparatus for the transmission of the radiotelegraph alarm signal shall be permanently equipped with a clock, clearly marking the seconds, preferably by means of a sweep hand completing one revolution per minute. This clock shall be placed at a point sufficiently visible from the operator's table so that the operator may, by keeping it in view, easily and correctly time the different elements of the alarm signal.

- 921a **36-86** § 40. (1) The radiotelephone alarm signal consists of two substantially sinusoidal audio frequency tones transmitted alternately. One tone shall have a frequency of 2 200 cycles per second and the other a frequency of 1 300 cycles per second, the duration of each tone being 250 milliseconds.
- 921b **36-87** (2) The radiotelephone alarm signal, when generated by automatic means, shall be sent continuously for a period of at least thirty seconds but not exceeding one minute; when generated by other means, the signal shall be sent as continuously as practicable over a period of approximately one minute.
- 922 **36-88** § 41. The purpose of these special signals is :
- 922a **36-89** a) in radiotelegraphy, the actuation of automatic devices giving the alarm to attract the attention of the operator when there is no listening watch on the distress frequency ;
- 922b **36-90** b) in radiotelephony, to attract the attention of the person on watch or to actuate automatic devices giving the alarm.
- 922c **36-91** § 42. (1) These signals shall only be used to announce :
- 922d **36-92** a) that a distress call or message is about to follow ; or
- 922e **36-93** b) the transmission of an urgent cyclone warning. In this case they may only be used by coast stations duly authorized by their government ; or
- 922f **36-94** c) the loss of a person or persons overboard. In this case they may only be used when the assistance of other ships is required and cannot be satisfactorily obtained by the use of the urgency signal only, but the alarm signal shall not be repeated by other stations. The message shall be preceded by the urgency signal (see Nos. 36-98 and 36-99).
- 923 **36-95** (2) In cases described in 36-93 and 36-94, the transmission of the warning or message by radiotelegraphy shall not begin until two minutes after the end of the radiotelegraph alarm signal.

924                    **36-96** § 43. Automatic devices intended for the reception of the radiotelegraph and radiotelephone alarm signals shall meet the requirements specified in Appendix 20.

930                    **36-97** § 44. Before any such automatic device is approved for use on ships, the administration having jurisdiction over those ships shall be satisfied by practical tests made under operating conditions equivalent to those obtaining in practice (including interference, vibration, etc.), that the apparatus complies with the provisions of these Regulations.

#### Section IX. Urgency Signal

934                    **36-98** § 45. (1) In radiotelegraphy, the urgency signal consists of three repetitions of the group XXX, sent with the letters of each group and the successive groups clearly separated from each other. It shall be transmitted before the call.

935                    **36-99**        (2) In radiotelephony, the urgency signal consists of three repetitions of the word PAN pronounced as the French word "panne". It shall be transmitted before the call.

932                    **36-100** § 46. (1) The urgency signal shall be sent only on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

933                    **36-101**        (2) The urgency signal may be transmitted by a land station only with the approval of the responsible authority.

936                    **36-102** § 47. (1) The urgency signal indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or the safety of a person.

936a                   **36-103**        (2) The urgency signal and the message following it shall be sent on one of the international distress frequencies (500 kc/s or 2 182 kc/s) or on one of the frequencies which may be used in case of distress (see Nos. 33-13, 33-14, 33-114, 35-03, 35-05, and 35-06).

- 937                    **36-104**        (3) The urgency signal shall have priority over all other com-  
                              munications, except distress. All mobile and land stations which  
                              hear it shall take care not to interfere with the transmission of the  
                              message which follows the urgency signal.
- 939                    **36-105** § 48.        Messages preceded by the urgency signal shall, as a general  
                              rule, be drawn up in plain language.
- 940                    **36-106** § 49. (1) Mobile stations which hear the urgency signal shall con-  
                              tinue to listen for at least three minutes. At the end of this period,  
                              if no urgency message has been heard, they may resume their normal  
                              service.
- 941                    **36-107**        (2) However, land and mobile stations which are in com-  
                              munication on frequencies other than those used for the transmission  
                              of the urgency signal and of the call which follows it may continue  
                              their normal work without interruption provided the urgency message  
                              is not addressed "to all stations" (CQ).
- 942                    **36-108** § 50.        When the urgency signal has been sent before transmitting  
                              a message "to all stations" (CQ) and which calls for action by the  
                              stations receiving the message, the station responsible for its trans-  
                              mission shall cancel it as soon as it knows that action is no longer  
                              necessary. This message of cancellation shall likewise be addressed  
                              "to all stations" (CQ).

#### Section X. Safety Signal

- 943                    **36-109** § 51. (1) In radiotelegraphy, the safety signal consists of three  
                              repetitions of the group TTT, the individual letters of each group,  
                              and the successive groups being clearly separated from each other.  
                              It shall be sent before the call.
- 944                    **36-110**        (2) In radiotelephony, the safety signal consists of the word  
                              SÉCURITÉ pronounced clearly as in French, repeated three times  
                              and transmitted before the call.
- 945                    **36-111** § 52. (1) The safety signal indicates that the station is about to  
                              transmit a message concerning the safety of navigation or giving  
                              important meteorological warnings.



- 946                    **36-112**        (2) The safety signal and call shall be sent on the distress frequency or one of the frequencies which may be used in case of distress (see Nos. 33-13, 33-14, 33-114, 35-03, 35-05, and 35-06).
- 946a                  **36-113**        (3) Where practicable, the safety message which follows should be sent on a working frequency, particularly in areas of heavy traffic, and a suitable announcement to this effect shall be made at the end of the call.
- 947                    **36-114** § 53. (1) With the exception of messages transmitted at fixed times, the safety signal, when used in the maritime mobile service, shall be transmitted towards the end of the first available period of silence (see No. 32-36 for radiotelegraphy and No. 35-31 for radiotelephony); the message shall be transmitted immediately after the period of silence.
- 948                    **36-115**        (2) In the cases prescribed in Nos. 44-17, 44-20 and 44-24, the safety signal and the message which follows it shall be transmitted as soon as possible, and shall be repeated at the end of the first period of silence which follows.
- 949                    **36-116** § 54.    All stations hearing the safety signal shall listen to the safety message until they are satisfied that the message is of no concern to them. They shall not make any transmission likely to interfere with the message.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document N° 867-FES  
CORRIGENDUM N° 2  
18 décembre 1959

COMMISSION 5  
COMMITTEE 5  
COMISIÓN 5

## CORRIGENDUM

au Compte rendu de la 25ème séance de la Commission 5

Document N° 867, page 6, 4ème ligne : au lieu de "N° 803" lire "N° 801".

Même page, même ligne : au lieu de "N° 585" lire "N° 685".

## CORRIGENDUM

to the Summary Record of the Twenty-fifth Meeting of Committee 5

Document No. 867, page 6, first paragraph :

For "Document No. 803" read : "Document No. 801", and  
for "Document No. 585" read : "Document No. 685".

## CORRIGENDUM

al Informe de la 25ª sesión de la Comisión 5

En el Documento N° 867, página 6, 4ª línea, léase "N° 801", en lugar de "N° 803",

y en las 5ª y 6ª , líneas de la misma página en donde dice : "dicho documento" debe decir "el Documento N° 685".

Le Président  
The Chairman  
El Presidente

Dr. Joachim

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 867-E  
CORRIGENDUM No.1  
16 December, 1959

## COMMITTEE 5

### CORRIGENDUM

#### Summary Record of the twenty-fifth meeting of Committee 5

- Page 1, seventeenth line, for "2 046 kc/s", read "2 049 kc/s";
- Page 4, seventh line, for "Conference", read "Plenipotentiary Conference";
- Page 7, eighth line from the bottom, for "Strofeld", read "Strohfeldd";
- " " fifth line from the bottom, for "Williams", read "Willems";
- " " same line, before "Mr. Petit", insert "Mr. Delamulla and";
- " " last line, after "translators", insert a comma;
- Page 8, seventh line, for "The whole world", read "Everyone";
- " " thirteenth line, insert "tomorrow afternoon" before "by our Conference".

Chairman

M. Joachim.



ADMINISTRATIVE  
RADIO CONFERENCEDocument No. 867-E  
14 December, 1959

GENEVA, 1959

COMMITTEE 5

## SUMMARY RECORD

Twenty-Fifth Meeting of Committee 5

10 December, 1959, at 3 p.m., in Room A

Agenda: Document No. DT 870

The Chairman called everybody to order and had the Agenda adopted, first having added thereto another item, namely, consideration of Document No. 772. The Committee would do well, he said, to consider that Document before considering the Summary Records. Perhaps Mr. Willems, Chairman of the Working Group which had drafted Document No. 772, would care to speak.

Mr. Willems, Chairman of the Working Group, introduced Document No. 772. His Group had been called upon to settle two points; one, the requests made by Spain and the Union of Soviet Socialist Republics for ship frequencies, and secondly, the search for joint ship-to-ship frequencies and ship-to-shore frequencies in Region 1. The following common frequencies had been adopted for Region 1:

|   |             |
|---|-------------|
| Common ship-to-shore frequency, Region 1: | 2 046 kc/s  |
| Common inter-ship frequency, Region 1:    | 2 056 kc/s  |
| Common national frequency, Region 1:      | 2 062 kc/s. |

Furthermore, Working Group 5A had considered, and the Committee had adopted, the assignment procedure for future requirements proposed by the Working Group.

The Chairman asked if anybody wished to comment on item 2 of Document No. 772. It was unanimously adopted. Committee 7 would be informed accordingly.

Summary Records: Document No. 699

The Chairman said that the following changes were to be made therein: On Page 2, in the statement attributed to the Delegate of India, read "(C-I-IV)" instead of "(C-I-V)". The same applied to the statement attributed to the Delegate of Japan.

The Delegate of Mexico wanted a little change in the Spanish version on Page 6.

Thus amended, Document No. 699 was adopted.



Document No. 732

This was adopted, subject to the following changes:

Page 3

The statement attributed to the Delegate of Mexico read:

"When the Delegate of Turkey said he did not see what was meant by "on a basis of equality", he got two different explanations. The first came from the United States, which thought that those words meant that the Board would deal with technical matters only, and no others. The other came from the Delegation of Colombia, which felt that those words represented an order to the Board enjoining it to give no priorities and to make no difference in treatment. This second interpretation, to my way of thinking, is the right one. If this is the sense to be attributed to paragraph a), then I fully support its adoption. Naturally, the reference in this paragraph 10 should be suitably clarified."

Page 3

The statement attributed to the Delegate of Cuba read:

"This procedure will not solve the high-frequency broadcasting problem, since it is not satisfactory for all Members of the Union.

" That our view is the right one is, we think, borne out by what the Representative of the I.F.R.B. has said in reply, since this plan has been conceived solely for those countries which have organized broadcasting services. What is more, it makes it impossible to bring other stations into use in the future. The procedure proposed will merely prolong the existing clash of interests in high-frequency broadcasting. It would be difficult to implement in many respects and will not give satisfaction to all."

Page 6

The statement attributed to the Delegate of Turkey, read:  
"because neither text would accomplish anything."

Page 7

After [ "Page 18: the Delegate of the United States ... number of frequencies" ] add: "The Delegate of the Belgian Congo, backed up by the Delegate of Spain, was against that charge. When the I.F.R.B. received two requests for frequencies from different countries, one of which disposed of frequencies in the same range, the I.F.R.B. would have to know all about the frequencies to make its recommendations."

Page 7, at the top of the page, after "the Belgian Congo withdraw his proposal" add "in order to gain time by avoiding a vote at a later meeting which would be inevitable in view of the number of abstentions."

Document No. 703

Document No. 703 was approved with the following amendments:

Page 6

Mexican statement, replace by:

"The Delegato of Mexico said that, when the problem had first been raised in the relevant working group, the Spanish Delegation had classified the countries into three categories:

1. Countries whose requirements had been satisfied in the Copenhagen Plan, and which were therefore in favour of maintaining it;
2. Countries which did not belong to Region 1, and for that reason, were not concerned with the problem;
3. Countries in the European Area of Region 1, which were not satisfied with the Copenhagen Plan but were, nevertheless, indifferent to the problem;

" The Mexican Administration had placed itself in the second category although its country was in Region 2. Nevertheless, as it had pointed out on several occasions, the problem should be duly considered by every country, since it was a matter of principle, and for that reason the Mexican Delegation could not refrain from taking part in the discussion. Working Group 5B1 had recognized in its report (see Document No. DT 719, page 5, paragraph 5) that the I.F.R.B. had applied the procedure prescribed by Article 11 of the Radio Regulations to the bands of the European area intended for the maritime and broadcasting services, although there were no provisions whatsoever in the E.A.R.C. Agreement for the entry into force of Sections I to VI of Article 11; the Board, had moreover, shown that it had used that procedure so as to be in line with that applied in the African Area of Region 1 and Region 3 while recognizing that in doing so it had had no authority for adopting such a course. In that connection, the Mexican Delegation had expressed, on the appropriate occasion, its approval of the Board's decision to apply the procedure advocated in Article 11, which revealed an error, possibly on the part of the E.A.R.C., while at the same time expressing a fear that a precedent might have been created, since in the absence of clear instructions, the Administrations should have been consulted, either through the Administrative Council, or direct.

" As for the reply just given by the Delegate of Italy to the question put by the Mexican Delegation in the statement contained in the Annex to Document No. 618 (Page 12), it confirmed his doubts on the legitimacy and purpose of the footnote, as well as on the legal validity of applying a procedure without authority to do so; at the same time, he would stress that the Mexican Administration had at no time doubted the Board's impartiality. In his view, the only Conference since Atlantic City, which had taken place before the present Conference had been the Buenos Aires (1952) one.

" In conclusion, the Mexican Delegation could not remain indifferent to that state of affairs, involving as it did, questions of principle and expressed a hope that future conferences would elucidate clearly the terms of reference they issued and be precise in their instructions, thus precluding the danger of giving rise to problems such as the one facing the Conference at present. He reiterated the views expressed in Working Group 5B1 (Annex to Document No. 618) and called upon all countries to adopt solutions founded on just and equitable bases."

Page 7

The statement by the Delegate of New Zealand: the Spanish text to be brought into line with the English text.

Page 10

The statement by the Delegate of Turkey: Replace by the following:

"The Delegate of Turkey did not consider that such an important question could be decided by a vote which did not include all the Member countries, as a restricted vote would not add to the validity of the decision. To refuse to take part in the voting might have the opposite effect, since it would leave a majority to impose its will on a minority."

Page 7

The statement by the Delegate of Japan: Replace by the following:

"The Delegate of Japan, although not able to determine for himself whether the Spanish proposal was the best solution, respected the efforts of Spain to improve its situation."

Document No. 799

Document No. 799 was approved with the following amendments:

Page 4

The statement by the Delegate of Portugal: Penultimate line after "He proposed", add "on a point of order"...

Page 6

statement by the Delegate of Mexico substitute:

"The Delegate of Mexico supported the United States proposal for the reasons set out at length in Document No. 253, describing the views of the Mexican Administration with regard to HF broadcasting and stating that the bands for that service should not be used until acceptable plans had been prepared determining the requirements of an extension".

Document No. 756

Document No. 756 was approved subject to the following amendments:

Page 2, 1st statement by the Delegate of Mexico, replace by:

"The Delegate of Mexico, referring to point 6, did not think it was necessary to include in the RR numbers 56 and 57 of Article 6, Section I of the E.A.R.C. Agreement for the reasons given by the Delegate of Colombia as set out under that point, and reserved the right to raise the matter again."

Page 2, 2nd statement by the Delegate of Mexico, replace by:

"The Delegate of Mexico felt that the term "monitoring of transmissions" should be clearly defined since it was used in various parts of the Regulations without there being a precise conception of its meaning."

Document No. 801

Document No. 801 was approved subject to the following modifications:

Page 5, after "The Delegates of Israel, Greece.... in plenary meeting", add:

"The Delegate of Malaya enquired why the countries of Malaya and Singapore are not found in the columns of frequencies 4 386.2 and 8 811.5 kc/s since these frequencies are being used in the coast stations of those. The Chairman of Working Group 5B3 (Mr. Bes) after referring to the E.A.R.C. Plan remarked that the names of Malaya and Singapore are not to be found in the plan. Mr. Petit of the I.F.R.B. explained as these frequencies were introduced later than 1951, the requirements of Malaya and Singapore are being met by the new channels of 4 371.1 and 8 748.1 kc/s, with dates of 3 December, 1951 being registered for these frequencies for Malaya and Singapore".



Document No. 867-E

Page 6

Page 7, line 4 (this correction applies to the French text only)

Replying to a request by the Delegate of Japan for a rectification of the limits of the area of Region 3, as set out on page 5 of Document No. 803, the Chairman said that since Document No. 585 had been approved by Committee 5, he (the Delegate of Japan) should submit his request to the Plenary Assembly.

Document No. 805

Document No. 805 was approved subject to the following amendments:

Page 3, statement by the Delegate of Mexico, replace by:

"The Delegate of Mexico said that he had abstained from voting because he disagreed with the procedure adopted at that meeting. The matter should be studied again either on Committee level or in plenary assembly."

Document No. 809

Document No. 809 was adopted without amendment.

Document No. 812

Document No. 812 was adopted without amendment.

The Delegate of Turkey asked that on page 4 of Document No. 731, in the English text of the Turkish statement the word "loss" should be "more".

Point 2: Procedure for the approval of the summary record of the 25th meeting of Committee 5

It was decided that after the publication of the document, any amendments should be sent to the Chairman of Committee 5, who would, if necessary issue a Corrigendum.

Point 3: Other business

The Delegate of the United States asked whether the decision to include numbers 56 and 57 in Article 6 of the E.A.R.C. Agreement had been made known to the Drafting Committee.

After a statement by Mr. Autelli, the Chairman said that he would deal with the matter.

The Delegate of Pakistan made the following statement:

"Mr. Chairman, Permit me Sir to congratulate you on the completion of the work of your Committee under your Chairmanship. There was no doubt that the work of your Committee was a very complex one and you yourself Mr. Chairman were in a very peculiar position having to handle very difficult questions. First of all the work in your Committee was a combination of the work of actually two separate committees originally proposed viz the International Frequency lists and the Notification Procedure Committee. In spite of the tremendous tasks this work has been successfully completed and such complex problems such as the Notification procedure and the I.F.R.B. regulations which was if not the most difficult nevertheless one of the most important tasks of this Conference, have found general acceptance. Such is the case with the High intricate problem of High Frequency Broadcasting. Your Committee besides finding solution to the problems of the various lists in the Aeronautical, Maritime and Regional bands also dealt with for the first time in the history of Telecommunication in a practical manner with the problem of the new and developing countries. Although Mr. Chairman we may have had some differences with you sometimes but there was never any doubt about your ability, tactfulness and pleasant demeanour. We feel ourselves very pleased to convey our congratulations to you on so successfully completing the tasks entrusted to you by this Conference". The Statement was greeted by a salvo of applause.

The Delegate of Ethiopia supported the statement made by Pakistan.

The Delegate of the United Kingdom of Great Britain and Northern Ireland associated himself with the sentiments expressed by the Delegate of Pakistan.

The Delegate of New Zealand supported the statements of Pakistan, Ethiopia and the United Kingdom. He also wished to congratulate the Chairman on his achievements in the field of technical and linguistic knowledge and on the additional work he had been called upon to provide while acting as a member of a small delegation.

The Chairman said:

"Since 20 August, the day Committee 5 first met, our Committee, considered as one of the most important, has held 25 meetings. It was split up into 2 working groups, several sub-sub-working groups, as well as Ad Hoc groups. I should like, once again, to thank all those who have cooperated with the Committee, and in particular, the Vice-Chairman, Mr. Vieira, Mr. Searle with his team consisting of Messrs. Gillioz, Henry, place Dawson and others, Mr. Autelli and his associates Mr. Sathar, Kirkpatrick, Dawson, Keith, Lebel, Bes, Gejer, Shinkawa, Strofeld and Parker and the Chairman of the famous miracle group, Mr. Mirza and Mr. Loeber, as well as the Chairman of the last group set up within the framework of the Committee, Mr. Williams. Thanks also to Mr. Petit as well as to the language group consisting of Mr. Barailler, Mr. Donald and Mr. Etulain.

" On my own behalf and yours, I should also like to convey our thanks to the Conference staff, the interpreters, the operators, the messengers, the translators the documents service and other personnel.

" After nearly four months of work, most of the final documents of our Committee have now been issued as blue documents. At the beginning of our task we spoke of the necessity of putting in order and cleaning up the structure of the radio spectrum in an economical, rational and efficient way; and although it has not been possible, in the course of this conference, to obtain entirely satisfactory results, we have, nevertheless, made a big step forward towards achieving our goal. The whole world is aware of the need to follow closely, when working on the registration of frequencies in an orderly way, the results of research in the domain of wave propagation and that of radio operation.

" It will now be up to the Administrations themselves and to the staff of the I.T.U., eleven members - the most responsible in this field - of which will be elected by our Conference.

" We have reached the end of our work in Committee 5. On this occasion, I should like to stress the important part that radio communication plays in the progress of humanity and in the improvement of conditions throughout the world.

" Since that memorable Saturday in early October, 1957, when humanity entered upon its space phase, we have seen many other manifestations of successful research in this field which is so closely linked with the progress of rational utilization of radio frequencies for peaceful purposes. And it is thanks to this progress that we can say today that humanity's ancient dream has been fulfilled and that we are now able to admire the unknown side of the Moon.

" I am convinced that international cooperation in the field of radio so often displayed within our Committee, will make it possible to attain still more distant goals."

The Meeting rose at 4 p.m.

J. Barrailler  
Rapporteur

M. Joachim  
Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 868-E  
14 December, 1959

PLENARY MEETING

MINUTES

OF THE

EIGHTEENTH PLENARY MEETING

Wednesday, 9 December 1959, at 8.30 p.m.

Chairman: Mr. Charles J. Acton (Canada)

Vice Chairmen: Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)

Deputy Secretary  
of the Conference: Mr. Clifford Stead

Subjects discussed::

1. Adoption of the Agenda (Document No. 820).
2. Fourteenth Series of Texts submitted by the Drafting Committee (Document No. 770).



The following Delegations were present :

Members of the Union

Afghanistan; Albania (People's Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian Soviet Socialist Republic; Brazil; Bulgaria (People's Republic of); Canada; China; Vatican City (State of the); Colombia (Republic of); Belgian Congo and Territory of Ruandi-Urundi; Korea (Republic of); Cuba; Denmark; States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Japan; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Oversea Provinces; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

Recognized Private Operating Agencies

British Broadcasting Corporation  
Cable & Wireless Ltd.  
Companhia Portuguesa Radio Marconi.

International Organizations

European Broadcasting Union  
International Civil Aviation Organization  
International Broadcasting and Television Organization

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1. Adoption of the Agenda (Document No. 820)

The Agenda was adopted

2. Fourteenth Series of Texts submitted by the Drafting Committee  
(Document No. 770)

Page 14-01

The Delegate of Denmark proposed that a reference should be added under "Region 1 - 27.5 - 28 Mc/s" to the Recommendation dealing with meteorological aid services in that band (Document No. 653, Annex 3).

The Delegate of France, speaking as Chairman of the Drafting Committee, said that such a reference would be unusual in the Table of Frequency Allocations.

The Delegate of Denmark suggested that the form of the reference could be similar to that of footnote 175f and would therefore not be unusual.

The Delegate of the United Kingdom of Great Britain and Northern Ireland said that 175f referred to a Recommendation concerning the use of frequencies, whereas the Recommendation in Document No. 653 referred to the future transfer of meteorological aid services to higher frequency bands. He would prefer not to add the proposed footnote.

The Delegate of Denmark withdrew his proposal.

The Delegate of the Belgian Congo regretted that footnote 172a had been added, since it might result in the hampering by land stations of high altitude observations.

The Delegate of the U.S.S.R. pointed out that in Regions 2 and 3 the band 27.5 to 28 Mc/s was allocated to three services - meteorological aids, fixed and mobile - although it might be expected that in view of the character of scatter in that band the danger of interference with meteorological aids would be greater in those regions than in Region 1. He did not think the Delegate of the Belgian Congo would insist that stations in the U.S.S.R. would cause interference in the Belgian Congo.

It was agreed to retain footnote 172a.

The Delegate of Cuba made the following statement:

"In Document No. 770 the text of 175a was as follows: 'Stations designed to use ionosphere scatter may operate only under arrangements to be agreed between administrations concerned and those having authorized services which may be affected.'

" The text approved in Committee 4 had been changed. That text was as follows:

" The operation of stations designed to use ionospheric scatter is permitted only under arrangements to be agreed between administrations concerned or affected.

" The difference between these two texts had changed the meaning proposed by Committee 4 and Cuba could not agree to that change."

The Delegate of Cuba said further that the Drafting Committee had changed the substance of footnote 175c.

The Chairman said that it seemed that the Spanish text differed from the English and French texts, which were correct, and suggested that the Spanish text should be brought into line with the other two languages.

The Delegate of Cuba urged that more attention should be paid to the Spanish text, which frequently contained serious errors and changes in substance.

The Chairman said that he was sure the Drafting Committee would do all it could to improve the Spanish text and would welcome any advice and assistance the Delegate of Cuba could give it.

Page 14-01 was approved.

Page 14-02

Page 14-02 was approved with a drafting change.

Page 14-03

The Delegate of the U.S.S.R. asked that a reference to footnote 175c should be added under Region 1, for the band 41 - 47 Mc/s, for the U.S.S.R. only.

The Chairman said that the U.S.S.R. request would require a separate footnote covering the use of ionospheric scatter stations.

The Delegate of France said that the request would cause serious difficulties for his country, which had experienced harmful interference from stations using ionospheric scatter. He could not therefore accept the U.S.S.R. proposal.

The Chairman put the proposal to the vote.

The U.S.S.R. proposal was rejected by 9 votes to 21, with 7 abstentions.

The Delegate of the United Kingdom asked that references should be included to 176a under Region 2 for the band 41 - 50 Mc/s and under Region 3 for 41 - 44 Mc/s, since, in Document No. 653, 176a had been a world-wide footnote. Although there was no allocation to broadcasting in those bands for Regions 2 and 3, it was known that ionospheric scatter could cause interference to broadcasting over very great distances.

The Delegate of Spain supported the United Kingdom proposal.

The proposal was adopted.

The Delegate of the Union of South Africa pointed out that, in 178a, the words "alternatively" and "additionally" had been interchanged so that the text did not reflect the decision of the Working Group. He asked that the Drafting Committee should restore the footnote to its original sense.

The Chairman of the Drafting Committee explained that there appeared to be a difference between the French and English texts of Document No. 653 from which the footnote was taken, and the Drafting Committee would investigate to see which version was correct. It was hoped that the Preamble to the Table, which he would submit at the next meeting, would obviate the need to use either word.

The Delegate of the Belgian Congo asked that the Belgian Congo and Ruandi-Urundi should be included in the list of countries in 178a.

It was so agreed.

Page 14-03 was approved as amended.

Page 14-04

The Delegate of Monaco asked that the name of his country should be included in 178b.

The Delegate of Iran asked that the name of his country should be included in 178g.

It was so agreed.

The Delegate of Italy felt that 178d and 178e were far removed from the intention of the Working Group in regard to the band 47 - 68 Mc/s in Region 1. He proposed that the words "except systems using Ionospheric scatter" should be added after "fixed service" in 178d and after "fixed" in 178e. It was in that band that ionospheric scatter was particularly feared. The other regions were covered by 176a, which did not apply to Region 1, for the band in question.



The Delegate of the U.S.S.R. considered that the Italian proposal was unnecessary. If it were adopted, the phrase should logically be added each time fixed services were mentioned, which would make the Table very cumbersome. If ionospheric scatter was not mentioned it would mean that it did not exist in that band.

The Delegates of the Belorussian S.S.R. and Bulgaria supported that view.

The Delegate of Czechoslovakia pointed out that a decision had been taken on the question in Committee 4.

The Delegate of Yugoslavia proposed that, instead of amending the footnotes, a remark should be included in the Preamble, stating that any footnotes referring to fixed services did not include ionospheric scatter services, unless a specific reference was made to the contrary.

The Chairman of the Drafting Committee agreed that was a possible solution, and suggested that he should draft an appropriate paragraph for the Preamble.

It was so agreed.

Page 14-04 was approved, as amended.

Page 14-05

The Delegate of Denmark proposed that the words "for ground-based transmitters only" should be added at the end of 180a to bring the footnote into line with 180c and 180d.

It was so agreed.

The Delegate of the Federal Republic of Germany made the following statement :

"With regard to the additional allocation to the broadcasting service of the frequency bands 68 - 73 Mc/s and 76 - 87.5 Mc/s in which extensive and essential mobile services are being operated in the Federal Republic of Germany in conformity with the Table of Frequency Allocations and to the probability of harmful interference, the Administration of the Federal Republic of Germany reserves the right for a relevant reservation when signing the Final Acts of this Conference."

The Delegate of Austria reserved the right to associate himself with the reservation made by the Delegate of the Federal Republic of Germany.

The Delegate of Greece made the following statement :

"The Delegation of Greece reserves its position on the adoption of footnote 180b if the draft Recommendation proposed in Document No. 665 is not accepted by the countries wishing to use broadcasting and television and mentioned in this footnote."

The Delegate of Turkey made the following statement :

"The Delegation of Turkey reserves its opinion on footnote 180b until the draft Recommendation in Document No. 665 has been considered."

Page 14-05 was approved, as amended.

Page 14-06

Page 14-06 was approved, with a slight drafting change.

Page 14-07

Page 14-07 was approved without comment.

Page 14-08

The Delegate of Denmark proposed that the words "for ground-based transmitters only" should be added in 192a after the words "aeronautical radio-navigation service".

It was so agreed.

The Delegate of Japan asked that the name of his country be included in 192b.

It was so agreed.

Page 14-08 was approved, as amended.

Page 14-09

The Delegate of Ireland asked that the name of his country be included in 193b.

It was so agreed.

Page 14-09 was approved as amended.

Page 14-10

The Chairman of the Drafting Committee pointed out that space and earth-space communications were mentioned on page 14-10 for the first time in the Table. A reference would be added each time those services were mentioned to indicate that they were "for research purposes only."

He proposed that the words "on this frequency" should be added in 195 after the words: "mobile stations of the maritime mobile service may communicate".

It was so agreed.

Page 14-10 was approved, as amended.

Page 14-11

The Chairman of the Drafting Committee considered that the wording of 195c was ambiguous and required revision.

The Chairman suggested that the countries concerned should consider the point and take it up with the Drafting Committee.

The Delegates of Bulgaria, Hungary, Poland, Roumania and Czechoslovakia asked that the names of their countries be included in 196b.

The Delegate of Portugal asked that the name of his country be deleted in 196c and inserted in 196d.

It was so agreed.

Page 14-11 was approved, as amended.

Pages 14-12 and 14-13

Pages 14-12 and 14-13 were approved with slight drafting changes.

Page 14-14 was adopted without comment.

Page 14-15

The Delegate of Ethiopia asked that the name of his country be included in 203c.

It was so agreed.

The Delegate of Denmark made two proposals in connection with 203d; the first, to change the words "on a non-interference basis" to "on a secondary basis"; and the second, to add the words "for research purposes only" after "earth-space services".

The Delegate of the U.S.S.R. had no objection to the second proposal, since, as the Chairman of the Drafting Committee had already explained, that phrase would be added in all cases where those services were mentioned. His Delegation did, however, object to the proposal to use the word "secondary". In some cases the earth-space service could even be considered as a priority one. He reminded the Delegate of Denmark that the second and third Soviet Sputniks had sent their signals on that frequency, and it was also on that frequency that the signals of the first Lunik had been received by research workers throughout the world. The use of the band for earth-space communications had never caused interference and his Delegation was categorically opposed to the Danish proposal, which would hamper research.

The Delegate of the United States made the following statement:

"My Delegation recognizes the importance of space research and believes that every nation should be encouraged to cooperate in this endeavour. We likewise recognize that the U.S.S.R., in the course of its space research, has made extensive use of the frequency 183.6 Mc/s without causing harmful interference to other services in this range and without depriving any nation of the right to use this frequency in accordance with the table of frequency allocations.

" The first report of the special Ad Hoc Committee of the Plenary Meeting indicates that the United States had no objection to the use of this frequency for space research on a non-interference basis to other services. According to our understanding, this would deprive no nation of any rights to operate or to establish stations in accordance with the table of frequency allocations. Our Delegation has not changed its original position shown in that report. Unfortunately the report was not written in terms of the priorities shown in Document No. 242 (Rev.) which would classify the use of 183.6 Mc/s for space research as secondary."

The Delegate of Denmark said that it was clear from the Minutes of the 37th meeting of Committee 4 (Document No. 746) that there was fundamental agreement on the point between the U.S.S.R. and Denmark. On page 2 of the Minutes it was recorded that: "The Delegate of Denmark said that he had noted the answer of the Delegate of the U.S.S.R. that the service would not cause harmful interference to authorized services nor would require protection from those services .....".

He would be prepared to accept the wording of that document as the opinion of the U.S.S.R. Delegate.

The Delegate of Italy supported the Danish proposal to change the words "on a non-interference basis" to "on a secondary basis". It should be clearly established that space and earth-space services were secondary, since no immediate protection from broadcasting and television could be given to those services.

The Chairman of the Drafting Committee proposed that if the term "secondary" was not acceptable, it should be clearly indicated that the space and earth-space services could not request protection from the services already established on that frequency.

The Delegate of the United States said that his Delegation wished to recognize that the band 183.6 Mc/s was also allocated to space and earth-space services on a non-interference basis - i.e., provided those services did not interfere with broadcasting stations. The United States would not quibble with words and could agree with the phrase "on a non-interference basis" contained in 203d.

The Delegate of the United Kingdom agreed that his Delegation could accept the footnote as it stood, with the addition of the words "for research purposes only".

The Chairman proposed that the Delegate of the U.S.S.R. and the Chairman of the Drafting Committee should meet with him during the recess to consider a possible revision of the footnote.

It was so agreed.

The Delegate of Israel asked whether 203d was the only footnote to refer to a "non-interference basis".

The Chairman said that point would be taken into account when reconsidering the footnote.

The Meeting was suspended at 10.30 p.m. and resumed at 11 p.m.

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The Chairman of the Drafting Committee announced that, during the recess, it had been found that there was a probable difference of interpretation of the French and English wording of "on a non-interference basis". There were, in fact, other footnotes in the table which used the same term and the same misunderstanding would probably arise in connection with them. The Chairman, the Delegate of the U.S.S.R., and he himself, therefore proposed that the Preamble to the Table should contain an additional paragraph indicating clearly that if a footnote mentioned that a band was allocated on a "non-interference basis" it meant also that the band did not request protection from a service appearing in the Table.

The Delegate of Denmark was happy to accept that elegant solution.

The Delegate of Norway accepted the solution proposed and withdrew the reservation made by his delegation in Committee 4.

The proposal was adopted.

Footnote 203d was approved with the addition of the words "for research purposes only" in brackets.

Page 14-15 was approved, as amended.

Page 14-16 was approved without comment.

Page 14-17

The Delegate of the U.S.S.R. asked whether the other countries listed in 209a would agree that the word "exclusively" should be substituted for "additionally". If not, he would request that a special footnote should be added to indicate that in the U.S.S.R. the band was allocated exclusively to the fixed and mobile services.

The Chairman of the Drafting Committee pointed out that when the Preamble was adopted both terms might prove redundant.

The Delegate of the U.S.S.R. agreed to await consideration of the Preamble.

Page 14-17 was approved, subject to consideration of the Preamble.

Pages 14-18, 14-19, 14-20 and 14-21 were approved without comment.

Page 14-22

The delegates of Albania, Hungary, Poland, Roumania and Czechoslovakia asked that the names of their countries be included in 211o.

It was so agreed.

It was agreed to add the words "In Region 1" in 211m, as proposed by Committee 8.

Page 14-22 was approved with those amendments.

Page 14-23 was approved without comment.

The Delegate of the U.S.S.R. made the following statement:

"The U.S.S.R. reserves the right for the ionospheric scatter services to use the bands 29.7 - 33, 38 - 44, 46 - 48, 56.75 - 57.75 Mc/s, and at the same time guarantees that steps will be taken so as not to cause any interference to broadcasting in these bands".

The Delegate of Bulgaria said that the radiolocation service which was mentioned in the Table under 10-40 Mc/s could not be accepted as a service which had any right to be included in the Table. The Delegation of Bulgaria had on several occasions requested clarification of that point and had tried to obtain some information on the service, but as none had unfortunately been forthcoming, the Delegation reserved the right not to recognize the service.

The Delegate of Cuba said that his Delegation wished to reserve the right to use any of the bands mentioned in the Table which had been set aside for the radiolocation service.

The Delegate of Roumania said that his Delegation could not accept the inclusion of the new service called "radiolocation" in the Frequency Allocation Table, and which had been given priority in several bands over other services operating in those bands in accordance with the Atlantic City Regulations. Roumania reserved the right to use the bands reserved for radiolocation in accordance with its needs and to improve its radiocommunication system.

The Delegate of Czechoslovakia said that as several delegations had made reservations on footnote 180b, and as the exact text of those reservations was not known, his Delegation also wished to express a reservation on that point in the meantime. In regard to the radiolocation service, his Delegation had already reserved its position during the discussion of the table.

The Delegate of Yugoslavia proposed that, to settle the difficulty with regard to 180b, the Draft Recommendation on page 4 of Document No. 665 should be approved as an integral part of Document No. 770.

The Delegate of Czechoslovakia said that the draft recommendation was being studied by the drafting committee and suggested that the Conference should revert to the question when the text of the revised recommendation was available in a blue document.

The Chairman of the Drafting Committee feared that if the conference waited to adopt the fourteenth series of texts until the recommendation was available in a blue document, the work of the Conference would be greatly delayed.

The Chairman agreed and urged the Meeting to accept Document No. 770 on a provisional basis, subject to any later changes which might prove essential.

The Delegates of the United Kingdom and the United States supported that view.

The Fourteenth Series of Texts submitted by the Drafting Committee (Document No. 770) was approved, subject to the amendments noted above and to a number of slight drafting changes, and to the consideration of the Preamble and the Draft Recommendation (Document No. 665).

The meeting rose at midnight.

E.M. Hamilton  
J. Umberg  
Rapportteurs

Clifford Stead  
Deputy Secretary  
of the Conference

Charles J. Acton  
Chairman

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ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 869-E  
CORRIGENDUM No. 1  
18 December, 1959

PLENARY MEETING

CORRIGENDUM

TO THE

MINUTES

OF THE

NINETEENTH PLENARY MEETING

Thursday, 10 December 1959, at 8.45 p.m.

Page 6, paragraph 5, read, at the end :

"..... should be allowed to operate a station in special circumstances, to avoid the situation which would arise in special circumstances, **if** the vessel had no operator. Naturally, such a right should be limited."



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 869-E  
14 December, 1959

## PLENARY MEETING

### MINUTES

of the

### NINETEENTH PLENARY MEETING

Thursday, 10 December 1959, at 8.45 p.m.

Chairman : Mr. Charles J. Acton (Canada)  
Vice-Chairmen : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M. B. Sarwate (Republic of India)  
Deputy Secretary  
of the Conference : Mr. Clifford Stead

### Subjects discussed :

1. Congratulations to the Assistant Secretary-General elect.
2. The Agenda (Document No. 834).
3. Draft Provisions for Article 5 (Document No. 823 and Add. 1).
4. Approval of the Minutes of the Twelfth Plenary Meeting (Document No. 797).
5. Deadline for receipt of texts of declarations for inclusion in the Final Acts.
6. Thirteenth Series of Texts submitted by the Drafting Committee (Document No. 747).
7. Fourth bis Series of Texts submitted by the Drafting Committee (Document No. 764).
8. Fifteenth Series of Texts submitted by the Drafting Committee (Document No. 791).



Present :

Members of the Union :

Afghanistan; Albania (People's Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian Soviet Socialist Republic; Brazil; Bulgaria (People's Republic of); Canada; China; Belgian Congo and Territory of Ruanda-Urundi; Korea (Republic of); Denmark; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Japan; Luxemburg; Malaya (Federation of); Morocco (Kingdom of); Mexico; Norway; New Zealand; Pakistan; Netherlands (Kingdom of the); Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics.

Recognized Private Operating Agencies :

Compagnie Portugaise Radio Marconi  
British Broadcasting Corporation.

Specialized Agencies :

International Civil Aviation Organization.

International Organizations :

International Radio Maritime Committee  
Independent Television Authority  
International Air Transport Association  
European Broadcasting Union  
International Broadcasting and Television Organization  
International Chamber of Shipping

1. Congratulations to the Assistant Secretary-General elect

The Chairman offered the congratulations of the Meeting to the Vice-Chairman, Dr. M. B. Sarwate, on his election as Assistant Secretary-General of the Union.

(Applause)

2. The Agenda (Document No. 834)

The Chairman proposed that the Meeting begin by considering the Draft Provisions for Article 5 contained in Document No. 823 and Add. 1.

The Delegate of the Union of Soviet Socialist Republics thought that, in view of the importance of Document No. 823, further time should be given for its study before it was discussed.

The Delegate of France, speaking as Chairman of the Drafting Committee, said the matter was of considerable urgency. A 24-hour delay in the study of Document No. 823 would mean much time lost to the Conference.

After a short discussion, in which the Delegates of the Bielorussian S.S.R., Greece and South Africa took part, the Chairman proposed, as a compromise, that the Chairman of the Drafting Committee introduce Document No. 823 at the present meeting and that further consideration then be deferred until a meeting the following morning.

It was so agreed.

3. Draft Provisions for Article 5 (Document No. 823 and Add. 1)

The Chairman of the Drafting Committee introduced the Provisions for Article 5 contained in Document No. 823 and Add. 1 and explained the main ideas underlying the various changes that had been made. He hoped that the following Plenary Meeting would be able to approve the document as rapidly as possible.

4. Approval of the Minutes of the Twelfth Plenary Meeting (Document No. 797)

The Delegate of Mexico drew attention to a series of minor corrections which he wished made in the Minutes of the 12th Plenary and which he would be happy to hand in to the Secretariat.

5. Deadline for receipt of texts of declarations for inclusion in the Final Acts

The Chairman said that the Chairman of the Drafting Committee had informed him that the remainder of the blue texts would have been distributed by the following Sunday, or early Monday morning. He would therefore propose that texts of declarations for inclusion in the Final Acts should be handed in not later than 2400 hours on Tuesday, 15 December.

The Delegate of Mexico thought that the deadline should be set 48 hours after the last of the blue texts had been actually distributed.

The Delegate of Spain agreed. 2400 hours on 15 December should be regarded as the earliest deadline. If the last of the blue texts had not been distributed 48 hours before that time, then delegates should be informed of the point at which the 48-hour period began to be counted.

The Delegate of Austria assumed that the deadline applied to declarations, not to reservations.

The Chairman proposed that the deadline he had mentioned should be accepted provisionally.

It was so agreed.

6. Thirteenth Series of Texts submitted by the Drafting Committee (Document No. 747)

Art. 25

The Delegate of Mexico said that the text of No. 564 on page 13-07 was not precise, and should be revised in the light of the decisions taken by Committee 7. Reference should be included to Nos. 548 and 548a.

The Chairman of the Drafting Committee proposed that, to meet the Delegate of Mexico's point, an asterisk be inserted after the word "according" (fourth line of No. 564) giving a reference to a footnote to read : "\* See also Nos. 548 and 548a".

It was so agreed.

Art. 45

The Delegate of the U.S.S.R. proposed that a second sentence be added to No. 1057e to read as follows : "However, this does not limit the rights of Administrations to have standard frequency stations."

The Delegate of the United States said that his delegation recognized the right of all Administrations to have standard frequency stations, but coordination was necessary if interference was to be avoided. Number 1057e as it stood seemed to impose no limitation on Administrations.

The Delegate of Denmark thought the point might be solved by the addition of the words : "standard frequency" before the word "station" in the first line of No. 1057e.

The Delegate of the U.S.S.R. fully agreed that there should be coordination, but did not think that the proposal of the Delegate of Denmark fully covered the rights of Administrations to have standard frequency stations.

The Delegate of the United Kingdom, stressing the need for international coordination, thought that No. 1057e should be left as it was in the blue texts, since it did not limit the right of Administrations to set up new stations.

The Delegate of Bielorussia said that No. 1057e as it stood was not clearly expressed. Final consideration of it should be postponed.

The Delegate of Israel pointed out that, if the Soviet proposal were accepted, a similar addition would have to be made to every paragraph in the Radio Regulations which referred to the assignment of frequencies for setting up new stations.

After further discussion, the Delegate of the United States proposed that the following wording (which had been agreed outside the meeting) should be adopted for No. 1057e :

"(3) Insofar as is practicable, a new frequency assignment in the standard frequency bands should not be made or notified to the Board until appropriate coordination has been completed."

It was so agreed.

After a short discussion on No. 1057i on page 13-10, in which the Chairman of the Drafting Committee and the Delegates of India and the United States took part, the Delegate of Canada proposed that that number be deleted.

It was so agreed.

App. 11

The Delegate of China, supported by the Delegate of Pakistan, proposed that the beginning of the first footnote on page 13-14 be amended to read : "\* Each transmission of figures or punctuation marks is preceded and followed by the words 'as a number' or 'as a mark' respectively spoken twice .....".

It was so agreed.

pp.13-16  
to 13-19

The Delegate of the United States then made the following statement :

"My Delegation is in sympathy with the basic objectives of this Recommendation concerning standard forms for ship station licences and aircraft station licences for international voyages and flights and for guidance of administrations desiring to improve their existing national licences. However, we do not believe, for both practical and policy reasons, that we can commit our Government to adopt for national use the specimen forms shown in the Annexes to the Recommendation. Nonetheless, we support the adoption of the Recommendation in light of the basic objectives involved."

The 13th Series of the blue texts, as amended, and subject to possible drafting changes proposed by the Chairman of the Drafting Committee and the Delegates of India, Argentina, United Kingdom, Bielorussia, Ethiopia and Iran was approved.

7. Fourth bis Series of Texts submitted by the Drafting Committee (Document No. 764)

Art.14

Series 4 bis of the blue texts was approved, subject to drafting changes proposed by the Delegates of Mexico and the United States.

8. Fifteenth Series of Texts submitted by the Drafting Committee (Document No. 791)

Art.24

The Delegate of Czechoslovakia proposed that the words "the government of another Member of the Union" in No. 503 on page 15-02 should be replaced by "another Government".

The Delegate of the United States wondered what the legal effect of the proposed change would be.

The Delegate of Portugal thought that the wording of No. 503 should be kept as it stood, since the Radio Regulations only applied to Members of the Union.

The Delegate of Czechoslovakia pointed out that, not only were there Members and Associate Members of the Union, but there were also Governments which were not Members of the Union. If a ship were in danger, the use of its station could not be prohibited simply because the operator did not possess a certificate issued by a Member of the Union.

The Delegate of Ethiopia, supported by the Delegate of the U.S.S.R., said that No. 503 should be brought into line with No. 500 where no mention was made of Members of the Union.

The Delegate of Mexico said that the point raised by the Delegate of Czechoslovakia was an important one, but wondered whether No. 504, which dealt with the question of temporary operators, did not cover the contingency that he had referred to. An operator, even if not holding a certificate issued by a Member or Associate Member of the Union, should be allowed to operate a station in cases of distress, although that right should be limited.

The Chairman of Committee 7 supported the proposal of the Delegate of Czechoslovakia.

The Chairman of the Drafting Committee thought that the provisions in No. 504 completely covered the contingency mentioned by the Delegate of Czechoslovakia.

The proposal of the Delegate of Czechoslovakia was rejected by 18 votes to 15, with 15 abstentions.

The Chairman proposed that consideration of Nos. 817 to 829c inclusive be deferred until a later meeting.

It was so agreed.

page 15-25

The Delegate of Denmark proposed that the last words in the Recommendation on page 15-25 be amended to read "Radio Regulations Nos. 242a and 579;".

It was so agreed.

The 15th Series of blue texts, as amended and subject to drafting changes proposed by the Delegates of Denmark, Czechoslovakia, United States and India was approved.

The meeting rose at 12.05 a.m. on Friday, 11 December.

Rapporteurs : Deputy Secretary of the Conference :

Chairman :

C.K.F. Mackenzie  
S. Vittese

Clifford Stead

Charles J. Acton

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

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**Document No. 870-E**

**SERIES 22bis**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source | Document No. | Reference      | Remarks |
|--------|--------------|----------------|---------|
| Com. 7 | DT 640       | Recommendation |         |





MOD

RECOMMENDATION No. ...  
to the C.C.I.R.**Relating to Studies of Radio Propagation and Radio Noise \***  
(This replaces Recommendation No. 1)

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the efficient utilization of radio frequencies depends upon the use of the most reliable technical data and standards, especially in those parts of the radio frequency spectrum which are most congested ;
- b) that the satisfaction of new frequency requirements and the development of radio services can be facilitated by improvements, where these are necessary, in the technical standards at present used by the I.F.R.B. ;
- c) that, in accordance with Appendix A, administrations will endeavour to promote further studies on radio propagation and radio noise through the medium of the C.C.I.R. ;
- d) that the C.C.I.R. has adopted a programme of studies covering many of these problems ;

*invites the C.C.I.R.*

- 1. to continue the studies of radio propagation and radio noise and to take measures for the co-ordination of the results of these studies carried out in different countries ;
- 2. to give particular attention to those studies which will assist in the further refinement of the technical standards used by the I.F.R.B. ;
- 3. to report regularly on these matters, even if the studies have not been completed ;
- 4. to continue regular consultation with other organizations undertaking studies of propagation such as the International Scientific Radio Union, in order to attain the maximum possible degree of co-ordination.

\* This Recommendation is intended to replace Resolution No.

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

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**Document No. 871-E  
14 December 1959**

**SERIES 21bis**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Source | Document No. | Reference      | Remarks |
|--------|--------------|----------------|---------|
| Com. 7 | 672          | Recommendation |         |



Source : Committee 7  
Doc. No. 672

RECOMMENDATION No. . . .

**Recommendation to the Safety of Life at Sea Conference  
relating to the Use of the Term "Emergency (Reserve)"**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) that the terms "Emergency (Reserve) Installation" and "Emergency (Reserve) Transmitter" are used both in the Radio Regulations and in the Convention for the Safety of Life at Sea, but have not been defined in either document;
- b) that the requirements to be met by such installations are not the same in the two documents;

*considering*

- a) that it would be desirable to eliminate the possibility of misinterpretation which exists in the use of these terms and which has been apparent at the Administrative Radio Conference;
- b) that the best mean to resolve this difficulty is to avoid the use of these ambiguous terms;

*having decided*

that in so far as the Radio Regulations are concerned the only term which needs to be defined in this context is "Ship's Emergency transmitter", which has been defined as "A ship's transmitter to be used exclusively on a distress frequency for distress urgency and safety purposes";

*recommends*

1. that the Safety of Life at Sea Conference should consider, as a complementary measure, the possibility of deleting the terms "Emergency (Reserve) Installation", "Emergency (Reserve) Transmitter", "Emergency (Reserve) Receiver" and "Emergency Source of Energy" from the Convention for the Safety of Life at Sea and of substituting new terms such as "Reserve Installation", "Reserve Transmitter", "Reserve Receiver" and "Reserve Source of Energy", which would thus avoid the use of the word "emergency";
2. that the new terms used should be precisely defined.

416a ADD

(4) Where practicable *coast stations* should use a common call sign for each frequency series <sup>1</sup>.

Title NOC

### Section III. Formation of Call Signs

438 NOC

§ 13. (1) The twenty-six letters of the alphabet, as well as digits in the cases specified below, may be used to form call signs. Accented letters are excluded.

439 NOC

(2) However, the following combinations may not be used as call signs :

440 NOC

a) combinations which might be confused with distress signals or with other signals of a similar nature ;

441 (MOD)

b) combinations reserved for the abbreviations to be used in the radiocommunication services (see Appendix 9) ;

443 (MOD)

c) those four-letter combinations commencing with the letter A which are used for the geographical portion of the International Code of Signals, in cases where confusion is likely to arise ;

442 NOC

d) for amateur stations, combinations commencing with a digit when the second character is the letter O or the letter I.

416a.1 ADD

<sup>1</sup> By "frequency series" is meant a group of frequencies, each of which belongs to one of the different bands between 4000 and 23 000 kc/s that are allocated exclusively to the maritime mobile service.

420 MOD

§ 14. Call signs in the international series are formed as indicated in Nos. 421 to 427<sup>2</sup>. The first or second letter in a particular series of letters may be replaced, in certain cases, by a digit (see Nos. 419 zero b and 419 zero c).

*Land and fixed stations*

421 (MOD)

§ 15. (1) — three letters

or

— three letters followed by not more than three digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

422 MOD

(2) However, it is recommended that, as far as possible,

a) the call signs of *coast and aeronautical stations* consist of :

— three letters

or

— three letters followed by one or two digits (other than the digits 0 and 1 in cases where they immediately follow a letter) ;

b) the call signs of *fixed stations* consist of :

— three letters followed by two digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

*Ship stations*

423 (MOD)

§ 16. (1) — four letters.

429<sup>1</sup> (MOD)

(2) However, *ship stations* employing radiotelephony may also use a call sign consisting of :

— two or three letters followed by four digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

*Aircraft stations*

424 (MOD)

§ 17. — five letters.

*Ships' survival craft stations*

\* 425a ADD

§ 18. — the call sign of the parent ship followed by two digits (other than the digits 0 or 1 in cases where they immediately follow a letter).

**21bis—03**

(replace 21-12)

- Aircraft survival craft stations*
- \* 425b ADD § 19. — the call sign of the parent aircraft, followed by a single digit other than 0 or 1.
- Mobile stations other than ship and aircraft stations*
- 426 MOD § 20. (1) — four letters followed by a single digit other than 0 or 1.
- 433<sup>1</sup> MOD (2) However, *mobile stations other than ship and aircraft stations* employing radiotelephony may also use a call sign consisting of :
- two or three letters followed by four digits (other than the digits 0 or 1 in cases where they immediately follow a letter).
- Amateur and experimental stations*
- 427<sup>1</sup> (MOD) § 21. (1) — one or two letters and a single digit (other than 0 or 1), followed by a group of not more than three letters.
- 427<sup>2</sup> (2) However, the prohibition of the use of the digits 0 and 1 does not apply to *amateur stations*.

#### Section IV. Identification of Stations using Radiotelephony

- 428 (MOD) § 22. (1) *Coast stations* employing radiotelephony may use :
- a call sign (see Nos. 421 and 422) ; *or*
  - the geographical name of the place as it appears in the List of Stations, followed preferably by the word RADIO or by any other appropriate indication.
- 429<sup>2</sup> MOD (2) *Ship stations* employing radiotelephony may use :
- a call sign (see Nos. 423 and 429<sup>1</sup>) ; *or*
  - the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no

\* The provisions of Nos. 425a and 425b replace the provisions of No. 425 of the Atlantic City Radio Regulations.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 872-E  
14 December, 1959

## PLENARY MEETING

### A G E N D A

#### Twenty-Fifth Plenary Meeting

Tuesday, 15 December 1959, at 9 a.m.

1. Twentieth Series of Texts submitted by the Drafting Committee  
(Documents Nos. 822 and 794).
2. Twenty-First Series of Texts submitted by the Drafting Committee  
(Document No. 843).
3. Twenty-Third Series of Texts submitted by the Drafting Committee  
(Documents Nos. 861 and 775).
4. Eleventh Series of Texts submitted by the Drafting Committee  
(Documents Nos. 714 and 851).
5. Proposal by Italy - Article 47, Radio Regulations, and Article 13,  
Additional Radio Regulations  
(Document No. 863).
6. Final Report by Committee C/3  
(Document No. 865).
7. Approval of the Minutes of the Thirteenth Plenary Meeting  
(Document No. 817).
8. Approval of the Minutes of the Fifteenth Plenary Meeting  
(Document No. 852).
9. Approval of the Minutes of the Sixteenth Plenary Meeting  
(Document No. 853).
10. Approval of the Minutes of the Seventeenth Plenary Meeting  
(Document No. 854).
11. Miscellaneous.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 873 E  
14 December, 1959

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PLENARY MEETING

MINUTES

OF THE

TWENTIETH PLENARY MEETING

Friday, 11 December, 1959, at 9.30 a.m.

Chairman : Mr. Charles J. Acton (Canada)  
Vice-Chairmen : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)  
Secretary of the  
Conference : Mr. Gerald C. Gross

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Subject discussed :

Draft text of Article 5 of the Radio Regulations  
(Document No. 823 and Addendum No. 1)

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The following Delegations were present:

Members of the Union:

Afghanistan; Albania (People's Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian Soviet Socialist Republic; Brazil; Bulgaria (People's Republic of); Canada; China; Vatican City (State of the); Colombia (Republic of); Belgian Congo and Territory of Ruandi-Urundi; Korea (Republic of); Cuba; Denmark; States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Guinea (Republic of); Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Iraq; Iceland; Israel (State of); Italy; Japan; Luxembourg; Malaya (Federation of); Morocco (Kingdom of); Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland is responsible; Thailand; Turkey; Union of South Africa and Territory of South-West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

Recognized Private Operating Agencies:

British Broadcasting Corporation.

International Organizations:

International Broadcasting and Television Organization;  
International Chamber of Shipping;  
European Broadcasting Union.

Draft Text of Article 5 of the Radio Regulations (Document No. 823 and Addendum No. 1)

The Delegate of the Belgian Congo suggested that it would be more logical to invert the order of "Secondary services" and "Primary services" in 107c and to place 107f, dealing with primary services, immediately after 107c, rather than after the definition of secondary services.

The Delegates of Mexico, Austria, the Argentine Republic and Colombia supported that suggestion.

The Chairman of the Drafting Committee explained that the Drafting Committee had found considerable difficulty in the way of placing the definition of primary services at the beginning of the Article. If any Delegate could suggest an appropriate wording for 107f as the first paragraph after 107c, he would be glad to accept the suggestion.

The Chairman asked the Delegates concerned to consider the point and to give their proposals to the Chairman of the Drafting Committee.

The Delegate of Brazil said that it had been agreed, when Document No. 242 was discussed, that secondary services should have priority only over other secondary services which might be put into use at a later date. The wording of 107g did not reflect that intention and he proposed that the words "other than the primary service or services" in sub-paragraph c) should be deleted and replaced by the words "of equal status",

The Delegate of Pakistan agreed that the text of 107g might be misunderstood, but suggested an alternative amendment, to delete the words "other than the primary service or services" in sub-paragraph c) and to insert the word "secondary" before the word "services".

The Delegate of Brazil accepted that amendment as being simpler and more direct than his own.

The Delegate of the United Kingdom supported that view.

The Chairman of the Drafting Committee said that if the text referred to "equal status", the word "status" would have to be defined. He suggested that it should be made clear in 107g that stations of a secondary service could claim protection from harmful interference from stations of other secondary services or other stations of the same secondary service.

The Delegate of the United States of America supported that suggestion.

The Chairman proposed that the meeting should adopt the proposal made by the Chairman of the Drafting Committee, who would be entrusted with finding the appropriate wording for sub-paragraph c) of 107g.

It was so agreed.

The Vice-Chairman of the I.F.R.B. (Mr. Gracie) said that it was very necessary for the I.F.R.B. to be perfectly clear as to the intentions of administrations in applying the principles contained in the footnotes. He suggested, therefore, that sub-paragraphs a) and b) of 107g should be amended by inserting the words "a main or a permitted" between the words "primary" and "service".

The Delegate of the United States of America supported that suggestion.

The Chairman of the Drafting Committee had no objection in principle but felt that, in view of the additions which were being made to define secondary services, it was becoming increasingly evident that it would be necessary to come back to No. 88 of the Radio Regulations.

He also pointed out that the amendment suggested by the Vice-Chairman of the I.F.R.B. would entail a consequential inversion of the order of primary and secondary, and main and permitted, services.

It was agreed to adopt the proposal made by the Vice-Chairman of the I.F.R.B., with the consequential change it involved.

The Delegate of Brazil said that it should not be possible for a permitted service which had previously been put into operation to hinder the later establishment of a station in accordance with a plan. He, therefore, proposed that the following words should be added at the end of sub-paragraph b) of 107L: "except in the case of an approved plan".

The Chairman of the Drafting Committee said that, if the intention of the meeting was to avoid causing difficulties in putting into operation plans for the main services, sub-paragraph c) would also have to be amended.

The Delegate of Brazil agreed.

The Delegate of the United States of America felt that the Brazilian proposal was interesting but that it was essential to be clear as to the exact interpretation of "plan".

The Delegate of India proposed an alternative amendment, to delete the first sentence of paragraph a), and to replace sub-paragraphs b) c) and d) by the following sentence: "In other respects the main and permitted services operate on a basis of equality in the choice and use of frequencies".

He thought that his proposal would solve many of the problems which had arisen, and did not amount to a change of substance from Document No. 242 (Rev.).

The Delegate of Austria supported the Indian proposal.

The Vice-Chairman of the I.F.R.B. expressed sympathy with the idea underlying the Brazilian amendment which would make the text clearer. He suggested that the amendment should read: "except in the case of stations in an I.T.U.-adopted plan". When a plan was adopted by the I.T.U.

on a world-wide or regional basis, some stations could not be put into use immediately. It was not fair that the rights of planned assignments should be prejudiced by stations of a permitted service having taken their place, and they should, therefore, be protected for a reasonable time. There must, however, be some time limit and a resolution would be presented by Committee 5 to the Plenary Meeting recommending that assignments in already adopted plans and lists would lapse if not taken up by a certain date in the future".

The Delegate of Brazil accepted that suggestion.

The Delegate of the United States of America suggested that it would be wiser to await the results of the work of Committee 5 which had been assigned all questions relating to lists and plans before taking a decision on 107L. At that stage, the Delegation of the United States could not accept the insertion of any reference to lists and plans. He suggested that Document No. 823 should be sent to the Drafting Committee, on the understanding that the Plenary Meeting could make any necessary changes when it considered the blue document containing the text of Article 5.

The Delegate of Austria supported that view.

The Delegates of Brazil and India accepted the United States proposal that consideration of 107L should be deferred until the results of Committee 5's work were known.

The Chairman of the Drafting Committee said that, while there would be no serious consequential changes in the text if a decision were to be taken later on permitted services, it was essential for the Drafting Committee to know whether the Plenary Meeting accepted the text on pages 3 and 4 of Document No. 823 concerning additional services and alternative allocations. If those texts were acceptable, the words "additional" and "alternative" could be deleted whenever they occurred in the footnotes and the printing of the pink documents could be expedited.

The Chairman suggested that the Drafting Committee should be authorized to proceed on that basis, and that it should also be authorized to send to the printers the text of Document No. 823, revised in the light of the amendments adopted and the drafting changes suggested by the Delegates of Denmark and Israel. Until the results of Committee 5's work were known, 107L would be left unchanged.

It was so agreed.

The Meeting rose at 11 a.m.

E. M. Hamilton

Rapporteur

Gerald C. Gross

Secretary of the Conference

Charles J. Acton

Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 874-E  
14 December, 1959

PLENARY MEETING

MINUTES

OF THE

TWENTY-FIRST PLENARY MEETING

Friday, 11 December, 1959 at 5 p.m.

Election of the Members of the  
International Frequency Registration Board

Chairman: Mr. Charles J. Acton (Canada)

Vice-Chairman: Mr. Juan A. Autelli (Argentine Republic)

Deputy-Secretary:  
of the Conference: Mr. Clifford Stead

Delegates of the following countries were present:

Afghanistan; People's Republic of Albania; Saudi Arabia, Argentine Republic; Commonwealth of Australia; Austria; Belgium; Bielorussian S.S.R; Burma; Bolivia; Brazil, People's Republic of Bulgaria; Canada; Ceylon; Republic of China; Vatican City State; Colombia, Belgian Congo; Republic of Korea; Costa Rica; Cuba; Denmark; Dominican Republic; Overseas States of the French Community and French Overseas Territories; Spain; United States of America; Ethiopia; Finland; France; Chana; Greece; Guatemala; Guinea; Hungarian People's Republic; Republic of India; Republic of Indonesia; Iran; Iraq; Ireland; Iceland; Israel; Italy; Japan; Hashemite Kingdom of Jordan; Kuwait; Lebanon; Libya; Luxembourg, Federation of Malaya; Kingdom of Morocco; Mexico; Monaco; Nepal; Nicaragua; Norway; New Zealand; Pakistan; Paraguay; Kingdom of the Netherlands; Peru; Republic of the Philippines; People's Republic of Poland; Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian S.S.R; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan; Sweden; Switzerland; Czechoslovakia; United States Territories; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Thailand; Tunisia; Turkey; Union of South Africa; Union of Soviet Socialist Republics; Uruguay; Venezuela.

Recognized Private Operating Agency: B.B.C.

The Chairman opened the meeting at 5.10 p.m.

The Delegate of the Union of Soviet Socialist Republics wished to explain that no candidacy had been presented for Mr. Iastrebov, who was at present the U.S.S.R. Representative on the International Frequency Registration Board, because on completion of his term of office Mr. Iastrebov would be returning to his post in the U.S.S.R. P.T.T. Administration. At the present election Mr. N. I. Krasnosselski was the official U.S.S.R. candidate for membership of the I.F.R.B

The Delegate of Mexico made the following statement:

"I note that among the candidacies for membership of the International Frequency Registration Board the name of Mr. Jaromir J. Svoboda does not appear, and it is, therefore, evident that, whatever may be the result of the vote we are about to take, the Board will no longer have the services of this outstanding engineer.

" During the past seven years, as a member of the Administrative Council, I have worked in close contact with Mr. Svoboda and have been able to appreciate not only his technical competence and his unimpeachable qualities as an international official, but also that he is a gentleman in the fullest sense of the word.

" These characteristics honour both him and his native country, and are the best recommendation for the years ahead of him. I should like to wish Mr. Svoboda every success in his future professional activities".

The Chairman reminded the delegates that the procedure for the election of members of the International Frequency Registration Board was outlined in Document No. 655. The candidacies, by Region, were set out in Document No. 793.

He asked the following five countries if they would be good enough to provide tellers: Region A - Mexico; Region B - Switzerland; Region C - Czechoslovakia; Region D - Ethiopia; Region E - Iran. The countries in question signified their assent.

Four delegations stated that they held proxies to vote on behalf of other countries: the Delegate of the Kingdom of Morocco would also be voting on behalf of Tunisia; the Delegate of Ghana on behalf of Guinea; the Delegate of the People's Republic of Bulgaria on behalf of the People's Republic of Albania; the Delegate of the United Arab Republic on behalf of Lebanon.

The Chairman then requested the five tellers to take their places, and as the Deputy Secretary of the Conference called the roll, the delegates of 84 countries registered their votes in the ballot for the election of the members of the International Frequency Registration Board.

There was a recess from 5.45 p.m. to 6.45 p.m.  
while the votes were counted.

The Chairman stated that all the 84 votes registered were valid, and announced the following result of the ballot.

|                                  | <u>Candidate</u>                 | <u>Number of Votes<br/>obtained</u> |
|----------------------------------|----------------------------------|-------------------------------------|
| <u>Region A (The Americas)</u>   |                                  |                                     |
| 3 seats                          | Mr. J. Gayer (U.S.A.)            | 68                                  |
|                                  | Mr. F. Dellamula (Argentina)     | 67                                  |
|                                  | Mr. A. Cata (Cuba)               | 51                                  |
|                                  | Mr. E. Martins da Silva (Brazil) | 36                                  |
| <u>Region B (Western Europe)</u> |                                  |                                     |
| 2 seats                          | Mr. Gracie (United Kingdom)      | 75                                  |
|                                  | Mr. R. Petit (France)            | 74                                  |

| <u>Region C (Eastern Europe<br/>and Northern Asia)</u> | <u>Candidate</u>               | <u>Number of votes<br/>obtained</u> |
|--|--------------------------------|-------------------------------------|
| 2 seats  | Mr. M. Flisak (P.R. of Poland) | 64                                  |
|  | Mr. N. Krasnosselski (U.S.S.R) | 62                                  |
| <u>Region D (Africa)</u>                               |                                |                                     |
| 1 seat   | Mr. N. Roberts (South Africa)  | 69                                  |
| <u>Region E (Asia and<br/>Australasia)</u>             |                                |                                     |
| 3 seats  | Mr. M. Mirza (Pakistan)        | 62                                  |
|  | Mr. S-I. Hase (Japan)          | 45                                  |
|  | Mr. T-K. Wang (China)          | 42                                  |
|  | Mr. J.D. Campbell (Australia)  | 33                                  |
|  | Mr. P.S.M. Sundaram (India)    | 22                                  |

The following were thus elected members of the International Frequency  
Registration Board:

Region A: United States of America - Mr. Gayer; Argentine  
Republic - Mr. Dellamula; Cuba - Mr. Cata.

Region B: United Kingdom of Great Britain and Northern Ireland -  
Mr. Gracie; France - Mr. Petit.

Region C: Republic of Poland - Mr. Flisak; Union of Soviet  
Socialist Republics - Mr. Krasnosselski.

Region D: Union of South Africa and Territory of South West  
Africa - Mr. Roberts.

Region E: Pakistan - Mr. Mirza; Japan - Mr. Hase; China - Mr. Wang

The Chairman congratulated all the members elected, seven of whom  
had been re-elected from the former Board.

Applause.

The new Board would take office on 1 October, 1960, and the  
attention of the Plenipotentiary Conference would be drawn to the changes  
on the Board that would have financial implications for the 1960 budget.

He concluded by thanking the tellers for their assistance.

The meeting rose at 6.55 p.m.

Rapporteur:  
B.J. Dazar

Deputy Secretary of the Conference  
Clifford Stead

Chairman  
Charles J. Acton



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 875-E  
15 December 1959

## SUB-COMMITTEE 7B

### SUMMARY RECORD

#### of the Thirty-first Meeting of Sub-Committee 7B (Radiotelegraphy and Radiotelephone Procedures in the Mobile Services)

Thursday, 10 December, 1959

Chairman : Mr. R. M. Billington (United Kingdom of Great  
Britain and Northern Ireland)

Vice-Chairman : Mr. J. Bes (France)

Agenda : Document No. DT 873

1. Approval of Summary Record of Twenty-first Meeting (Document No. 761)

The Summary Record of the Twenty-first Meeting, Document No. 761, was adopted without amendment.

2. Approval of Summary Record of Twenty-second Meeting (Document No. 762)

The Summary Record of the Twenty-second Meeting of Sub-Committee 7B, Document No. 762, was adopted subject to correction of the following typing error:-

Heading: Insert the date "Thursday, 23rd November, 1959".

3. Approval of Summary Record of Twenty-third Meeting (Document No. 783)

The Summary Record of the Twenty-third Meeting, of Sub-Committee 7B, Document No. 783, was adopted subject to amendments of the following typing errors:

Page 2

Twenty-fifth line: For "deduction" read "reduction".

Page 5

Under RR 597: For "operators" read "apparatus"

4. Approval of Summary Record of Twenty-fourth Meeting (Document No. 784)

The Delegate of China pointed out that the following amendments were required on Page 9:

Second and third lines: Delete "and, there being no objection, it was adopted".

Second Paragraph: For "Delegation" read "deletion".

Subject to the above amendments the Summary Record of the Twenty-fourth Meeting, Document No. 784, was adopted.

5. Approval of Summary Record of Twenty-fifth Meeting (Document No. 785)

The Summary Record of the Twenty-fifth Meeting of Sub-Committee 7B, Document No. 785, was adopted subject to amendment of the following typing error:

Page 2

Penultimate line: for "called" read "calling".

6. Approval of Summary Record of Twenty-sixth Meeting (Document No. 786)

The Delegate of Malaya pointed out that in the last paragraph on Page 2 the words "on which a watch shall be kept" should be deleted.

With this amendment the Summary Record of the Twenty-sixth Meeting, Document No. 786, was adopted.

7. Approval of Summary Record of Twenty-seventh Meeting (Document No. 787)

The Summary Record of the Twenty-seventh Meeting of Sub-Committee 7B, Document No. 787, was adopted without amendment.

8. Approval of Summary Record of Twenty-eighth Meeting (Document No. 788)

The Summary Record of the Twenty-eighth Meeting of Sub-Committee 7B, Document No. 788, was adopted without amendment.

9. Approval of Summary Record of Twenty-ninth Meeting (Document No. 789)

The Summary Record of the Twenty-ninth Meeting of Sub-Committee 7B, Document No. 789, was adopted without amendment.

10. Approval of Summary Record of Thirtieth Meeting (Document No. 790)

The Summary Record of the Thirtieth Meeting of Sub-Committee 7B, Document No. 790, was adopted without amendment.

11. Any Other Business

It was agreed that the Summary Record of this final meeting of Sub-Committee 7B should be approved by the Chairman.

In his closing remarks Mr. Billington thanked his Vice-Chairman, Mr. Bes, for his cooperation; his Rapporteur for many hours of hard work; Mr. Prunieras and Mr. Itturioz for their excellent collaboration in the Language Group; Messrs. Page of the I.F.R.B. and Mr. Kunz of the General Secretariat, for their advice and assistance; the Interpreters for their valuable service; and finally all members of the Committee for their cooperation and the honour they had done him in asking him to direct the work of Committee 7. He felt that the good spirit in which the work of the Sub-Committee had been carried out had resulted in the satisfactory completion of its task.

Capt. Graves, speaking on behalf of Sub-Committee 7B endorsed the Chairman's remarks but he said that Mr. Billington himself had carried the great burden of responsibility for the work of Sub-Committee 7B - a work programme which involved a very large portion of the Regulations. He thanked Mr. Billington for his untiring efforts, his patience and the wise guidance which he had given to the Sub-Committee. He was sure he was expressing the opinion of all members of Sub-Committee 7B when he said its Chairman had done a magnificent job.

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This concluded the business of the final meeting of Sub-Committee 7B.

Rapporteur :

G. F. Wilson

Chairman :

R. M. Billington

**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 876-E  
15 December, 1959**

**SERIES: D**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Blue Document No. | Series No. | Pages    | Former Article | New Article | Pages | Remarks   |
|-------------------|------------|----------|----------------|-------------|-------|-----------|
| 573               | 2          | 2-16     | 27             | 27          | D—01  | Chap. VII |
| 764               | 4 bis      | 4 bis 04 | 28             | 28          | D—02  |           |
| 695               | 9          | 9-01     | 29             | 29          | D—08  |           |
| 617               | 4          | 4-12     | 30             | 30          | D—17  |           |
| 573               | 2          | 2-17     | 31             | 31          | D—20  |           |
| 573               | 2          | 2-17     | 32             | 31          |       |           |
| 673               | 7          | 7-01     | 33             | 32          | D—20  |           |
| 695               | 9          | 9-11     | 29a            | 33          | D—38  |           |
| 617               | 4          | 4-16     | 30a            | 34          | D—50  |           |
| 791               | 15         | 15-11    | 34             | 35          | D—52  |           |
| 796               | 17         | 17-37    | App. 1         | App. 1      | D—61  |           |
| 796               | 17         | 17-53    | „ 1 zero       | „ 2         | D—77  |           |
| 617               | 4          | 4-20     | „ 3            | „ 3         | D—84  |           |
| 617               | 4          | 4-29     | „ 4            | „ 4         | D—93  |           |
| 573               | 2          | 2-23     | „ 5            | „ 5         | D—96  |           |
| 673               | 7          | 7-22     | „ 2a           | „ 6         | D—102 |           |
| 673               | 7          | 7-19     | „ 2            | „ 7         | D—103 |           |
| 617               | 4          | 4-19     | „ 1a           | „ 8         | D—106 |           |
| 813               | 19         | 19-01    | „ 6            | „ 9         | D—107 |           |
| 813               | 19         | 19-16    | „ 7            | „ 10        | D—122 |           |



| Former reference                                   | Source   | New reference  |
|--|--|--|
| Chap.: XIII<br>Art. : 27 to 34<br>Nos. : 568-834 b | Committee: 7<br>Doc. Nos. : 476-571 Rev., 638, 534,<br>489, 606, 622, 544, 633 | Chap.: VII<br>Art. : 27 to 35<br>Nos. : 27-01 to 35-61 |

## CHAPTER VII

### Working Conditions in the Mobile Services

#### ARTICLE 27

##### Aircraft and Aeronautical Stations

- 568                    **27-01** § 1.        Except as otherwise provided in these Regulations, the aeronautical mobile service may be regulated by special arrangements between governments concerned (see Article 41 of the Convention).
- 569                    **27-02** § 2.        In the absence of special arrangements, the provisions of these Regulations concerning the exchanging of and accounting for public correspondence shall be applicable to stations in the aeronautical mobile service.
- 570                    **27-03** § 3. (1) Aircraft stations may communicate with stations of the maritime mobile service. They shall then conform to those provisions of these Regulations which relate to the maritime mobile service.
- 571                    **27-04**            (2) For this purpose aircraft stations should use the frequencies allocated to the maritime mobile service. However, having regard to interference which may be caused by aircraft stations at high altitudes, maritime mobile frequencies in the bands above 30 Mc/s shall not be used by aircraft stations in any specific area without the prior agreement of all the administrations of the area in which interference is likely to be caused. In particular, aircraft stations operating in Region 1 should not use frequencies in the bands above 30 Mc/s allocated to the maritime mobile service by virtue of any agreement between administrations in that Region.
- 571a                   **27-05**            (3) However, the frequencies 156-30 Mc/s and 156-80 Mc/s may be used by aircraft stations for safety purposes only.
- 572                    **27-06**            (4) Aircraft stations when handling public correspondence with stations of the maritime mobile service shall comply with all

the provisions applicable to the handling of public correspondence in the maritime mobile service (see particularly Articles 37 to 40).

## ARTICLE 28

### Conditions to be Observed by Mobile Stations

#### Section I. General Provisions

- 573 **28-01** § 1. (1) Mobile stations shall be established in such a way as to conform to the provisions of Chapter II as regards frequencies and class of emission.
- 574 **28-02** (2) For the use of class B emissions by mobile stations see No. 12-11.
- 575 **28-03** § 2. The frequencies of emission of mobile stations shall be checked as often as possible by the inspection service to which these stations are subject.
- 576 **28-04** § 3. The energy radiated by receiving apparatus shall be reduced to the lowest possible value and shall not cause harmful interference to other stations.
- 576a **28-05** § 4. Administrations shall take all practicable steps necessary to ensure that the operation of any electrical or electronic apparatus installed in mobile stations does not cause harmful interference to the essential radio services of stations which are operating in accordance with the provisions of these Regulations.
- 577 **28-06** § 5. (1) Changes of frequency in the sending and receiving apparatus of any mobile station shall be capable of being made as rapidly as possible.
- 578 **28-07** (2) Installations of any mobile station shall be capable, once communication is established, of changing from transmission to reception and vice versa in as short a time as possible.
- 579 **28-08** § 6. The operation of a broadcasting service (see No. 1-28) by mobile stations at sea and over the sea is prohibited.

580                    **28-09 § 7.**        Mobile stations other than survival craft stations shall be provided with the documents enumerated in the appropriate section of Appendix 11.

581                    **28-10 § 8.**        When any ship station transmitter itself cannot be controlled in such a way that its frequency satisfies the tolerance specified in Appendix 3, the ship station shall be provided with a device, having a precision equal to at least one-half of this tolerance, for measuring the frequency of the emission.

## **Section II. Special Provisions regarding Safety**

581a                   **28-11 § 9.**        (1) The International Convention for the Safety of Life at Sea prescribes which ships and which of their survival craft shall be fitted with radio equipment and which ships shall carry portable radio equipment for use in survival craft. It also prescribes the requirements which shall be complied with by such installations.

581b                   **28-12**            (2) The Annexes to the Convention on International Civil Aviation state which aircraft should be fitted with radio equipment and which aircraft should carry portable radio equipment for use in survival craft. They state also the requirements which should be complied with by such installations.

581c                   **28-13 § 10.**        The applicable provisions of the present Regulations shall, however, be observed in the use of all such installations.

581d                   **28-14 § 11.**        (1) Mobile stations of the maritime mobile service may communicate, for safety purposes, with stations of the aeronautical mobile service.

581e                   **28-15**            (2) For these purposes only, they may use the aeronautical emergency frequency 121.5 Mc/s using class A3 emissions. They shall then comply with any special arrangements between the governments concerned by which the aeronautical mobile service is regulated.

### Section III. Ship Stations using Radiotelegraphy

581f **28-16** § 12. Ship stations equipped with radiotelegraph apparatus intended to be used for normal traffic shall be provided with devices permitting change-over from transmission to reception and vice versa without manual switching. In addition these stations should be able to listen on the reception frequency during the course of periods of transmission.

#### *Bands between 110 and 160 kc/s*

582 **28-17** § 13. In ship stations all apparatus installed for the use of class A1 emissions on frequencies in the authorised bands between 110 and 160 kc/s shall provide, in addition to the frequency 143 kc/s, at least two frequencies selected within these bands.

#### *Bands between 405 and 535 kc/s*

583 **28-18** § 14. Transmitters used in ship stations working in the authorised bands between 405 and 535 kc/s shall be provided with devices readily permitting a material reduction of power.

585 **28-19** § 15. All ship stations equipped with radiotelegraph apparatus to work in the authorised bands between 405 and 535 kc/s shall be able to:

- 586 **28-20** a) send and receive class A2 emissions on 500 kc/s ;
- 587 **28-21** b) send, in addition, class A1 and A2 emissions on at least two working frequencies ;
- 587a **28-22** c) receive, in addition, class A1 and A2 emissions on all the other frequencies necessary for their service.

588a **28-23** § 16. The provisions of Nos. 28-21 and 28-22 do not apply to apparatus provided solely for distress, urgency and safety purposes.



*Bands between 1 605 and 2 850 kc/s*

- 588b      **28-24** § 17.      In Regions 2 and 3, any radiotelegraph station installed on board a ship which uses 2 091 kc/s for call and reply shall be provided with at least one other frequency in the authorised bands between 1 605 and 2 850 kc/s.

*Bands between 4 000 and 23 000 kc/s*

- 590      **28-25** § 18.      In ship stations, all apparatus using class A1 emissions on frequencies in the authorised bands between 4 000 and 23 000 kc/s shall satisfy the following conditions :
- 591      **28-26**      a) in each of the bands necessary to carry on the station service, it shall have at least two working frequencies in addition to one in the calling band (see Nos. 32-099 and 32-104) ;
- 592      **28-27**      b) changes of frequency in transmitting apparatus shall be effected within five seconds if the frequencies are in the same band and within fifteen seconds if the frequencies are in different bands ;
- 593      **28-28**      c) in the matter of frequency changing, receiving apparatus shall be capable of a performance equal to that of the transmitting apparatus.

**Section IV. Ship Stations using Radiotelephony***Bands between 1 605 and 4 000 kc/s*

- 597a      **28-29** § 19.      All ship stations equipped with radiotelephony apparatus to work in the authorised bands between 1 605 and 2 850 kc/s shall be able to :
- 597b      **28-30**      a) send and receive class A3 emissions on 2 182 kc/s ;
- 597c      **28-31**      b) send, in addition, class A3 emissions on at least two working frequencies ; <sup>1</sup>
- 597c.1      **28-31.1** <sup>1</sup> In certain areas, administrations may reduce this requirement to one working frequency.

- 597d                      **28-32**                      c) receive, in addition, class A3 emissions on all the other frequencies necessary for their service.
- 597e                      **28-33 § 20.**                      The provisions of 28-31 and 28-32 do not apply to apparatus provided solely for distress, urgency and safety purposes.
- Bands between 156 and 174 Mc/s*
- 597f                      **28-34 § 21.**                      All ship stations equipped with radiotelephony to work in the authorised bands between 156 and 174 Mc/s (see No. 198 and Appendix 18) shall be able to send and receive Class F3 emissions on:
- 597g                      **28-35**                      a) the calling and safety frequency 156.80 Mc/s ;
- 597h                      **28-36**                      b) the primary inter-ship frequency 156.30 Mc/s ; and
- 597i                      **28-37**                      c) all the frequencies necessary for their service.

#### Section V. Aircraft Stations

- 598                      **28-38 § 22.** (1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting and receiving on the frequency 500 kc/s, preferably class A2 emissions, or class A3 emissions on the frequency 2 182 kc/s.
- 599                      **28-39**                      (2) Aircraft stations, when communicating with stations of the maritime mobile service on frequencies allocated to that service, shall comply as far as possible with the provisions of this Article.

## Section VI. Survival Craft Stations

- 600                    **28-40** § 23.      Equipment provided for use in survival craft stations shall, if capable of operating on any frequency :
- 600a                   **28-41**            — *in the bands between 405 and 535 kc/s*, be able to transmit on 500 kc/s using class A2 emissions, but see No. 12-11. If a receiver is provided for any of these bands, it shall be able to receive class A2 emissions on 500 kc/s ;
- 600b                   **28-42**            — *in the bands between 1 605 and 2 850 kc/s*, be able to transmit on 2 182 kc/s using class A3 emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 emissions on 2 182 kc/s ;
- 600c                   **28-43**            — *in the bands between 4 000 and 23 000 kc/s*, be able to transmit on 8 364 kc/s using class A2 emissions. If a receiver is provided for any of these bands, it shall be able to receive class A1 and A2 emissions throughout the band 8 320 to 8 745 kc/s ;
- 600d                   **28-44**            — *in the bands between 118 and 132 Mc/s*, be able to transmit on 121.5 Mc/s, preferably using amplitude modulated emission. If a receiver is provided for any of these bands, it shall be able to receive class A3 emissions on 121.5 Mc/s ;
- 600e                   **28-45**            — *in the bands between 235 and 328.6 Mc/s*, be able to transmit on the frequency 243 Mc/s.

## ARTICLE 29

**General Radiotelegraph Procedure  
in the Maritime Mobile and Aeronautical Mobile Services**

**Section I. General Provisions**

- 602                   **29-01** § 1. (1) In the maritime mobile and aeronautical mobile services  
the procedure detailed in this Article is obligatory, except in cases  
of distress, urgency or safety, to which the provisions of Article 36  
are applicable.
- 603                   **29-02**       (2) However, in the aeronautical mobile service the procedure  
specified in Sections III, IV and V of the present Article is applicable  
only in the absence of special arrangements to the contrary concluded  
between the governments concerned.
- 604                   **29-03**       (3) Aircraft stations when communicating with stations of the  
maritime mobile service shall use the procedure specified in this  
Article.
- 605                   **29-04** § 2.       The use of the Morse code signals specified in the Tele-  
graph Regulations shall be obligatory in the maritime and aeronau-  
tical mobile services. However, for radiocommunications of a spe-  
cial character, the use of other signals is not precluded.
- 606                   **29-05** § 3. (1) In order to facilitate radiocommunications, stations of the  
mobile service shall use the service abbreviations given in  
Appendix 13.
- 607                   **29-06**       (2) In the maritime mobile service, only the service abbrevia-  
tions given in Appendix 13 are to be used.

**Section II. Preliminary Operations**

- 609                   **29-07** § 4.       In areas where traffic is congested, ship stations shall take  
into account the provisions of No. 32-21.

- 610                    **29-08** § 5. (1) Before transmitting, a station shall take precautions to  
                          ensure that its emissions will not interfere with transmissions already  
                          in progress ; if such interference is likely, the station shall await an  
                          appropriate break in the communications in progress.
- 611                    **29-09**        (2) If, these precautions having been taken, the emissions of  
                          the station should, nevertheless, interfere with a transmission already  
                          in progress the following rules shall be applied :
- 612                    **29-10**        a) The mobile station whose emission causes interference  
                          to the correspondence of a mobile station with a coast  
                          or aeronautical station, shall cease sending at the first  
                          request of the coast or aeronautical station.
- 613                    **29-11**        b) The mobile station whose emission causes interference  
                          to communications already in progress between mobile  
                          stations shall cease sending at the first request of one  
                          of the other stations.
- 614                    **29-12**        c) The station which requests this cessation shall indicate  
                          the approximate waiting time imposed on the station  
                          whose emission it suspends.

### Section III. Calls, Reply to Calls and Signals Preparatory to Traffic

#### *Method of Calling*

- 617                    **29-13** § 6. (1) The call consists of :  
                          — the call sign of the station called, not more than three  
                          times ;  
                          — the word DE ;  
                          — the call sign of the calling station, not more than three  
                          times.
- 618                    **29-14**        (2) However, in the bands between 4 000 and 27 500 kc/s,  
                          when the conditions of establishing contact are difficult, the call signs  
                          may be transmitted more than three times but not more than ten  
                          times each. In this case, the call signs of the called and the calling

station shall be transmitted in alternate sequence up to a total of twenty call signs altogether (e.g. ABC ABC de WXYZ WXYZ . . . or ABC ABC ABC de WXYZ WXYZ WXYZ . . .). This call may be sent three times at intervals of two minutes ; thereafter it shall not be repeated until an interval of fifteen minutes has elapsed.

*Frequency to be used for Calling and for Preparatory Signals*

620                    **29-15** § 7. (1) For making the call and for transmitting preparatory signals, the calling station shall use a frequency on which the station called keeps watch.

621                    **29-16**        (2) A ship station calling a coast station in any of the frequency bands allocated to the maritime mobile service between 4 000 and 23 000 kc/s shall use a frequency in the calling band specially reserved for this purpose.

*Indication of the Frequency to be used for Traffic*

623                    **29-17** § 8. (1) The call, as described in Nos. 29-13 and 29-14, shall be followed by the service abbreviation indicating the working frequency and; if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.

624                    **29-18**        (2) When, as an exception to this rule, the call is not followed by an indication of the frequency to be used for the traffic, this indicates :

625                    **29-19**                    a) where the calling station is a land station, that it proposes to use for traffic its normal working frequency shown in the appropriate list of stations ;

626                    **29-20**                    b) where the calling station is a mobile station, that the frequency to be used for traffic is to be chosen by the station called from the frequencies on which the calling station can transmit.

*Indication of the Number of Radiotelegrams or of Transmission in Series*

628           **29-21** § 9. (1) When the calling station has more than one radiotelegram to transmit to the station called, the above-mentioned preparatory signals shall be followed by the service abbreviation and the figure giving the number of such radiotelegrams.

629           **29-22**       (2) Moreover, when the calling station wishes to send its radiotelegrams in series, it shall indicate this by adding the service abbreviation for requesting the consent of the station called.

*Form of Reply to Calls*

630           **29-23** § 10.     The reply to calls consists of :  
                                   — the call sign of the calling station, not more than three times ;  
                                   — the word DE ;  
                                   — the call sign of the station called.

*Frequency for Reply*

632           **29-24** § 11. (1) For transmitting the reply to calls and to preparatory signals, the station called shall use the frequency on which the calling station keeps watch, unless the calling station has specified a frequency for the reply.

633           **29-25**       (2) As an exception to this rule :

634           **29-26**       a) When a mobile station calls a coast station on 143 kc/s, the coast station shall transmit the reply to the call on its normal working frequency in the bands between 90 and 160 kc/s, as indicated in heavy type in the appropriate list of stations.

635           **29-27**       b) When a mobile station calls a coast station in one of the bands authorised for radiotelegraphy between 4 000 and 23 000 kc/s, the coast station shall transmit the reply to the call on one of its working frequencies in the same band, these frequencies being indicated in the appropriate list of stations.

*Agreement on the Frequency to be used for Traffic*

- 637                    **29-28** § 12. (1) If the station called is in agreement with the calling station,  
it shall transmit :
- 638                    **29-29**            a) the reply to the call ;
- 639                    **29-30**            b) the service abbreviation indicating that from that mo-  
ment onwards it will listen on the working frequency  
announced by the calling station ;
- 640                    **29-31**            c) if necessary, the indications referred to in No. 29-39 ;
- 641                    **29-32**            d) the letter K if the station called is ready to receive the  
traffic of the calling station ;
- 642                    **29-33**            e) if useful, the service abbreviation and figure indicating  
the strength and/or intelligibility of the signals received  
(see Appendix 13).
- 643                    **29-34**            (2) If the station called is not in agreement with the calling  
station on the working frequency to be used, it shall transmit :
- 644                    **29-35**            a) the reply to the call ;
- 645                    **29-36**            b) the service abbreviation indicating the working fre-  
quency to be used by the calling station and, if  
necessary, the class of emission ;
- 646                    **29-37**            c) if necessary, the indications specified in No. 29-39.
- 647                    **29-38**            (3) When agreement is reached regarding the working fre-  
quency which the calling station shall use for its traffic, the station  
called shall transmit the letter K after the indications contained in its  
reply.

*Reply to the Request for Transmission by Series*

- 648                    **29-39** § 13.        The station called, in replying to a calling station which  
has proposed to transmit its radiotelegrams by series (see No. 29-22),  
shall indicate, by means of the service abbreviation, its acceptance or  
refusal. In the former case it shall specify, if necessary, the number  
of radiotelegrams which it is ready to receive in one series.



*Difficulties in Reception*

650

**29-40** § 14 (1) If the station called is unable to accept traffic immediately, it shall reply to the call as indicated in Nos. 29-28 to 29-33, but it shall replace the letter K by the signal · — . . . (wait), followed by a number indicating in minutes the probable duration of the waiting time. If the probable duration exceeds ten minutes (five minutes in the case of an aircraft station communicating with a station of the maritime mobile service), the reason for the delay shall be given.

651

**29-41** (2) When a station receives a call without being certain that such a call is intended for it, it shall not reply until the call has been repeated and understood. When, on the other hand, a station receives a call which is intended for it but is uncertain of the call sign of the calling station, it shall reply immediately using the service abbreviation in place of the call sign of this latter station.

**Section IV. Forwarding (Routing) of Traffic***Traffic Frequency*

653

**29-42** § 15. (1) As a general rule a station of the mobile service shall transmit its traffic on one of its working frequencies in that band in which the call has been made.

654

**29-43** (2) In addition to its normal working frequency, printed in heavy type in the appropriate list of stations, a coast station may use one or more supplementary frequencies in the same band, in accordance with the provisions of Article 32.

655

**29-44** (3) The use of frequencies reserved for calling shall be forbidden for traffic except distress traffic (see Article 32).

656

**29-45** (4) If the transmission of a radiotelegram is to take place on a frequency and/or with a class of emission other than those used for the call, the transmission of the radiotelegram shall be preceded by :

— the call sign of the station called, not more than three times ;

— the word DE ;

— the call sign of the calling station, not more than three times.

657

**29-46** (5). If the transmission is to be made on the same frequency and with the same class of emission as the call, the transmission of the radiotelegram shall be preceded, if necessary, by :

— the call sign of the station called ;

— the word DE ;

— the call sign of the calling station.

#### *Numbering in Daily Series*

658

**29-47** § 16. (1) As a general rule radiotelegrams of all kinds transmitted by ship stations, and radiotelegrams in the public correspondence service transmitted by aircraft stations shall be numbered in a daily series ; number 1 shall be given to the first radiotelegram sent each day to each separate station.

658a

**29-48** (2) A series of numbers which has begun in radiotelegraphy should be continued in radiotelephony and vice versa.

#### *Long Radiotelegrams*

661

**29-49** § 17. (1) In cases where both stations are able to change from sending to receiving without manual switching, the transmitting station may continue to send until completion of the message or until the receiving station breaks in on the transmission with the service abbreviation BK. Before commencing, both stations normally agree on such a method of working by means of the abbreviation QSK.

662

**29-50** (2) If this method of working cannot be employed, long radiotelegrams, whether in plain language or in secret language shall, as a general rule, be transmitted in sections, each section containing fifty words in the case of plain language and twenty words or groups if secret language is used.

663

**29-51** (3) At the end of each section the signal - - - - - (?) meaning "Have you received the radiotelegram correctly up to this point?" shall be transmitted. If the section has been correctly

received, the receiving station shall reply by sending the letter K and the transmission of the radiotelegram shall be continued.

*Suspension of Traffic*

664

- 29-52** § 18. When a mobile station transmits on a working frequency of a land station and causes interference with the transmission of such land station, it shall suspend working at the first request of the latter.

**Section V. End of Traffic and Work**

*Signal for the End of Transmission*

666

- 29-53** § 19. (1) The transmission of a radiotelegram shall be terminated by the signal  $\cdot - \cdot - \cdot$  (end of transmission), followed by the letter K.

667

- 29-54** (2) In the case of transmission by series, the end of each radiotelegram shall be indicated by the signal  $\cdot - \cdot - \cdot$  (end of transmission) and the end of the series by the letter K.

*Acknowledgment of Receipt*

669/670

- 29-55** § 20. (1) The acknowledgment of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner :

- the call sign of the sending station ;
- the word DE ;
- the call sign of the receiving station ;
- the letter R followed by the number of the radiotelegram ;

*or*

- the letter R followed by the number of the last radiotelegram of a series.

671

- 29-56** (2) The acknowledgment of receipt shall be transmitted by the receiving station on the traffic frequency (see Nos. 29-42 and 29-43).

*End of Work*

673

- 29-57** § 21. (1) The end of work between two stations shall be indicated by each of them by means of the signal  $--- ---$  (end of work).

- 675                    **29-58**        (2) The signal --- --- (end of work) shall also be used :
- when the transmission of radiotelegrams of general information, meteorological information and general safety notices is finished, and
  - when transmission is ended in long-distance radio-communication services with deferred acknowledgment of receipt or without acknowledgment of receipt.

#### Section VI. Control of Working

- 675a                    **29-59** § 22.        The provisions of this section are not applicable in cases of distress, urgency or safety (see No. 29-01).
- 677                    **29-60** § 23.        In communication between land stations and mobile stations, the mobile station shall comply with the instructions given by the land station, in all questions relating to the order and time of transmission, to the choice of frequency and class of emission, and to the duration and suspension of work.
- 678                    **29-61** § 24.        In communication between mobile stations, the station called shall control the working in the manner indicated in No. 29-60. However, if a land station finds it necessary to intervene, these stations shall comply with the instructions given by the land station.

#### Section VII. Tests

- 679                    **29-62** § 25.        When it is necessary for a mobile station to send signals for testing or adjustment which are liable to interfere with the working of neighbouring coast or aeronautical stations, the consent of these stations shall be obtained before such signals are sent.
- 680                    **29-63** § 26.        When it is necessary for a station in the mobile service to make test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals shall not be continued for more than ten seconds and shall be composed of a series of VVV followed by the call sign of the station emitting the test signals.

## ARTICLE 30

## Calls by Radiotelegraphy

- 681 MOD **30-01** § 1. (1) The provisions of this Article are not applicable to the aeronautical mobile service when special agreements exist between the governments concerned.
- 682 **30-02** (2) Aircraft stations when communicating with stations of the maritime mobile service shall use the procedure specified in this Article.
- 683 **30-03** § 2. (1) As a general rule, it rests with the mobile station to establish communication with the land station. For this purpose, the mobile station may call the land station only when it comes within the service area of the latter, that is to say, that area within which, by using an appropriate frequency, the mobile station can be heard by the land station.
- 684 **30-04** (2) However, a land station having traffic for a mobile station may call this station if it has reason to believe that the mobile station is keeping watch and is within the service area of the land station.
- 685 **30-05** § 3. (1) In addition, each coast station shall, so far as practicable, transmit its calls in the form of "traffic lists" consisting of the call signs in alphabetical order of all mobile stations for which it has traffic on hand. These calls are made at specified times fixed by agreement between the administrations concerned and at intervals of at least two hours and not more than four hours during the working hours of the coast station.
- 685a **30-06** (2) Continuous or frequently repeated emissions of its call sign or of the enquiry signal CQ by a coast station should be avoided (see No. 14-01).
- 686 **30-07** (3) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands.
- 687 **30-08** (4) They may, however, announce this transmission by the following brief preamble sent on a calling frequency :

- CQ, not more than three times ;
- the word DE ;
- the call sign of the calling station, not more than three times ;
- QSW followed by the indication of the working frequency or frequencies on which the traffic list is about to be sent.

In no case may this preamble be repeated.

- 688                   **30-09**       (5) The provisions of No. 30-08 are obligatory when 500 kc/s  
is used.
- 689 (MOD)           **30-10**       (6) They do not apply when frequencies in the bands between  
4 000 and 27 500 kc/s are used.
- 690                   **30-11**       (7) The hours at which coast stations transmit their traffic  
lists and the frequencies and classes of emission which they use for  
this purpose shall be stated in the list of stations.
- 691                   **30-12**       (8) Mobile stations should, as far as possible, listen to the  
traffic lists transmitted by coast stations. On hearing their call sign  
in such a list they shall reply as soon as they can do so.
- 692                   **30-13**       (9) When the traffic cannot be sent immediately, the coast  
station shall inform each mobile station concerned of the probable  
time at which working can begin, and also, if necessary, the fre-  
quency and class of emission which will be used.
- 693                   **30-14** § 4.     When a land station receives calls from several mobile  
stations at practically the same time it decides the order in which  
these stations may transmit their traffic. Its decision shall be based  
on the priority (see No. 39-01) of the radiotelegrams or radio-  
telephone calls that mobile stations have on hand and on the need  
for allowing each calling station to clear the greatest possible number  
of communications.
- 694                   **30-15** § 5. (1) When a station called does not reply to a call sent three  
times at intervals of two minutes, the calling shall cease and shall  
not be renewed until after an interval of fifteen minutes.

- 695                    **30-16**        (2) However, in the case of a communication between a  
station of the maritime mobile service and an aircraft station, calling  
may be renewed after an interval of five minutes.
- 696                    **30-17**        (3) Before renewing the call, the calling station shall ascertain  
that the station called is not in communication with another station.
- 697                    **30-18**        (4) If there is no reason to believe that harmful interference  
will be caused to other communications in progress, the provisions  
of Nos. 30-15 and 30-16 are not applicable. In such cases the call,  
sent three times at intervals of two minutes, may be repeated after an  
interval of less than fifteen minutes but not less than three minutes.
- 697a                   **30-19 § 6.**       Mobile stations shall not radiate a carrier wave between  
calls.
- 699                    **30-20 § 7.**       When the name and address of the administration or  
private operating agency controlling a mobile station are not given  
in the appropriate list of stations or are no longer in agreement  
with the particulars given therein, it is the duty of the mobile station  
to furnish as a matter of regular procedure, to the land station to  
which it transmits traffic, all the necessary information in this respect:
- 700                    **30-21 § 8.**       (1) The land station may, by means of the abbreviation TR,  
ask the mobile station to furnish it with the following information :
- 701                    **30-22**            a) position and, whenever possible, course and speed ;
- 702                    **30-23**            b) next port of call.
- 702a                   **30-24**        (2) The information referred to in Nos. 30-21 to 30-23,  
preceded by the abbreviation TR, should be furnished by mobile  
stations, without prior request from the coast station, whenever such  
a measure seems appropriate.
- 703                    **30-25**        (3) The information referred to in Nos. 30-21 to 30-24 is  
furnished on the authority of the master or the person responsible  
for the ship, aircraft or other vehicle carrying the mobile station.

## ARTICLE 31

**Radiotelegraphic Call to Several Stations**

- 704 **31-01** § 1. Two types of calling signal "To all stations" are  
recognized :
- 705 **31-02** a) call CQ followed by the letter K  
(see Nos. 31-04 and 31-05) ;
- 706 **31-03** b) call CQ not followed by the letter K  
(see No. 31-06).
- 707 **31-04** § 2. Stations desiring to enter into communication with stations  
of the mobile service, without, however, knowing the names of any  
such stations within their service area, may use the enquiry signal  
CQ, in place of the call sign of the station called in the calling  
formula, the call being followed by the letter K (general call to all  
stations in the mobile service with request for reply).
- 708 **31-05** § 3. In the maritime mobile service, in regions where traffic  
is congested, the use of the call CQ followed by the letter K is  
forbidden. As an exception it may be used with signals denoting  
urgency.
- 709 **31-06** § 4. The call CQ not followed by the letter K (general call to  
all stations without request for reply) is used before the transmission  
of information of any kind intended to be read or used by anyone  
who can intercept it.
- 710 **31-07** § 5. The call CP followed by two or more call signs or by a  
code word (call to certain receiving stations without request for  
reply) is used only for the transmission of information of any nature  
intended to be read or used by the persons authorized.

## ARTICLE 32

**Use of Frequencies for Radiotelegraphy in the Maritime Mobile  
and Aeronautical Mobile Services****Section I. Bands included between 90 and 160 kc/s***A. Call and Reply*

- 740 **32-01** § 1. (1) The frequency 143 kc/s (class A1 only) is the international



calling frequency used by stations of the maritime mobile service in the bands between 90 and 160 kc/s.

741                    **32-02**        (2) Apart from 143 kc/s, the use of any frequency between 140 and 146 kc/s is forbidden.

742                    **32-03 § 2.**        The frequency for replying to a call sent on 143 kc/s is :  
                                  — for a ship station, 143 kc/s ;  
                                  — for a coast station, its normal working frequency.

#### *B. Traffic*

743                    **32-04 § 3.**        (1) The following rules shall be observed by stations of the maritime mobile service using class A1 or F1 emissions in the bands between 90 and 160 kc/s :

744                    **32-05**        (2) *a)* Each coast station shall keep watch on 143 kc/s unless the appropriate list of stations provides otherwise.

745                    **32-06**        *b)* The coast station shall transmit its traffic on the working frequency or frequencies specially assigned to it.

746                    **32-07**        *c)* When a ship station desires to establish communication with another station of the maritime mobile service, it shall use 143 kc/s, unless the appropriate list of stations provides otherwise.

747                    **32-08**        *d)* This frequency shall be used exclusively :  
                                  — for individual calls and replies to such calls ;  
                                  — for the transmission of signals preparatory to traffic.

748                    **32-09**        (3) A ship station after establishing communication with another station of the maritime mobile service on the general calling frequency 143 kc/s shall, so far as practicable, transmit its traffic on

some other frequency in the authorized bands, taking care not to disturb the work in progress at another station.

749 **32-10** § 4. (1) As a general rule, any ship station working in the bands between 110 and 160 kc/s when it is not engaged in communication with other stations of the maritime mobile service shall, during its hours of service, keep watch every hour on 143 kc/s for five minutes beginning at x h. 35, Greenwich mean time (G.M.T.).

750 **32-11** (2) The frequency 143 kc/s may be used for individual calls preferably during the period indicated in No. 32-10.

## **Section II. Bands included between 405 and 535 kc/s**

713 **32-12** § 5. The provisions of this Section are also applicable to aircraft stations when communicating with stations of the maritime mobile service.

### *A. Distress*

714 **32-13** § 6. (1) The frequency 500 kc/s is the international distress frequency for radiotelegraphy ; it shall be used for this purpose by ship, aircraft and survival craft stations using frequencies in the bands between 405 and 535 kc/s when requesting assistance from the maritime services. It shall be used for the distress call and distress traffic, for the urgency signal and urgency messages, and for the safety signal and, outside regions of heavy traffic, short safety messages. When practicable, safety messages shall be transmitted on the working frequency after a preliminary announcement on 500 kc/s (see also No. 32-28).

714a **32-14** (2) However, ship and aircraft stations which cannot transmit on 500 kc/s should use any other available frequency on which attention might be attracted.

715 **32-15** (3) In addition, 500 kc/s may be used only :

716 32-16 a) for call and reply (see Nos. 32-20 and 32-22) ;

32-17 b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in No. 30-09.

718 32-18 (4) Apart from the transmissions authorized on 500 kc/s, and taking account of No. 32-21, all transmissions on the frequencies included between 490 and 510 kc/s are forbidden.

719 32-19 (5) In order to facilitate the reception of distress calls, other transmissions on the frequency 500 kc/s shall be reduced to a minimum, and in any case shall not exceed three minutes.

### B. Call and Reply

720 **32-20** § 7. (1) The general calling frequency, which shall be used by any ship station or coast station engaged in radiotelegraphy in the authorized bands between 405 and 535 kc/s, and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in these bands, is the frequency 500 kc/s.

721 **32-21** (2) However, in order to reduce interference in regions of heavy traffic, administrations may consider the requirements of No. 32-20 as satisfied when the calling frequencies assigned to coast stations open to public correspondence are not separated by more than 3 kc/s from the general calling frequency 500 kc/s.

722 **32-22** § 8. (1) The frequency for replying to a call sent on the general calling frequency (see No. 32-20) is 500 kc/s except where the calling station specifies the frequency on which it will listen for the reply (see No. 29-30).

723 **32-23** (2) However, in regions of heavy traffic, ship stations should request coast stations to answer on their normal working frequency. In these regions coast stations may answer calls made by ship stations

of their own nationality in accordance with special arrangements made by the administration concerned (see No. 29-30).

### *C. Traffic*

- 724 **32-24** § 9. (1) Coast stations working in the authorized bands between 405 and 535 kc/s shall be able to use at least one frequency in addition to 500 kc/s. One of these additional frequencies<sup>1</sup>, which is printed in heavy type in the appropriate list of stations, is the normal working frequency of the station.
- 725 **32-25** (2) In addition to their normal working frequency, coast stations may use, in the authorized bands, additional frequencies which are shown in ordinary type in the appropriate list of stations. The band 405 to 415 kc/s, however, is assigned to radio direction-finding; it may not be used by the mobile service except on the conditions fixed by Chapter II.
- 726 **32-26** (3) The working frequencies of coast stations shall be chosen so as to avoid interference with neighbouring stations.
- 726a **32-27** (4) In regions of heavy traffic, coast stations should use class A1 emissions on their working frequencies.
- 727 **32-28** § 10. As an exception to the provisions of Nos. 32-13 to 32-17 and on condition that signals of distress, urgency and safety, and calls and replies are not interfered with, 500 kc/s may be used<sup>1</sup> outside areas of heavy traffic for direction-finding but with discretion.
- 730 **32-29** § 11. (1) Ship stations employing class A1 or A2 emissions in the authorized band between 405 and 535 kc/s shall use working frequencies chosen from the following: 425, 454, 468 and 480 kc/s,
- 727.1 **32-28-1** <sup>1</sup> Furthermore, subject to the conditions specified in No. 32-28, the transmission of a single short radiotelegram on 500 kc/s is permitted within the service areas of certain coast stations of Australia, India, Indonesia and Pakistan. These countries shall endeavour to meet in full the provisions of this Article before the next Administrative Radio Conference.

except as permitted by No. 7-06. In addition, 512 kc/s may be used in Regions 1 and 3 and 448 kc/s in Region 2.

731

**32-30** (2) Coast stations are prohibited from transmitting on the working frequencies designated for the use of ship stations on a world-wide basis or on the working frequency designated for the use of ship stations in the Region in which the coast station is situated.

732

**32-31** (3) In Regions 1 and 3 the frequency 512 kc/s may be used by ship stations as a supplementary calling frequency when 500 kc/s is being used for distress.

**32-32** (4) During these periods coast stations may :

**32-33** a) use 512 kc/s as a supplementary frequency for call and reply, *or*

**32-34** b) make use of other arrangements for call and reply which shall have been specified in the appropriate list of stations.

732a

**32-35** (5) When 500 kc/s is in use for distress, ship stations shall not use 512 kc/s as a working frequency in those areas where it is in use as a supplementary calling frequency.

#### *D. Watch*

733

**32-36** § 12. (1) In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, take the necessary measures to ensure watch on the international distress frequency 500 kc/s for three minutes twice an hour beginning at *x* h. 15 and *x* h. 45 Greenwich mean time (G.M.T.) by an operator using headphones or a loud-speaker.

734

**32-37** (2) During the periods mentioned above, except for the emissions provided for in Article 36 :

- 735                    32-38            a) transmissions shall cease in the bands between 485 and 515 kc/s ;
- 736                    32-39            b) outside these bands, transmissions of stations of the mobile service may continue ; stations of the maritime mobile service may listen to these transmissions on the express condition that they first ensure watch on the distress frequency as required by No. 32-36.
- 737                    32-40 § 13. (1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for Class A2 emissions.
- 738                    32-41            (2) These stations, while observing the requirements of No. 32-36, are authorized to relinquish this watch only when they are engaged in communications on other frequencies.
- 739                    32-42            (3) When they are engaged in such communications :
- Ship stations may maintain this watch on 500 kc/s by means of an operator using headphones or a loud-speaker or by some appropriate means such as an automatic alarm receiver.
  - Coast stations may maintain this watch on 500 kc/s by means of an operator using headphones or a loud-speaker ; in the latter case an indication may be inserted in the appropriate list of stations.

### Section III. Bands included between 1 605 and 4 000 kc/s

- 751                    32-43 § 14.      In Regions 2 and 3, the frequencies assigned to ship stations for radiotelegraphy in the bands between 1 605 and 2 850 kc/s shall, as far as possible, be harmonically related (sub-harmonics) to the frequencies assigned to ship stations in the 4 000 kc/s radiotelegraph band (see Section V).

- 751a                    **32-44** § 15. In Region 2, the frequencies in the band 2 070 to 2 080 kc/s are assigned to ship stations using wide-band telegraphy and special transmission systems. The provisions of No. 32-52 are applicable.

## MOD

**Section IV. Additional Provisions applicable in Regions 2 and 3 only**

- 751b                    **32-45** § 16. (1) The frequency 2 091 kc/s is the calling frequency for the maritime mobile service of radiotelegraphy in those parts of the bands between 1 605 and 2 850 kc/s in which radiotelegraphy is authorized.
- 751c                    **32-46**            (2) The frequency 2 091 kc/s may be used for calls and replies.
- 751d                    **32-47**            (3) Each coast station using the calling frequency 2 091 kc/s shall, as far as possible, maintain watch on this frequency during its working hours.
- 751e                    **32-48**            (4) Coast stations which use 2 091 kc/s for calling shall be able to use at least one other frequency in those parts of the bands between 1 605 and 2 850 kc/s in which the maritime mobile radiotelegraphy is authorized.
- 751f                    **32-49**            (5) One of these frequencies is printed in heavy type in the appropriate list of stations to indicate that it is the normal working frequency of the station. Supplementary frequencies, if any, are shown in ordinary type.
- 751g                    **32-50**            (6) Working frequencies of coast stations shall be chosen in such a manner as to avoid interference with other stations.

**Section V. Bands included between 4 000 and 27 500 kc/s***A. General Provisions*

- 752                    **32-51** § 17. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 32-80, 32-98 and 32-102 shall employ only Class A1 emission. However, other classes of emission are not

precluded from the bands specified in No. 32-98 provided that such emission can be contained within the normal working channels indicated in Appendix 15. Survival craft stations may use Class A2 emissions in these bands (see No. 28-40).

- 752a      **32-52**      (2) Mobile stations equipped to operate in the frequency bands authorised to ships for wide-band telegraphy and special transmission systems may use any class of emissions provided that such emissions can be contained within the wide-band channels indicated in Appendix 15. However, manual morse and telephony are excluded.
- 752b      **32-53**      (3) Coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 and 23 000 kc/s shall not use Type 2 transmissions.
- 752c      **32-54**      (4) Coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 and 23 000 kc/s shall at no time use mean power in excess of the following :

| <i>Band</i> | <i>Maximum mean power</i> |
|-------------|---------------------------|
| 4 Mc/s      | 5 kW                      |
| 6 Mc/s      | 5 kW                      |
| 8 Mc/s      | 10 kW                     |
| 12 Mc/s     | 15 kW                     |
| 16 Mc/s     | 15 kW                     |
| 22 Mc/s     | 15 kW                     |

- 755      MOD      **32-55** § 18. (1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25 070-25 110 kc/s, shall be divided into four parts, beginning at the low frequency end :
- 755a      MOD      **32-56**      a) a band of working frequencies for ship stations using wide-band telegraphy and special transmission systems;
- 756           **32-57**      b) a band of working frequencies for the use of high traffic ship stations ;



- 757                    **32-58**            c) a band of calling frequencies for the use of all ship and aircraft stations entering into communication with stations of the maritime mobile service ;
- 758                    **32-59**            d) a band of working frequencies for the use of low-traffic ship stations.
- 758o    ADD            **32-60**            (2) The band 25 070-25 110 kc/s, allocated to ship radiotelegraph stations, consists solely of working frequencies which may be assigned to ships of all kinds.
- 758a                    **32-61**            (3) For the purpose of this Section :  
                              — a passenger ship is a vessel defined as such by the Convention for the Safety of Life at Sea ;  
                              — a cargo ship is any ship that is not a passenger ship as defined above.
- 758b                    **32-62**            (4) Stations installed on passenger ships shall use the high traffic band and whaling factory vessels, tankers above 40,000 tons gross and other cargo ships above 12,500 tons gross handling a large volume of traffic may also use this band (see No. 32-57).
- 758c                    **32-63**            (5) Stations installed on ships other than those mentioned in No. 32-62 shall use the low traffic band (see No. 32-59).
- 760                    **32-64**            (6) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in Appendix 15.
- 761                    **32-65**§ 19.       For the exchange of radiotelegraph communications with stations of the maritime mobile service, aircraft stations may utilize the frequencies of the bands allocated to that service for radiotelegraphy between 4 000 and 25 110 kc/s. When using these frequencies, aircraft stations shall comply with the provisions of this Section.

#### *B. Call and Reply*

- 762                    **32-66**§ 20. (1) In order to establish communication with a station in the maritime mobile service, each ship and aircraft station shall use a

calling frequency in the bands listed in No. 32-80.

763

**32-67** (2) Frequencies in the calling bands are assigned to each mobile station in accordance with the provisions of Nos. 32-81 to 32-85 inclusive.

764

**32-68** § 21. In order to reduce interference, mobile stations shall, within the means at their disposal, endeavour to select for calling the band with the most favourable propagational characteristics for effecting reliable communication. In the absence of more precise data, a mobile station shall, before making a call, listen for the signals of the station with which it desires to communicate. The strength and intelligibility of such signals are useful as a guide to propagational conditions and indicate which is the preferable band for calling.

765

**32-69** § 22. (1) The calling frequency to be used by a coast station, in each of the bands for which it is equipped, is its normal working frequency as shown in heavy type in the appropriate list of stations (see No. 32-79).

766

**32-70** (2) So far as is practicable, a coast station shall transmit its calls at specified times in the form of traffic lists on the frequency or frequencies indicated in the appropriate list of stations (see Nos. 30-05 and 30-07).

767

**32-71** § 23. Unless the calling station specifies otherwise, the frequency for reply to a call made in any maritime mobile band is as follows :

768

**32-72** a) for a mobile station, its assigned calling frequency in the same band as that used by the calling station ;

769

**32-73** b) for a coast station, its normal working frequency in the same band as that used by the calling station.

770

**32-74** § 24. When notifying the transmitting frequencies of a coast station, administrations shall indicate on which of the ship calling bands the station keeps watch and, as far as possible, the approximate hours of watchkeeping in Greenwich mean time (G.M.T.). This information shall be published in the appropriate list of stations.

*C. Traffic*

771

**32-75** § 25. (1) A mobile station, after establishing communication on a calling frequency (see No. 32-66) changes to a working frequency for the transmission of traffic. The use of frequencies in the calling bands for any purpose other than calling shall be prohibited.

772

**32-76** (2) Working frequencies shall be assigned to mobile stations in accordance with the provisions of Nos. 32-87 to 32-106 inclusive.

773

**32-77** § 26. (1) A coast station shall transmit its traffic on its normal working frequency or on other working frequencies assigned to it.

773a

**32-78** (2) Countries which share a channel in one of the exclusive maritime mobile bands between 4 000 and 23 000 kc/s should give special consideration to the countries among them which have no other channel in the same band and should endeavour to use their primary channel to the greatest extent possible, in order to permit the latter countries to satisfy their minimum communication requirements.

774

**32-79** (3) Working frequencies assigned to coast stations using the bands between 4 000 and 27 500 kc/s are included within the following limits :

4 238 to 4 368 kc/s  
 6 357 to 6 525 kc/s  
 8 476 to 8 745 kc/s  
 12 714 to 13 130 kc/s  
 16 952 to 17 290 kc/s  
 22 400 to 22 650 kc/s (see No. . . . . 7-32-1)

*D. Assignment of Frequencies to Mobile Stations***1. Calling Frequencies of Ship Stations**

775

**32-80** § 27. (1) The calling frequencies assigned to ship stations are included within the following limits :

4 177 to 4 187 kc/s  
 6 265.5 to 6 280.5 kc/s

8 354 to 8 374 kc/s  
 12 531 to 12 561 kc/s  
 16 708 to 16 748 kc/s  
 22 220 to 22 270 kc/s

- 776 **32-81** (2) In the band 4 177 to 4 187 kc/s, the calling frequencies shall be uniformly distributed. They shall be preferably spaced 1 kc/s apart. The extreme frequencies assignable are 4 178 and 4 186 kc/s as indicated in Appendix 15.
- 777 **32-82** (3) In each of the other maritime mobile service bands between 4 000 and 18 000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4 177 to 4 187 kc/s. In the band 22 220 to 22 270, the preferable spacing of calling frequencies is 5 kc/s.
- 778 **32-83** § 28. The administration to which a ship station is subject shall assign to it a series of calling frequencies including one frequency in each of the bands in which the station is equipped to transmit. In the bands between 4 000 and 18 000 kc/s, the frequencies assigned to each ship station shall be in harmonic relationship. Each administration shall take the necessary steps to assign such harmonic series of calling frequencies to ships in accordance with an orderly system of rotation so as to distribute these frequencies uniformly throughout the calling bands as outlined in No. 32-81. The same system of uniform distribution shall be applied in the assignment of calling frequencies in the band 22 220 to 22 270 kc/s.
- 779 **32-84** § 29. (1) The centre calling frequency in each of the calling bands indicated in No. 32-80 shall be reserved as far as possible for the use of aircraft desiring to communicate with stations of the maritime mobile service. These frequencies are the following : 4 182 ; 6 273 ; 8 364 ; 12 546 ; 16 728 and 22 245 kc/s.
- 780 **32-85** (2) The frequency 8 364 kc/s, however, shall not be assigned to or used by ship stations except to establish communications relating to the safety of life. It is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands

between 4 000 and 25 110 kc/s, and if they desire to establish with stations of the maritime and aeronautical mobile services communications relating to search and rescue operations.

## 2. Working Frequencies of Mobile Stations

### *a) Channel Spacing and Assignment of Frequencies*

- 780a **32-86** § 30. In all bands the working frequencies for ship stations equipped to use wide-band telegraphy and special transmission systems are spaced 4 kc/s apart. The frequencies assignable are shown in Appendix 15.
- 781 **32-87** § 31. (1) The working frequencies for high-traffic ships in the band 4 160 to 4 177 kc/s are so spaced as to provide channels 1.5 kc/s wide, the extreme frequencies assignable being 4 161 and 4 176 kc/s as shown in Appendix 15.
- 782 **32-88** (2) In the band 4 187 to 4 238 kc/s, the working frequencies of low-traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4 188 and 4 236.5 kc/s as indicated in Appendix 15.
- 783 **32-89** § 32. The working frequencies assigned to each ship station in the 6, 8, 12 and 16 Mc/s band shall be harmonically related to those assigned in the 4 Mc/s band except as provided in No. 32-86.
- 784 **32-90** § 33. In the case of the 22 Mc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows as shown in Appendix 15 :
- 785 **32-91** a) in the high-traffic band, the working frequencies are spaced 6 kc/s apart, the extreme frequencies assignable being 22 151 and 22 217 kc/s ;

- 786                      **32-92**                      b) in the low-traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 272.5 and 22 395 kc/s.
- 786a    ADD                      **32-93** § 34.                      In the 25 Mc/s band, the frequency separation shall be 3 kc/s. The extreme frequencies which may be assigned are, as shown in Appendix 15 : 25 074 and 25 107 kc/s.
- b) Working Frequencies for Ship Stations using Wide-band Telegraphy and Special Transmission Systems*
- 787a                      **32-94** § 35.                      The working frequencies assigned to ship stations using wide-band telegraphy and special transmission systems are included within the following limits :
- 4 140 to 4 160 kc/s  
6 211 to 6 240 kc/s  
8 280 to 8 320 kc/s  
12 421 to 12 471 kc/s  
16 562 to 16 622 kc/s  
22 100 to 22 148 kc/s
- 787b                      **32-95** § 36. (1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy and special transmission systems, one or more series of working frequencies designated in Appendix 15. The total number of series assigned to each ship shall be determined by traffic requirements.
- 787c                      **32-96**                      (2) When ship stations employing wide-band telegraphy and special transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign channels to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.
- 787d                      **32-97**                      (3) However, within the limits of the bands given in No. 32-94 administrations may, to meet the needs of specific systems, assign

frequencies in a different manner from that shown in Appendix 15. Nevertheless, administrations shall take into account, as far as possible, the provisions of Appendix 15 concerning channelling and 4 kc/s spacing.

*c) Working Frequencies of High-traffic Ships*

788

**32-98 § 37.** The working frequencies assigned to high-traffic ships are included within the following band limits :

4 160 - 4 177 kc/s  
 6 240 - 6 265.5 kc/s  
 8 320 - 8 354 kc/s  
 12 471 - 12 531 kc/s  
 16 622 - 16 708 kc/s  
 22 148 - 22 220 kc/s

789

**32-99 § 38.** (1) Each administration shall assign to each high-traffic ship within its jurisdiction two or more series of working frequencies shown in Appendix 15 for vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

790

**32-100** (2) When high-traffic ships are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation which will ensure approximately the same number of assignments on any one frequency.

792

**32-101 § 39.** For the exclusive purpose of communication with stations of the maritime mobile service an aircraft station may be assigned one or more series of working frequencies in the high-traffic bands. These frequencies shall be assigned in accordance with the same system of uniform distribution provided for high-traffic ships.

*d) Working Frequencies for Low-traffic Ships*

793

**32-102§ 40.** Working frequencies assigned to low-traffic ships shall be included within the following band limits :

4 187 to 4 238 kc/s  
 6 280.5 to 6 357 kc/s  
 8 374 to 8 476 kc/s  
 12 561 to 12 714 kc/s  
 16 748 to 16 952 kc/s  
 22 270 to 22 400 kc/s

794

**32-103§ 41.** (1) In each of the low-traffic bands, the assignable frequencies are divided into two equal Groups A and B, Group A comprising the frequencies in the lower half of the band and Group B the frequencies in the upper half (see Appendix 15).

795

**32-104** (2) Each administration shall assign to each of its low-traffic ships two series of working frequencies, one in Group A and the other in Group B. In each band, the two working frequencies are separated by half the width of the assignable band.

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**32-105** (3) For example, if the frequency assigned to a ship station is the lowest frequency assignable in Group A, the other must be the lowest frequency assignable in Group B. If one of the frequencies assigned is the second frequency from the low frequency end of Group A, then the other frequency assigned must be the second frequency from the low frequency end of Group B, etc.

797

**32-106** (4) Each administration shall assign successively one such pair of frequencies to each of its ship stations commencing at either end of the band. When all available working frequencies in a band have been assigned in this manner, the process shall be repeated as often as is necessary to satisfy all its requirements and to ensure a uniform distribution of assignments throughout the band.

797a

**32-107** (5) Administrations shall try to ensure that Group A and Group B frequencies are equally used for traffic, and to this end should arrange for half their ship stations to operate generally on Group A frequencies, and for the other half to operate generally on Group B frequencies.



Title ADD

797b ADD

*e) Working Frequencies available for use by all Ships*

**32-108§ 42.** The working frequencies in the band 25 070 to 25 110 kc/s may be assigned to ships of all kinds. For operational purposes, they shall be considered as frequencies additional to the working frequencies in the 22 Mc/s band.

*f) Abbreviations for the Indications of Working Frequencies*

798

**32-109§ 43.** In the bands between 4 000 and 27 500 kc/s the following system of abbreviations may be used :

799

**32-110** a) to designate a working frequency the last three figures of the frequency excluding fractions of a kilocycle may be transmitted ;

800

**32-111** b) when the calling station does not know the working frequencies of a low-traffic ship station, it may request the ship station to reply on its working frequency in Group A or on its working frequency in Group B by transmitting QSW A or QSW B as the case may be ;

800a

**32-112** c) in case of poor receiving conditions on the working frequency stated by the low-traffic ship according to No. 32-111, the coast station may request the ship to change to transmissions on its supplementary working frequency in the same frequency band. This request is made by the transmission of QSY B or QSY A as the case may be.

**Section VI. Aeronautical Mobile Service**

801

**32-113§ 44.** Governments may, by agreement, decide the frequencies to be used for call and reply in the aeronautical mobile service.

802

**32-114§ 45.** Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service, the provisions of Nos. 32-13 and 32-14 shall be applied.

## ARTICLE 33

**General Radiotelephone Procedure  
in the Maritime Mobile Service****Section I. General Provisions**

- 680a **33-01** § 1. (1) The procedure detailed in the present Article is applicable to radiotelephone stations of the maritime mobile service, except in cases of distress, urgency or safety, to which the provisions of Article 36 are applicable.
- 680b **33-02** (2) Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They shall then comply with the provisions of this Article, and of Article 27.
- 680c **33-03** § 2. (1) The service of ship radiotelephone stations shall be performed by an operator satisfying the conditions specified in Article 23.
- 680d **33-04** (2) For the call signs or other means of identification for coast and ship radiotelephone stations see Article 19.
- 680e **33-05** § 3. The radiotelephone public correspondence service provided on ships should, if possible, be operated on a duplex basis.
- 680f **33-06** § 4. (1) Automatic calling and identification devices, and devices providing for the emission of a signal to indicate that a channel is in use, may be used in this service on a non-interference basis to the service provided by coast stations.
- 680g **33-07** (2) Radiotelephone stations of the maritime mobile service should, as far as possible, be equipped with devices for instantaneous switching from transmission to reception and vice versa. This equipment is necessary for all stations participating in communication between ships or aircraft and subscribers of the land telephone system.

- 680h                    **33-08** § 5.       Stations of the maritime mobile service equipped for radiotelephony may transmit and receive radiotelegrams by means of radiotelephony.

## Section II. Preliminary Operations

- 680i                    **33-09** § 6. (1) Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely the station shall await an appropriate break in the working.
- 680j                    **33-10**        (2) If, these precautions having been taken, the emissions of the station should nevertheless interfere with a transmission already in progress, the following rules shall be applied :
- 680k                    **33-11**        a) The mobile station whose emission causes interference to the correspondence of a mobile station with a coast or aeronautical station shall cease sending at the first request of the coast station or the aeronautical station.
- 680m MOD            **33-12**        b) The mobile station whose emission causes interference to communications already in progress between mobile stations, shall cease sending at the first request of one of the other stations.
- 680n                    **33-13**        c) The station which requests this cessation shall indicate the approximate waiting time imposed on the station whose emission it suspends.

## Section III. Calls, Reply to Calls and Signals Preparatory to Traffic

### *Method of Calling*

- 680op \*                **33-14** § 7. (1) The call consists of :
- the call sign or other identification of the station called, not more than three times ;
  - the words THIS IS ;
  - the call sign or other identification of the calling station, not more than three times.

- 680q **33-15** (2) When contact is established the call sign or other identification may thereafter be transmitted once only.
- 680r **33-16** (3) When the coast station is fitted with equipment for selective calling and the ship station is fitted with equipment for receiving selective calls, the coast station shall call the ship by transmitting the appropriate code signal, and the ship station shall call the coast station by speech in the manner given in No. 33-14.

*Frequency to be Used for Calling and for Preparatory Signals*

**A. Bands between 1 605 and 4 000 kc/s**

- 680u **33-17 § 8.** (1) A radiotelephone ship station calling a coast station of its own nationality should use for the call :
- 680v **33-18** a) the frequency 2 182 kc/s ;
- 680w **33-19** b) a working frequency, whenever and wherever traffic density is high.
- 680x **33-20** (2) A radiotelephone ship station calling a coast station of another nationality should, as a general rule, use the frequency 2 182 kc/s. However, where so agreed by administrations, the ship station may use a working frequency on which watch is kept by that coast station.
- 680y **33-21** (3) A radiotelephone ship station calling another ship station should use for the call :
- 680z **33-22** a) the frequency 2 182 kc/s ;
- 680aa **33-23** b) an inter-ship frequency, whenever and wherever traffic density is high and prior arrangements can be made.
- 680ab **33-24** (4) An aircraft station calling a coast station or a ship station may use the frequency 2 182 kc/s.

- 680ac      **33-25**      (5) Coast stations shall, in accordance with the requirements of their own country, call ship stations of their own nationality either on a working frequency, or, when calls to individual ships are made, on the frequency 2 182 kc/s.
- 680ad      **33-26**      (6) However, a ship station which keeps watch simultaneously on 2 182 kc/s and a working frequency should be called on the working frequency.
- 680ae      **33-27**      (7) As a general rule, coast stations should call radiotelephone ship stations of another nationality on the frequency 2 182 kc/s.

**B. Bands between 4 000 and 23 000 kc/s**

- 680ag      **33-28** § 9. (1) A ship station calling a coast station by radiotelephony may use either the frequency reserved for this purpose in accordance with Section B of Appendix 15, or the working frequency associated with that of the coast station in accordance with Appendix 17.
- 680ah      **33-29**      (2) A coast station calling a ship station by radiotelephony shall use one of its working frequencies specified in the appropriate list of stations.
- 680ai      **33-30**      (3) The preliminary operations for the establishment of radiotelephone communications may also be carried out by radiotelegraphy using the procedure appropriate to radiotelegraphy (see Nos. 29-15 and 29-16).

**C. Bands between 156 and 174 Mc/s**

- 680ak      **33-31** § 10. (1) In the bands between 156 Mc/s and 174 Mc/s used for the maritime mobile services, coast and ship stations should, as a general rule, call on 156-80 Mc/s. However, in the public correspondence service, calling may be conducted on a working channel or on a two-frequency calling channel which has been implemented in accordance with No. 35-43.

- 680al                    **33-32**        (2) When 156.80 Mc/s is being used for distress, urgency or safety communications, a ship station desiring to participate in the port operations service may establish contact on 156.60 Mc/s or another port operations frequency, indicated in heavy type in the appropriate list of stations.

*Form of Reply to Calls*

- 680an                    **33-33** § 11.    The reply to calls consists of :
- the call sign or other identification of the calling station, not more than three times ;
  - the words THIS IS ;
  - the call sign or other identification of the station called, not more than three times.

*Frequency for Reply*

**A. Bands between 1 605 and 4 000 kc/s**

- 680aq                    **33-34** § 12. (1) When a ship station is called on 2 182 kc/s it should reply on the same frequency unless another frequency is indicated by the calling station.
- 680ar                    **33-35**        (2) When a ship station is called on a working frequency by a coast station of the same nationality, it shall reply on the working frequency normally associated with the frequency used by the coast station for the call.
- 680as                    **33-36**        (3) A ship station, after calling a coast station or another ship station, shall indicate the frequency on which a reply is required if this frequency is not the normal one associated with the frequency used for the call.
- 680at                    **33-37**        (4) A ship station which frequently exchanges traffic with a coast station of another nationality may use the same procedure for reply as ships of the nationality of the coast station, where this has been agreed by the administrations concerned.

- |       |              |   |
|-------|--------------|---|
| 680au | <b>33-38</b> | (5) As a general rule a coast station shall reply :   |
| 680av | <b>33-39</b> | a) on 2 182 kc/s to calls made on 2 182 kc/s unless another frequency is indicated by the calling station ; |
| 680aw | <b>33-40</b> | b) on a working frequency to calls made on a working frequency.   |

**B. Bands between 4 000 and 23 000 kc/s**

- |       |              |   |
|-------|--------------|---|
| 680ay | <b>33-41</b> | § 13. (1) When a ship station is called by a coast station, it may reply either on the calling frequency given in Section B of Appendix 15, or on the working frequency associated with that of the coast station in accordance with Appendix 17. |
| 680az | <b>33-42</b> | (2) When a coast station is called by a ship station, the coast station should reply on one of its working frequencies specified in the appropriate list of stations.   |
| 680ba | <b>33-43</b> | (3) In the Tropical Zone of Region 3, when a station is called on 6 203.5 kc/s, it should reply on the same frequency.  |

**C. Bands between 156 and 174 Mc/s**

- |       |              |   |
|-------|--------------|---|
| 680bc | <b>33-44</b> | § 14. (1) When a station is called on 156.80 Mc/s it should reply on the same frequency.  |
| 680bd | <b>33-45</b> | (2) When a coast station open to public correspondence calls a ship station either by speech or by selective calling, using a two-frequency channel, the ship station shall reply by speech on the frequency associated with that of the coast station ; conversely, a coast station shall reply to a call from a ship station on the frequency associated with that of the ship station. |

*Indication of the Frequency to be Used for Traffic*

**A. Bands between 1 605 and 4 000 kc/s**

- |       |              |   |
|-------|--------------|---|
| 680bg | <b>33-46</b> | § 15. If contact is established on the frequency 2 182 kc/s, coast and ship stations shall transfer to one of their normal working frequencies for the exchange of traffic. |
|-------|--------------|---|

**B. Bands between 4 000 and 23 000 kc/s**

- 680bi      **33-47** § 16. After a ship station has established contact with a coast station, or another ship station, on the calling frequency of the band chosen, traffic shall be exchanged on their respective working frequencies.

**C. Bands between 156 and 174 Mc/s**

- 680bk      **33-48** § 17. (1) Whenever contact has been established between a coast station in the public correspondence service and a ship station either on 156.80 Mc/s, or on a two-frequency calling channel (see 35-43), the stations shall transfer to one of their normal pairs of working frequencies for the exchange of traffic. The calling station should indicate the channel to which it is proposed to transfer by reference to the frequency in Mc/s or, preferably, to its channel designator.

- 680bl      **33-49** (2) When contact on 156.80 Mc/s has been established between a coast station in the port operations service and a ship station, the ship station should indicate the particular service required (such as navigational information, docking instructions, etc.) and the coast station shall then indicate the channel to be used for the exchange of traffic by reference to the frequency in Mc/s or, preferably, to its channel designator.

- 680bm      **33-50** (3) A ship station, when it has established contact with another ship station on 156.80 Mc/s, should indicate the inter-ship channel to which it is proposed to transfer for the exchange of traffic by reference to the frequency in Mc/s or, preferably, to its channel designator.

*Agreement on the Frequency to be Used for Traffic*

- 680bo      **33-51** § 18. (1) If the station called is in agreement with the calling station, it shall transmit :

- 680bp      **33-52** a) an indication that from that moment onwards it will listen on the working frequency or channel announced by the calling station ;



- 680bq **33-53** b) an indication that it is ready to receive the traffic of the calling station.
- 680br **33-54** (2) If the station called is not in agreement with the calling station on the working frequency or channel to be used, it shall transmit an indication of the working frequency or channel proposed.
- 680bs **33-55** (3) For communications between a coast station and a ship station, the coast station shall finally decide the frequency or channel to be used.
- 680bt **33-56** (4) When agreement is reached regarding the working frequency or channel which the calling station shall use for its traffic, the station called shall indicate that it is ready to receive the traffic.

*Indication of Traffic*

- 680bv **33-57** § 19. When the calling station wishes to exchange more than one radiotelephone call, or to transmit more than one radiotelegram, it should indicate this when contact is established with the station called.

*Difficulties in Reception*

- 680bx **33-58** § 20. (1) If the station called is unable to accept traffic immediately it should reply to the call as indicated in No. 33-33 followed by "Wait . . . . minutes", indicating the probable duration of waiting time in minutes. If the probable duration exceeds ten minutes (five minutes in the case of an aircraft station communicating with a station of the maritime mobile service), the reason for the delay shall be given. Alternatively, the station called may indicate by any appropriate means that it is not ready to receive traffic immediately.
- 680by **33-59** (2) When a station receives a call without being certain that such a call is intended for it, it shall not reply until the call has been repeated and understood.
- 680bz **33-60** (3) When a station receives a call which is intended for it, but is uncertain of the identification of the calling station, it shall reply

immediately asking for a repetition of the call sign or other identification of the calling station.

#### Section IV. Forwarding (Routing) of Traffic

##### *Traffic Frequency*

- 680cb **33-61** § 21. (1) Every station of the maritime mobile service should transmit its traffic (radiotelephone calls or radiotelegrams) on one of its working frequencies in the band in which the call has been made.
- 680cc **33-62** (2) In addition to its normal working frequency, printed in heavy type in the appropriate list of stations, a coast station may use one or more supplementary frequencies in the same band in accordance with the provisions of Article 35.
- 680cd **33-63** (3) The use of frequencies reserved for calling shall be forbidden for traffic except distress traffic (see Article 35).
- 680ce **33-64** (4) After contact has been established on the frequency to be used for traffic, the transmission of a radiotelegram or radiotelephone call shall be preceded by :
- 680cf **33-65** — the call sign or other identification of the station called ;  
— the words THIS IS ;  
— the call sign or other identification of the calling station.
- 680cg **33-66** (5) The call sign or other identification need not be sent more than once.

##### *Establishment of Radiotelephone Calls and Transmission of Radiotelegrams*

#### A. Establishment of Radiotelephone Calls

- 680cj **33-67** § 22. (1) In setting up a radiotelephone call the coast station should establish connection with the telephone network as quickly as pos-

sible. In the meantime the mobile station shall maintain watch on the appropriate working frequency as indicated by the coast station.

- 680ck      **33-68**      (2) However, if the connection cannot be quickly established, the coast station shall inform the mobile station accordingly. The latter station shall then either :
- 680cl      **33-69**      a) maintain watch on the appropriate frequency until an effective circuit can be established ; or
- 680cm      **33-70**      b) contact the coast station later at a mutually agreed time.
- 680cn      **33-71**      (3) When a radiotelephone call has been completed, the procedure indicated in No. 33-81 shall be applied unless further calls are on hand at either station.

#### B. Transmission of Radiotelegrams

- 680cp MOD      **33-72** § 23. (1) The transmission of a radiotelegram should be made as follows:

Radiotelegram begins, from ... (name of ship or aircraft) ;

- number ... (serial number of radiotelegram) ;
- number of words ... ;
- date ... ;
- time ... (time radiotelegram was handed in aboard ship or aircraft) ;
- service indications (if any) ;
- address ... ;
- text ... ;
- signature ... (if any) ;
- radiotelegram ends, over.

- 680cq      **33-73**      (2) As a general rule radiotelegrams of all kinds transmitted by ship stations, and radiotelegrams in the public correspondence service transmitted by aircraft stations shall be numbered in a daily

series ; number 1 shall be given to the first radiotelegram sent each day to each separate station.

- 680cr      **33-74**      (3) A series of numbers which has begun in radiotelegraphy should be continued in radiotelephony and vice versa.
- 680cs      **33-75**      (4) Each radiotelegram should be transmitted once only by the sending station. However, it may, when necessary, be repeated in full or in part by the receiving or the sending station.
- 680ct      **33-76**      (5) When, during the transmission of a radiotelegram, it is necessary to spell certain expressions, difficult words, etc. the spelling table given in Appendix 16 shall be used.
- 680cu      **33-77**      (6) In transmitting groups of figures each figure shall be spoken separately and the transmission of each group or series of groups shall be preceded by the words "in figures". In cases of language difficulties the figure table given in Appendix 16 shall be used.
- 680cv      **33-78**      (7) Numbers written in letters shall be spoken as they are written, their transmission being preceded by the words "in letters".

#### C. Acknowledgment of Receipt

- 680cx      **33-79** § 24. (1) The acknowledgment of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner :
- the call sign or other identification of the sending station ;
  - the words THIS IS ;
  - the call sign or other identification of the receiving station ;
  - " Your No. . . . received, over " ;
  - or*
  - " Your No. . . . to No. . . . received, over " .
- 680cy      **33-80**      (2) The radiotelegram, or series of radiotelegrams, shall not be considered as cleared until this acknowledgment has been received.

- 680cz                    **33-81**        (3) The end of work between two stations shall be indicated by each of them by means of the word "Out".

#### Section V. Duration and Control of Working

- 680da                    **33-82** § 25. (1) In the maritime mobile service calling and signals preparatory to traffic shall not exceed two minutes when made on 2 182 kc/s or on 156·80 Mc/s (but see No. 33-01).

- 680db MOD              **33-83**        (2) In communications between land stations and mobile stations, the mobile station shall comply with the instructions given by the land station in all questions relating to the order and time of transmission, to the choice of frequency, and to the duration and suspension of work.

- 680dc                    **33-84**        (3) In communications between mobile stations, the station called controls the working in the manner indicated in No. 33-83. However, if a land station finds it necessary to intervene, these stations shall comply with the instructions given by the land station.

#### Section VI. Tests

- 680dd                    **33-85** § 26.    When it is necessary for a mobile station to send signals for testing or adjustments which are liable to interfere with the working of neighbouring coast stations, the consent of these stations shall be obtained before such signals are sent.

- 680de                    **33-86** § 27. (1) When it is necessary for a station to make test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals shall not be continued for more than ten seconds, and shall include the call sign or other identification of the station emitting the test signals. This call sign or other identification shall be spoken slowly and distinctly.

- 680df                    **33-87**        (2) Any signals sent for testing shall be kept to a minimum particularly on 2 182 kc/s, 156·80 Mc/s and in the Tropical Zone of Region 3 on 6203·5 kc/s.

## ARTICLE 34.

**Calls by Radiotelephony**

- 703a      **34-01** § 1. (1) The provisions of this Article are not applicable to the aeronautical mobile service when special agreements exist between the governments concerned.
- 703b      **34-02**      (2) Aircraft stations when communicating with stations of the maritime mobile service shall use the procedure specified in this Article.
- 703c      **34-03** § 2. (1) As a general rule, it rests with the mobile station to establish communication with the land station. For this purpose the mobile station may call the land station, only when it comes within the service area of the latter, that is to say, that area within which by using an appropriate frequency, the mobile station can be heard by the land station.
- 703d      **34-04**      (2) However, a land station having traffic for a mobile station may call this station if it has reason to believe that the mobile station is keeping watch and is within the service area of the land station.
- 703e      **34-05** § 3. (1) In addition, each coast station shall, so far as practicable, transmit its calls in the form of "traffic lists" consisting of the call signs or other identification in alphabetical order of all mobile stations for which it has traffic on hand. These calls shall be made at specified times fixed by agreement between the administrations concerned and at intervals of at least two hours and not more than four hours during the working hours of the coast station.
- 703f      **34-06**      (2) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands.
- 703g      **34-07**      (3) They may, however, announce this transmission by the following brief preamble sent on a calling frequency :

- “Hullo all stations” not more than three times ;
- the words “THIS IS” ;
- “. . . Radio” not more than three times ;
- “Listen for my traffic list on . . . kc/s”.

In no case may this preamble be repeated.

- 703h **34-08** (4) The provisions of No. 34-07 are obligatory when 2 182 kc/s or 156.80 Mc/s is used.
- 703i **34-09** (5) The hours at which coast stations transmit their traffic lists and the frequencies and classes of emission which they use for this purpose shall be stated in the list of stations.
- 703j **34-10** (6) Mobile stations should as far as possible listen to the traffic lists transmitted by coast stations. On hearing their call sign or other identification in such a list they must reply as soon as they can do so.
- 703k **34-11** (7) When the traffic cannot be sent immediately, the coast station shall inform each mobile station concerned of the probable time at which working can begin, and also, if necessary, the frequency and class of emission which will be used.
- 703l **34-12 § 4.** When a land station receives calls from several mobile stations at practically the same time, it decides the order in which these stations may transmit their traffic. Its decision shall be based on the priority (see No. 37-01) of the radiotelegrams or radiotelephone calls that mobile stations have on hand and on the need for allowing each calling station to clear the greatest possible number of communications.
- 703m **34-13 § 5.** (1) When a station called does not reply to a call sent three times at intervals of two minutes, the calling shall cease and shall not be renewed until after an interval of fifteen minutes.
- 703n **34-14** (2) However, in the case of a communication between a station of the maritime mobile service and an aircraft station, calling may be renewed after an interval of five minutes.

- 703o **34-15** (3) Before renewing the call, the calling station shall ascertain that the station called is not in communication with another station.
- 703p **34-16** (4) If there is no reason to believe that harmful interference will be caused to other communications in progress, the provisions of Nos. 34-13 and 34-14 are not applicable. In such cases the call, sent three times at intervals of two minutes, may be repeated after an interval of less than fifteen minutes but not less than three minutes.
- 703q **34-17** § 6. Mobile stations shall not radiate a carrier wave between calls.
- 703r **34-18** § 7. When the name and address of the administration or private operating agency controlling a mobile station are not given in the appropriate list of stations or are no longer in agreement with the particulars given therein, it is the duty of the mobile station to furnish as a matter of regular procedure, to the land station to which it transmits traffic, all the necessary information in this respect.
- 703s **34-19** § 8. (1) The land station may ask the mobile station to furnish it with the following information :
- 703t **34-20** a) position and, whenever possible, course and speed.
- 703u **34-21** b) next port of call.
- 703v **34-22** (2) The information referred to in Nos. 34-19 to 34-21 should be furnished by mobile stations without prior request from the coast station, whenever such a measure seems appropriate.
- 703w **34-23** (3) The information referred to in Nos. 34-19 to 34-22 is furnished on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

## ARTICLE 35

### Use of Frequencies for Radiotelephony in the Maritime Mobile Service

#### Section I. General Provisions

804

- 35-01** § 1. (1) The provisions of this Article are applicable to radio-telephone stations of the maritime mobile service.



805 **35-02** (2) Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They shall then comply with the provisions of this Article and Article 27.

805a **35-03** (3) Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service, the provisions of Nos. 35-05 and 35-06 shall be complied with.

810 **35-04** § 2. The frequencies of transmission (and reception when these frequencies are in pairs as in the case of duplex radiotelephony) assigned to each coast station shall be indicated in the appropriate list of stations. This list shall also indicate any other useful information concerning the service performed by each coast station.

## **Section II. Bands between 1 605 and 4 000 kc/s**

### *A. Distress*

813 **35-05** § 3. (1) The frequency 2 182 kc/s is the international distress frequency for radiotelephony; it shall be used for this purpose by ship, aircraft and survival craft stations using frequencies in the authorized bands between 1 605 and 4 000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for the urgency signals and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2 182 kc/s.

813a **35-06** (2) However, ship and aircraft stations which cannot transmit on 2 182 kc/s should use any other available frequency on which attention might be attracted.

814 **35-07** (3) Except for transmissions authorized on 2 182 kc/s, all transmissions on the frequencies between 2 170 and 2 194 kc/s are forbidden.

814a **35-08** (4) Any coast station using 2 182 kc/s for distress purposes should be able to transmit, as soon as practicable, the radiotelephone

alarm signal described in No. 36-86 (see also Nos. 36-92, 36-93 and 36-94).

#### *B. Call and Reply*

- 816                    **35-09** § 4. (1) The frequency 2 182 kc/s may also be used :
- 816a                   **35-10**            a) for call and reply in accordance with the provisions of Article 33 ;
- 816b                   **35-11**            b) by coast stations to announce the transmission, on another frequency, of traffic lists (see Nos. 34-06 to 34-09).
- 817                    **35-12**            (2) In addition, an administration may assign to its stations other frequencies for call and reply.
- 817a                   **35-13** § 5.        To facilitate the reception of distress calls, all transmissions on 2 182 kc/s shall be kept to a minimum.

817b       SUP

#### *C. Watch*

- 819                    **35-14** § 6. (1) All coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes shall, during their hours of service, maintain a watch on 2 182 kc/s.
- 820                    **35-15**            (2) These stations shall maintain this watch by means of an operator using some aural method, such as headphones, split headphones or loudspeaker.
- 820a                   **35-16**            (3) In addition, ship stations should keep the maximum watch practicable on 2 182 kc/s for receiving by any appropriate means the radiotelephone alarm signal described in No. 36-86, as well as distress, urgency and safety signals.
- 820b                   **35-17** § 7.        Ship stations open to public correspondence should, as far as possible during their hours of service, keep watch on 2 182 kc/s.

*D. Traffic*

- 821                    **35-18** § 8. (1) Coast stations which use 2 182 kc/s for calling shall be able to use at least one other frequency in the authorized bands between 1 605 and 2 850 kc/s.
- 821a                  **35-19**        (2) Coast stations open to the public correspondence service on one or more frequencies between 1 605 and 2 850 kc/s shall also be capable of transmitting and receiving class A3 emissions on 2 182 kc/s.
- 822                    **35-20**        (3) One of the frequencies which coast stations are required to be able to use (see No. 35-18) is printed in heavy type in the appropriate list to indicate that it is the normal working frequency of the station. Supplementary frequencies, if assigned, are shown in ordinary type.
- 823                    **35-21**        (4) Working frequencies of coast stations shall be chosen in such a manner as to avoid interference with other stations.
- 823a SUP    823b SUP    823c SUP    823d SUP    823e SUP

*E. Additional Provisions Applying to Region 1*

- 824                    **35-22** § 9. (1) The provisions of this sub-section apply only to stations of the maritime mobile service.
- 825                    **35-23**        (2) The carrier power of mobile radiotelephone stations operating in the authorized bands between 1 605 and 2 850 kc/s shall not exceed 100 watts.
- 825a                  **35-24**        (3) The carrier power of coast radiotelephone stations, operating in the authorized bands between 1 605 and 3 800 kc/s, shall be limited to :  
                              — 2 kilowatts for coast stations located north of latitude 32°N ;  
                              — 3.5 kilowatts for coast stations located south of latitude 32°N.

- 825aa ADD 35-25 § 10. (1) All stations on ships making international voyages should be able to use :
- 825ab ADD 35-26 a) the ship-shore working frequency 2 049 kc/s, if required by their service ;
- 825ac ADD 35-27 b) the intership frequency 2 056 kc/s, if required by their service. This frequency may be used as an additional ship-shore frequency.
- 825ad ADD 35-28 (2) These frequencies shall not be used for working between stations of the same nationality.
- 825b 35-29 § 11. (1) Additionally, when a ship station of one country wishes to communicate with a coast station in another country, the ship station may use one of its own assigned ship-to-shore frequencies, by agreement with the coast station, even if the use of such frequency is not provided for in the area where the ship is located.
- 825c 35-30 (2) Ships frequently exchanging correspondence with a coast station of a nationality other than their own may use the same frequencies as ships of the nationality of the coast station where mutually agreed by the administrations concerned.

*F. Additional Provisions Applying to Regions 1 and 3*

- 826 35-31 § 12. (1) In order to increase the safety of life at sea, and over the sea, all stations of the maritime mobile service, normally keeping watch on frequencies in the authorized band between 1 605 and 2 850 kc/s shall, during their hours of service and, as far as possible, take steps to keep watch on the international distress frequency 2 182 kc/s for three minutes twice each hour beginning at x h. 00 and x h. 30 Greenwich mean time (G.M.T.)<sup>1</sup>.
- 827 35-32 (2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease within the band 2 170-2 194 kc/s.

35-31 <sup>1</sup> In Region 3, this Regulation does not apply to Japan and the Philippines.

Title ADD

*G. Additional Provisions applying to Regions 2 and 3*

827zero ADD

- 35-33** § 13. All stations on ships making international voyages should be able to use the intership frequency 2 638 kc/s, if required by their service.

**Section III. Bands Between 4 000 kc/s and 23 000 kc/s***A. Call, Reply and Safety*

827a

- 35-34** § 14. In the bands authorized for radiotelephony, ship stations may use, for calling, one of the following frequencies :

8 269 kc/s

12 403.5 kc/s

16 533.5 kc/s

22 074 kc/s

827b

- 35-35** § 15. In that part of the Tropical Zone situated in Region 3, 6 203.5 kc/s, using double-sideband emissions, is designated for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.

*B. Watch*

827c

- 35-36** § 16. Coast stations open to public correspondence may, optionally, maintain watch on the calling frequencies listed in No. 35-34. Stations maintaining this watch are indicated in the appropriate list of stations.

*C. Traffic*

829

- 35-37** § 17. (1) For the conduct of duplex telephony, the frequencies of emission of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Appendix 17.

- 829a      **35-38**      (2) The single sideband working frequencies given in Section B of Appendix 15 are intended to encourage the use of single sideband operation.
- 829b      **35-39**      (3) Administrations may assign these frequencies to ships of any category according to traffic requirements.
- 829c      **35-40**      (4) The Recommendations of the C.C.I.R. should be used as a guide in the design of equipment intended to operate in these bands.

#### **Section IV. Bands between 156 and 174 Mc/s**

##### *A. Call, Reply and Safety*

- 830      **35-41** § 18. (1) The frequency 156.80 Mc/s is designated for world-wide use by the international maritime mobile radiotelephone service in Band 8 for call, reply and safety purposes. It may also be used for messages preceded by the urgency and safety signals and, if necessary, for distress messages.
- 830a      **35-42**      (2) This frequency may also be used by coast stations to announce the transmission on another frequency of their traffic lists and important maritime information.
- 830b      **35-43**      (3) Any one of the channels designated in Appendix 18 for public correspondence may be used as a calling channel if an administration so desires. Such use shall be indicated in the appropriate list of stations.
- 830c      **35-44**      (4) Ship and coast stations in the public correspondence service may use a working frequency, for calling purposes, as provided in Article 33.
- 831      **35-45**      (5) All emissions in the band 156.725-156.875 Mc/s capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.80 Mc/s are forbidden.

##### *B. Watch*

- 831a      **35-46** § 19. (1) A coast station providing an international maritime mobile service of radiotelephony in the band 156 to 174 Mc/s should, during

its working hours in that band, maintain, as far as possible, an efficient aural watch on 156.80 Mc/s.

- 831b      **35-47**      (2) In addition to the watch referred to in No. 35-46, a coast station open to the international public correspondence service should, during its hours of service, maintain watch on its receiving frequency or frequencies indicated in the appropriate list of stations for receiving calls from mobile stations.
- 831c      **35-48**      (3) The method of watch on a working frequency shall be no less efficient than watch by an operator.
- 831d      **35-49**      (4) Ship stations should, where practicable, maintain watch on 156.80 Mc/s when within the service area of a coast station providing international maritime mobile radiotelephone service in Band 8.
- 831e      **35-50** § 20.      A coast station in the port operations service in an area where 156.80 Mc/s is being used for distress, urgency or safety, shall, during its working hours, keep an additional watch on 156.60 Mc/s or other port operations frequency indicated in heavy type in the appropriate list of stations.

### *C. Traffic*

- 831f      **35-51** § 21. (1) Where practicable, coast stations open to the international public correspondence service shall be capable of working with ship stations equipped for duplex or semi-duplex operation.
- 831g      **35-52**      (2) The method of working (single-frequency or two-frequency), specified in Appendix 18 for each channel should be used in the international services.
- 831h      **35-53** § 22.      Communications in the port operations service shall be restricted to those relating to the movement and the safety of ships and, in emergency, to the safety of persons.

- 831i **35-54** § 23. (1) Coast stations, which use 156-80 Mc/s for calling shall be able to use at least one other authorized channel in the international maritime mobile radiotelephone service in the band 156 to 174 Mc/s.
- 831j **35-55** (2) In the band 156 to 174 Mc/s, administrations shall, where practicable, assign frequencies to coast and ship stations in accordance with the Table of Transmitting Frequencies given in Appendix 18 for such international services as administrations consider necessary.
- 831k **35-56** (3) In assigning frequencies to their coast stations, administrations should collaborate in cases where harmful interference might occur.
- 831l **35-57** (4) Channels are designated by numbers in the Table of Transmitting Frequencies given in Appendix 18.
- 832 **35-58** § 24. (1) In assigning frequencies to stations of authorized services, other than maritime mobile, administrations shall avoid the possibility of interference to international maritime services in Band 8.
- 832a **35-59** (2) The use of channels for maritime mobile purposes other than those indicated in the Table of Transmitting Frequencies given in Appendix 18 shall not cause harmful interference to services which operate in accordance with that Table and shall not prejudice the future development of such services.
- 834a **35-60** § 25. (1) In Region 1, the carrier power of ship station transmitters should not exceed 20 watts.
- 834b **35-61** (2) In Regions 2 and 3, the carrier power of ship station transmitters up to 50 watts may be allowed.



APPENDIX  
(See Article 9)

**Section A. Basic Characteristics to be furnished for Notification  
under No. 9-01 of the Regulations**

|           |  |
|-----------|--|
| Column 1  | Assigned frequency.  |
| Column 2c | Date of putting into use.  |
| Column 3  | Call sign (Identification).<br><i>This is not a basic characteristic for stations referred to in No. 19-01.1.</i>  |
| Column 4a | Name of the transmitting station.  |
| Column 4b | Country in which the transmitting station is located.  |
| Column 4c | Longitude and latitude of the transmitter site.  |
| Column 5a | Locality(ies) or area(s) with which communication is established.<br><i>This is not a basic characteristic for land, earth, radio-navigation land, radiolocation land or standard frequency stations, or for ground-based stations in the meteorological aids service.</i> |
| Column 5b | Length of circuit (km)<br><i>This is a basic characteristic only for land, earth, radio-navigation land, radiolocation land and standard frequency stations.</i>   |
| Column 6  | Class of station and nature of service.  |
| Column 7  | Class of emission, necessary bandwidth and description of transmission.  |
| Column 8  | Power (in kW).   |
| Column 9a | Azimuth of maximum radiation.  |

Column 10 Maximum hours of operation of the circuit to each locality or area (G.M.T.).

Column 11 Megacycle order of the other frequencies normally utilized for the same circuit.

*This is a basic characteristic only for fixed stations within the range 4 000 kc/s to 28 000 kc/s.*

Supplementary information : reference frequency or frequencies, if any.

**Section B. Basic Characteristics to be Furnished for Notification  
under No. 9-02 of the Regulations**

Column 1 Assigned frequency.

Column 2c Date of putting into use.

Column 4a The letter " R ".

Column 4b Country in which the receiving (land or earth) station is located.

Column 4c Longitude and latitude of the site of the receiving (land or earth) station.

Column 5a Name of the receiving (land or earth) station.

Column 5b Maximum distance in km between mobile or space stations and the receiving (land or earth) station.

Column 6 Class of mobile or space stations and nature of service.

Column 7 Class of emission of mobile or space stations and necessary bandwidth.

Column 8 Highest power used by the mobile or space stations.

Column 10 Maximum hours of operation of the mobile or space stations (G.M.T.).

**Section C. Basic Characteristics to be Furnished for Notification  
under No. 9-05 of the Regulations**

|           |  |
|-----------|--|
| Column 1  | Assigned frequency.  |
| Column 2c | Date of putting into use.  |
| Column 4b | Country in which the transmitting station is located.                        |
| Column 5a | Locality(ies) or area(s) with which communication is established.            |
| Column 6  | Class of station and nature of service.                                      |
| Column 7  | Class of emission, necessary bandwidth and description of transmission.      |
| Column 8  | Power (in kW).   |
| Column 10 | Maximum hours of operation of the circuit to each locality or area (G.M.T.). |

**Form of Notice\***

For use when Notifying to the International Frequency Registration Board a Frequency Assignment  
or a Change to an Assignment Recorded in the Master International Frequency Register  
(see Article 9)

(a) Notifying administration

\_\_\_\_\_ kc/s  
\_\_\_\_\_ Mc/s

(b) New assignment

(c) Change of characteristics of a recorded assignment in the Master Register

(d) Deletion of an assignment

(e) { Notice No. \_\_\_\_\_  
Date \_\_\_\_\_

1 Assigned frequency

2c \_\_\_\_\_ Date of putting into use

3 \_\_\_\_\_ Call sign (Identification)

For I.F.R.B. use

4a \_\_\_\_\_ Name of transmitting station

4b \_\_\_\_\_ Country

4c \_\_\_\_\_ Longitude and latitude of the transmitter site

| Locality(ies) or area(s) with which communication is established<br><br>5a | Length of circuit (km)<br><br>5b | Class of station and nature of service<br><br>6 | Class of emission, necessary bandwidth and description of transmission<br><br>7 | Power (in kW)<br>Pc<br>Pm<br>Pp<br>e<br><br>8 | Transmitting antenna characteristics   |  |                             | Maximum hours of operation of the circuit to each locality or area (G.M.T.)<br><br>10 | Megacycle order of the other frequencies normally utilized for the same circuit<br><br>11 | Supplementary information |
|--|----------------------------------|---|---|---|--|--|-----------------------------|---|---|---------------------------|
|  |                                  |   |   |   | Azimuth of maximum radiation<br><br>9a | Angular width of radiation main lobe<br><br>9b | Antenna gain (db)<br><br>9c |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |
|  |                                  |   |   |   |  |  |                             |   |   |                           |

12a \_\_\_\_\_ Operating Administration or Company

Regional or service agreement \_\_\_\_\_ COORD/ \_\_\_\_\_

12b \_\_\_\_\_ Name and postal address } of  
\_\_\_\_\_ Telegraphic address } administration  
(Article 15)

Other information: \_\_\_\_\_

\* The actual size of the notice is a matter for individual administrations.

Section D. Form of Notice

### Section E. General Instructions

1. A separate notice shall be sent to the International Frequency Registration Board for notifying :
  - Each new frequency assignment,
  - Any change in the characteristics of a frequency assignment recorded in the Master International Frequency Register (hereinafter called the *Master Register*),
  - Any total deletion of a frequency assignment recorded in the Master Register.
2. Frequencies prescribed by these Regulations for common use, such as 500 kc/s, or 2 182 kc/s, should not be notified (see No. 9-03).
3. Separate entries, in Columns 5a to 10, should be made for the various characteristics when they do not apply to the assignment as a whole, for instance when the class of emission or the power differs according to the localities or areas of reception.
4. When submitting notices for television broadcasting stations in Region 1, separate notices shall be submitted for the sound and vision channels. In such cases, the notice shall relate to the sound and vision carrier frequencies.

### I. General Notes

- (a) The name of the notifying administration should be indicated.
- (b) Indicate in this box by the letter "X" when the notice reflects :
  - the first use of a frequency by a station,
  - or
  - the first use of an additional frequency by a station.
- (c) Indicate in this box by the letter "X" when the notice reflects a change in the characteristics of a frequency assignment recorded in the Master Register.
  - (1) In the case where existing particulars (including the frequency) are changed, the new characteristics in the appropriate place should

be underlined ; the original characteristics which have been changed should be shown in brackets underneath or at the side.

- (2) In the case where the change is an addition to existing particulars, the additional characteristics should be shown in the appropriate place and should be underlined.
- (3) In the case where the change is a cancellation of a particular characteristic or characteristics, this should be shown in the appropriate place by a dash and, underneath or at the side, the characteristics which have been cancelled should be shown in brackets.
- (d) Indicate in this box by the letter "X" when the notice reflects a deletion of an assignment, in all of its notified characteristics.
- (e) The serial number of the notice and the date on which the notice is sent to the Board shall be shown here.

## II. Notes Concerning Information to be Entered in the Notice Pertaining to Specific Columns of the Master Register

### *Column 1*    Assigned frequency

1. Indicate the assigned frequency as defined in Article 1 \*, in kc/s up to 30 000 kc/s inclusive, and in Mc/s above 30 000 kc/s.
2. *This information is a basic characteristic.*

### *Column 2c*    Date of putting into use

1. In the case of a new assignment, insert the date (actual or foreseen, as appropriate) of putting the frequency assignment into use.
2. Whenever the assignment is changed in any of its basic characteristics, as defined in this Appendix except in the case of a change in Columns 3, 4a or 11, then the date to

---

\* For television broadcasting stations in Region 1, the frequencies to be notified are those of the sound and vision carriers.

be indicated shall be that of the latest change (actual or foreseen, as appropriate).

3. *This information is a basic characteristic.*

**Column 3** Call sign (Identification)

1. Indicate the call sign or other identification used in accordance with Article 19.
2. *This information is a basic characteristic, except for stations referred to in Nos. 9-05 and [19-01.1] or when the frequency assignment is used for reception in the circumstances described in No. 9-02.*

**Column 4** Name and location of transmitting station

- 4a Indicate the name of the locality by which the transmitting station is known or in which it is situated.
- 4b Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.
- 4c Indicate the geographical co-ordinates (in degrees and minutes) of the transmitter site.

However, when the frequency assignment is used for reception in the circumstances described in No. 9-02, the indication to be given in Column 4 is as follows :

- 4a The letter " R ".
- 4b The country in which the receiving (land or earth) station is located.
- 4c The geographical co-ordinates (in degrees and minutes) of the site of the receiving (land or earth) station.

*The information to be supplied for Columns 4a, 4b and 4c is a basic characteristic. However, for stations referred to*

*in No. 9-05 only the information to be supplied in Column 4b is a basic characteristic.*

**Column 5a** Locality(ies) or area(s) with which communication is established.

1. Indicate in this column only the locality(ies) or area(s) to which the frequency is normally used.
2. For fixed stations, indicate the name of the locality by which the receiving station is known or in which it is situated.
  - a) Reception points may be grouped and entered collectively as areas in this column if all other basic characteristics of the frequency assignment are the same with respect to each such point and provided the area is well defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view.
  - b) Similarly, in the case of one-way simultaneous transmissions to multiple points, representative points outlining the area being served may be indicated, but it should be specified as Supplementary Information that this is a simultaneous transmission.
  - c) In the case of a network composed of stations intercommunicating on the same frequency, the symbol ZN shall be entered in Column 5a. When the same frequency is used for two or more networks of the same administration, each network should be identified by a separate letter following the network symbol ZN, e.g. ZN-A, ZN-B, etc.
  - d) In the case of a network, as well as in the case where a frequency is used in a specific area by numerous stations under the jurisdiction of the same administration, it is necessary to notify only sufficient stations to define the



area of operation, provided that that area is well defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view.

3. For land, earth, radionavigation land, radiolocation land and standard frequency stations and ground-based stations in the meteorological aids service, it is not necessary to indicate any information in this column.
4. For broadcasting stations, the areas of reception should be indicated. Each area should be either a country or one of the zones indicated on the map annexed to this Appendix.
5. For reception in the circumstances described in No. 9-02, the name of the locality by which the receiving (land or earth) station is known or in which it is situated should be indicated.
6. In the case of a notification under No. 9-05 in a frequency band above 28 000 kc/s, each area in which the particular frequency is used should be clearly defined in order to assist co-ordination with other administrations.
7. *This information is a basic characteristic*, except for paragraph 3 above.

*Column 5b* Length of circuit (km)

1. The length of the circuit in km should be indicated in this column.
2. For reception in the circumstances described in No. 9-02, the maximum distance between the mobile or space stations and the receiving (land or earth) station should be indicated.

3. This information is not a basic characteristic *except in the case of paragraph 2 above, and in the case of land, earth, radionavigation land, radiolocation land and standard frequency stations. In these latter cases, the distances shown shall represent the service ranges.*

**Column 6** Class of station and nature of service

1. Indicate the class of station and nature of service performed, using the symbols shown in Appendix 10.
2. When the frequency assignment is used for reception in the circumstances described in No. 9-02, the class of station and nature of service applicable to the mobile or space stations should be indicated.
3. *This information is a basic characteristic.*

**Column 7** Class of emission, necessary bandwidth and description of transmission.

1. Indicate, for each locality or area of reception shown in Column 5a, the class of emission, necessary bandwidth and description of transmission, in accordance with Article 2 and Appendix 5.
2. When the frequency assignment is used for reception in the circumstances described in No. 9-02, the particulars to be indicated are those applicable to the mobile or space stations.
3. *This information is a basic characteristic.*

**Column 8** Power (in kW)

1. The power supplied to the antenna transmission line shall be notified as follows, according to the class of emission :

- a) Carrier power ( $P_c$ ) for A3 sound broadcasting (see No. 1-97);
  - b) Mean power ( $P_m$ ) for other amplitude modulated emissions using unkeyed full carrier, and for all frequency modulated emissions (see No. 1-96);
  - c) Peak envelope power ( $P_p$ ) for all classes of emission other than those referred to in a) or b), including A5 television (vision) (see No. 1-95).
2. In the frequency bands above 28 000 kc/s, except for the notices referred to in 9-05, the power notified may be either the effective radiated power (see No. 1-98), or the power supplied to the antenna transmission line. In the latter case, the antenna gain (Column 9c) is a basic characteristic.
  3. The appropriate symbol  $P_c$ ,  $P_m$  or  $P_p$  shall follow the indication of the value of the power. In cases where the effective radiated power is notified, this symbol shall be followed by the letter "e".
  4. The power normally used to each locality or area of reception shown in Column 5a shall be indicated.
  5. When the frequency assignment is used for reception in the circumstances described in No. 9-02 the power of the mobile or space stations should be indicated. If not all of the stations use the same power, the highest power should be indicated.
  6. *This information is a basic characteristic.*

*Column 9* Transmitting antenna characteristics

*Column 9a* Azimuth of maximum radiation

1. If a directive transmitting antenna is used, indicate the azimuth of maximum radiation of the transmitting antenna in degrees (clockwise) from True North.
2. If a transmitting antenna with non-directional characteristics is used, insert "ND" in this column.
3. *This information is a basic characteristic, except for stations referred to in No. 9-05 or when the frequency assignment is used for reception in the circumstances described in No. 9-02.*

*Columns 9b and 9c*

*If the radiation characteristics of the antenna concerned differ from those recommended by the C.C.I.R., the following information should be notified in Columns 9b and 9c :*

*Column 9b* Angular width of radiation main lobe

The total angle in the horizontal plane, in degrees, within which the radiation power in any direction does not fall more than 6 db below the power radiated in the direction of maximum radiation, should be indicated.

*Column 9c* Antenna gain (db)

1. The relative gain of the antenna in the direction of maximum radiation for the assigned frequency should be indicated (see No. 1-101).
2. *In the frequency bands above 28 000 kc/s, the antenna gain is a basic characteristic in the case where the power notified in Column 8 is the power supplied to the antenna transmission line.*  
It is not a basic characteristic if the effective radiated power is notified in Column 8.

**Column 10** Maximum hours of operation of the circuit to each locality or area (G.M.T.)

1. When the frequency assignment is used for reception in the circumstances described in No. 9-02 the maximum hours of operation are those relating to the mobile or space stations.
2. As complementary information, indicate by the letter "I" any part of the period during which the operation of the circuit is intermittent.
3. *This information is a basic characteristic, except for paragraph 2 above.*

**Column 11** Megacycle order of the other frequencies normally utilized for the same circuit.

1. If the notified frequency is the only frequency used for the particular circuit, the indication "Nil" shall be inserted in this column.
2. In the case of a meteorological or press broadcast transmission intended to cover a large area, the separate notice made for each frequency assignment required for transmission to each specific part of this area should indicate "Nil" in this column, subject to the condition that the specific area notified in Column 5a satisfies the conditions laid down in sub-paragraph 2a) relating to that column.
3. In cases other than those mentioned in paragraphs 1 and 2, the megacycle order of the other frequencies normally used for the circuit over the whole of the solar cycle shall be indicated. For this purpose, the megacycle order shall be calculated according to the following ranges :

| Range                | Megacycle Order |
|----------------------|-----------------|
| 4 000 - 5 999 kc/s   | 5               |
| 6 000 - 7 999 kc/s   | 7               |
| ⋮                    | ⋮               |
| 26 000 - 27 999 kc/s | 27              |

4. *This information is a basic characteristic for fixed stations between 4 000 kc/s and 28 000 kc/s.*

*Column 12a* Operating Administration or Company \*

*This information is not a basic characteristic, but it is recommended it be supplied in cases where the same agency operates in more than one country.*

*Column 12b* Postal and telegraphic address of the administration responsible for the station.\*

1. The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of the circuit (see Article 15).
2. This information is not a basic characteristic.

*Supplementary Information*

Any supplementary information supplied by the administration should be indicated within the frame provided on the notice.

1. If the assignment is made in application of a regional or service agreement; the relevant agreement shall be indicated in the appropriate place; otherwise, insert the indication "Nil".
2. Indicate after the symbol COORD/---- the name of any administration with which co-ordination has been effected for the use of the frequency; if no co-ordination has been effected, the indication "Nil" should be inserted. In the case of a notification under No. 9-05 in a frequency band above 28 000 kc/s, the area or areas of the actual agreed use to which the co-ordination refers should be indicated.

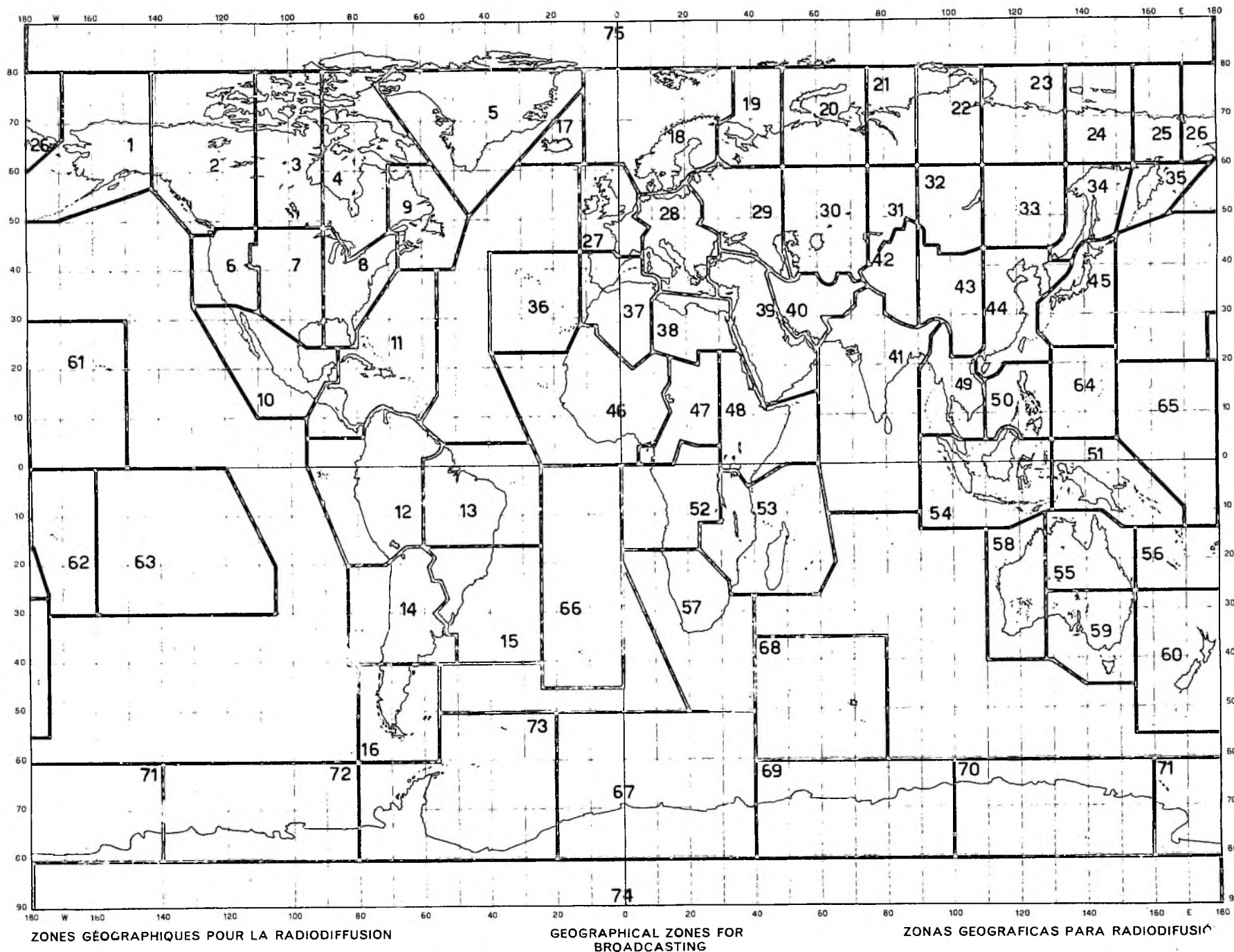
\* Where this information already appears in the Preface to the International Frequency List, the appropriate reference number or letter may be used.

3. In any case where there are one or more reference frequencies in a particular transmission (e.g. in the case of (a) the frequency of the reduced carrier in an independent or single sideband emission, and (b) the frequencies of the audio and video carriers in a television emission), such reference frequencies shall be supplied. In the case of television broadcasting stations in Region 1, each notice shall include, as supplementary information, both the frequency of the other carrier and the assigned frequency.

4. Any other information which the administration considers to be relevant should be indicated, such as, for example, an indication that the assignment concerned would be operating in accordance with No. 3-03 of these Regulations, or information concerning the use of the notified frequency if such use is restricted or if the frequency is not used during all the time which is possible according to propagation conditions.

5. *Only the information specified in paragraph 3 above is a basic characteristic; it is recommended, however, that the information under paragraphs 1 and 2 above be supplied.*







BC

**Form of Notice \***  
 For Use when Submitting to the International Frequency Registration Board  
 a Seasonal High Frequency Broadcasting Schedule  
 or a Change thereto  
 (see Article 10)

(a) Notifying administration

(b) Assignment for the particular season

(c) Change of characteristics of an assignment for the season

(d) Deletion of an assignment for the season

Season: MARCH MAY SEPT. NOV.

Year :

Other date:

1a Assigned frequency  kc/s

1b Alternative frequency  kc/s

1c Frequency band  Mc/s

2c Date of putting into use in the particular season

3 Call sign (Identification)

4a Name of transmitting station

4b Country

4c Longitude and latitude of the transmitter site

| Zone(s) or area(s) of reception<br><br>5a | Class of emission and necessary bandwidth<br><br>7 | Power (kW)<br><br>8 | Transmitting antenna characteristics |  |                              |                              |                           | Hours of operation (G.M.T.)<br><br>10 | Other frequencies simultaneously utilized for same programme to the same area(s)<br><br>11 | Supplementary information |
|---|--|---------------------|--------------------------------------|--|------------------------------|------------------------------|---------------------------|---------------------------------------|--|---------------------------|
|   |  |                     | Azimuth of max. radiation<br><br>9a  | Angular width of radiation main lobe<br><br>9b | Antenna gain in db<br><br>9c | Angle of elevation<br><br>9d | Type of antenna<br><br>9e |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |
|   |  |                     |                                      |  |                              |                              |                           |                                       |  |                           |

12b  Name and postal address  
 Telegraphic address

of  
administration  
(Article 15)

COORD/   
 Other information:

\* The actual size of the notice is a matter for individual administrations

Section A. Form of Notice

(See Article 10)

APPENDIX 2

### Section B. General Instructions

1. A separate notice shall be sent to the I.F.R.B. for notifying :
  - Each frequency assignment to be put into use for a particular season ;
  - any change in the characteristics of a frequency assignment in the High Frequency Broadcasting Schedule, for the season ;
  - any deletion of a frequency assignment in the High Frequency Broadcasting Schedule, for the season.
2. Separate entries, in Columns 5a and 8 to 11, should be made for the various characteristics when they do not apply to the assignment as a whole, for instance when the power, antenna characteristic or hours of operation differ according to the zones or areas of reception.

#### I. General Notes

- (a) The name of the notifying administration should be indicated.
- (b) Indicate in this box by the letter "X" when the notice reflects the first frequency usage by a station in a particular season.
- (c) Indicate in this box by the letter "X" when the notice reflects a change in the characteristics of a frequency assignment in the High Frequency Broadcasting Schedule, for the season.
  - 1) In the case where existing particulars are changed, the new characteristics in the appropriate place should be underlined ; the original characteristics which have been changed should be shown in brackets underneath or at the side.
  - 2) In the case where the change is an addition to existing particulars, the additional characteristics should be shown in the appropriate place and should be underlined.
  - 3) In the case where the change is a cancellation of a particular characteristic or characteristics, this should be shown in the appropriate place by a dash and, underneath or at the side, the characteristics which have been cancelled should be shown in brackets.

(d) Indicate in this box by the letter "X" when the notice reflects a deletion of an assignment, in all of its notified characteristics, for the season.

(e) The serial number of the notice and the date on which the notice is sent to the Board shall be shown here.

## II. Notes Concerning Information to be Entered in the Specific Columns of the Notice

### *Column 1* Frequency

- 1a Indicate the assigned frequency as defined in Article 1, in kc/s ;
- 1 b indicate any suggested alternative frequency or frequencies in kc/s, or
- 1c the desired band in Mc/s, if a specific frequency is not given under 1a and 1b above.

### *Column 2c* Date of putting into use, in the particular season

- 1. If the assignment is to be brought into use on the implementation date of the seasonal schedule, indicate the last two digits of the year in the box(es) of the season(s) for which the assignment is to be used.
- 2. If the assignment is to be brought into use or changed by any date other than the implementation date of the particular seasonal schedule, this date shall be entered in the space provided.

### *Column 3* Call sign (Identification)

Indicate the call sign or other station identification used in accordance with Article 19.

### *Column 4* Name and location of transmitting station

- 4a Indicate the name of the locality by which the transmitting station is known or in which it is situated.

4b Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.

4c Indicate the geographical co-ordinates (in degrees and minutes) of the transmitter site.

*Column 5a* Zone(s) or area(s) of reception

1. Indicate in this column the zone(s) of reception as shown in the map annexed to Appendix 1.
2. If the reception area is smaller than an entire zone, it should be indicated as a country or part of a country using symbols from the Preface to the International Frequency List, as far as possible.
3. Indicate, as supplementary information, the maximum service range (in km) when this is considered necessary.

*Column 7* Class of emission and necessary bandwidth

Indicate the class of emission and necessary bandwidth in accordance with Article 2 and Appendix 5.

*Column 8* Power (in kW)

Indicate the carrier power into the transmission line.

*Transmitting Antenna Characteristics*

*Column 9a* Azimuth of maximum radiation

1. If a directive transmitting antenna is used, indicate the azimuth of maximum radiation of the transmitting antenna in degrees (clockwise) from True North.

2. If a transmitting antenna with non-directional characteristics is used, insert "ND" in this column.

*Column 9b* Angular width of radiation main lobe

The total angle in the horizontal plane, in degrees, within which the radiation power in any direction does not fall more than 6 db below the power radiated in the direction of maximum radiation, should be indicated.

*Column 9c* Antenna gain (db)

The relative gain of the antenna in the direction of maximum radiation for the assigned frequency should be indicated.

*Column 9d* Angle of elevation

The angle of the direction of maximum radiation in the vertical plane in degrees should be indicated.

*Column 9e* Type of antenna

The nomenclature of the C.C.I.R. book of "Antenna Diagrams" should be used wherever it is applicable as shown in a list at the end of this instruction (see III of this Section).

*Column 10* Hours of operation (G.M.T.)

*Column 11* Other frequencies simultaneously used for the same programme to the same area(s)

1. If the notified frequency is the only frequency used for the particular schedule, the indication "Nil" shall be inserted in this column.
2. In other cases, the other frequencies simultaneously used for the same programme to the same area shall be indicated.

*Column 12b* Postal and telegraphic address of administration responsible for the station \*

The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions, and questions referring to the technical operation (see Article 15).

### *Supplementary Information*

Any other information supplied by the administration should be indicated in the space provided.

1. Indicate after the symbol COORD/--- the name of any administration with which co-ordination has been effected for the use of the frequency; if no co-ordination has been effected, the indication "Nil" should be inserted.

2. Any other information which the administration considers to be relevant should be indicated, such as, for example, the maximum service range when this is less than 2 000 kms; or information concerning the use of the notified frequency if such use is restricted; or if the frequency is not used during all the hours indicated in Column 10, or on certain days of the week only; or if synchronizing techniques are used.

### **III. Symbols for Type of Antenna**

|     |                                  |
|-----|----------------------------------|
| HOR | Horizontal non-directive antenna |
| VER | Vertical non-directive antenna   |

---

\* Where this information already appears in the Preface to the International Frequency List, the appropriate reference number or letter may be used.

|       |  |
|-------|--|
| DP    | Dipole   |
| H     | Horizontal   |
| V     | Vertical   |
| R     | With reflector   |
|       | (Example : DPHR means : Horizontal dipole with reflector)  |
| H     | Horizontal dipole curtain antenna  |
| R     | With reflector curtain   |
| S     | Slewed antenna   |
| / . . | Number of half wave elements in each row   |
| / . . | Number of half wave elements in each stack (one above the other)   |
| / . . | Height above ground in full wavelengths of the bottom row of elements  |
| S . . | Angle of slew, if any  |
|       | (Example : HRS/4/3/2S15 means : Horizontal array with reflector curtain, 4 half wave elements in each row, 3 stacks of dipoles, bottom element 2 wavelengths above the ground, slewed with an angle of 15 degrees) |
| RHO   | Rhombic antenna  |
| / . . | Length of one side of the rhombus, in wavelengths  |
| / . . | Height of rhombus above ground, in wavelengths   |
| / . . | One half of the interior side angle of rhombus   |
|       | (Example : RHO/2.5/0.4/65 means : Rhombic antenna, length of one side 2.5 wavelengths, height above ground 0.4 wavelengths, one half of the interior side angle 65 degrees)  |
| TRO   | Tropical broadcasting antenna  |
| / . . | Number of rows   |
| / . . | Height above the ground in wavelengths   |
|       | (Example : TRO/4/0.2 means : Tropical BC antenna with 4 rows (and 4 dipoles in each row) in a height of 0.2 wavelengths above the ground)  |

| Former reference | Source                        | New reference |
|------------------|-------------------------------|---------------|
| App. 3           | Committee: 6<br>Doc. No.: 414 | App. 3        |

## APPENDIX 3

## Table of Frequency Tolerances †

(See Article 12)

1. Frequency tolerance is defined in Article 1 and is expressed in parts in  $10^6$  or, in some cases, in cycles per second.

2. The power shown for the various categories of stations is the mean power as defined in Article 1.

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations | Tolerances<br>applicable until<br>1st January, 1966* to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|---|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.   |  |
| <i>Band : 10 to 535 kc/s</i>  |   |  |
| 1. <i>Fixed Stations :</i>  |   |  |
| -10 to 50 kc/s  | 1 000   | 1 000  |
| -50 to 535 kc/s   | 200   | 200  |
| 2. <i>Land Stations :</i>   |   |  |
| a) <i>Coast Stations:</i>   |   |  |
| -power 200 W or less  | 500   | 500  |
| -power above 200 W  | 200   | 200  |
| b) <i>Aeronautical Stations</i>   | 200 *   | 100 *  |

† Certain services may need tighter tolerances for technical and operational reasons.



| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations | Tolerances<br>applicable until<br>1st January, 1966* to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|---|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.   |  |
| 3. <i>Mobile Stations</i> :   |   |  |
| a) Ship Stations  | 1 000 <sup>a)</sup>   | 1 000 <sup>a)</sup>  |
| b) Ships' Emergency Transmitters  | 5 000   | 5 000  |
| c) Survival Craft Stations  | 5 000   | 5 000  |
| d) Aircraft Stations  | 500   | 500  |
| 4. <i>Radiodetermination Stations</i>   | 200 *   | 100 *  |
| 5. <i>Broadcasting Stations</i>   | 20 c/s  | 10 c/s   |
| <i>Band : 535 to 1 605 kc/s</i><br><i>Broadcasting Stations</i>                                       | 20 c/s  | 10 c/s <sup>b)</sup>   |
| <i>Band : 1 605 to 4 000 kc/s</i>   |   |  |
| 1. <i>Fixed Stations</i> :  |   |  |
| —power 200 W or less  | 100   | 100  |
| —power above 200 W  | 50  | 50   |
| 2. <i>Land Stations</i> :   |   |  |
| —power 200 W or less  | 100   | 100  |
| —power above 200 W  | 50  | 50   |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations   | Tolerances<br>applicable until<br>1st January, 1966* to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|---|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.   |  |
| <b>3. Mobile Stations :</b><br>a) Ship Stations<br>b) Survival Craft Stations<br>c) Aircraft Stations<br>d) Land Mobile Stations<br><br><b>4. Radiodetermination Stations :</b><br>-power 200 W or less<br>-power above 200 W<br><br><b>5. Broadcasting Stations</b>        | 200<br>—<br>200 *<br>200<br><br>100<br>50<br><br>50   | 200<br>300<br>100 *<br>200<br><br>100<br>50<br><br>20  |
| <b>Band : 4 to 29.7 Mc/s</b><br><br><b>1. Fixed Stations :</b><br>-power 500 W or less<br>-power above 500 W<br><br><b>2. Land Stations :</b><br>a) Coast Stations:<br>-power 500 W or less<br>-power above 500 W and<br>less than or equal to 5kW<br>-power above and 5 kW | 100<br>30<br><br><br>50<br>50 *<br>50   | 50<br>15<br><br><br>50<br>30 *<br>15   |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations | Tolerances<br>applicable until<br>1st January, 1966* to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|---|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.   |  |
| b) Aeronautical Stations:<br>-power 500 W or less<br>-power above 500 W                               | 100<br>50   | 100<br>50  |
| c) Base Stations:<br>-power 500 W or less<br>-power above 500 W                                       | 100<br>50   | 100<br>50  |
| 3. <i>Mobile Stations</i> :   |   |  |
| a) Ship Stations :  |   |  |
| 1) Class A1 emission  | 200   | 200  |
| 2) Emission other than<br>Class A1 :  |   |  |
| -power 50 W or less   | 50  | 50   |
| -power above 50 W   | 50  | 50   |
| b) Survival Craft Stations  | 200   | 200  |
| c) Aircraft Stations  | 200 *   | 100 *  |
| d) Land Mobile Stations   | 200   | 200  |
| 4. <i>Broadcasting Stations</i>   | 30  | 15   |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations | Tolerances<br>applicable until<br>1st January, 1966 * to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|--|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.  |  |
| <i>Band : 29.7 to 100 Mc/s</i>  |  |  |
| 1. <i>Fixed Stations :</i>  |  |  |
| –power 200 W or less  | 200 *  | 50 *   |
| –power above 200 W  | 200  | 30   |
| 2. <i>Land Stations :</i>   |  |  |
| –power 15 W or less   | 200  | 50   |
| –power above 15 W   | 200  | 20   |
| 3. <i>Mobile Stations :</i>   |  |  |
| –power 5 W or less  | 200  | 100  |
| –power above 5 W  | 200  | 50   |
| 4. <i>Radiodetermination Stations</i>   | 200  | 200  |
| 5. <i>Broadcasting Stations<br/>(other than television) :</i>   |  |  |
| –power 50 W or less   | 50   | 50   |
| –power above 50 W   | 30   | 20   |
| 6. <i>Broadcasting Stations<br/>(television sound and vision) :</i>                                   |  |  |
| –power 50 W or less   | 100  | 100  |
| –power above 50 W   | 30   | 1 000 c/s  |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations | Tolerances<br>applicable until<br>1st January, 1966 * to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|--|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.  |  |
| <i>Band : 100 to 470 Mc/s</i>   |  |  |
| 1. <i>Fixed Stations :</i>  |  |  |
| —power 50 W or less   | 100 *  | 50 *   |
| —power above 50 W   | 100 *  | 20 *   |
| 2. <i>Land Stations :</i>   |  |  |
| a) Coast Stations   | 100  | 20   |
| b) Aeronautical Stations  | 100  | 50   |
| c) Base Stations :  |  |  |
| —power 5 W or less  | 100  | 50   |
| —power above 5 W  | 100  | 20   |
| 3. <i>Mobile Stations :</i>   |  |  |
| a) Ship Stations and Survival<br>Craft Stations:  |  |  |
| —in the band 156-174 Mc/s:  | 100  | 20   |
| —outside this band  | 100 <i>d)</i>  | 50 <i>d)</i>   |
| b) Aircraft Stations  | 100  | 50   |
| c) Land Mobile Stations:  |  |  |
| —power 5 W or less  | 100  | 50   |
| —power above 5 W  | 100  | 20   |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations            | Tolerances<br>applicable until<br>1st January, 1966 * to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|--|--|--|
|  | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.  |  |
| 4. <i>Radiodetermination Stations</i>  | 200 * d) e)  | 50 * d) e)   |
| 5. <i>Broadcasting Stations<br/>(other than television)</i>  | 30   | 20   |
| 6. <i>Broadcasting Stations<br/>(television sound and vision):</i><br>-power 100 W or less<br>-power above 100 W | 100<br>30  | 100<br>1 000 c/s   |
| <i>Band : 470 to 2 450 Mc/s</i>  |  |  |
| 1. <i>Fixed Stations :</i><br>-power 100 W or less<br>-power above 100 W   | 7 500<br>7 500   | 300 f)<br>100 g)   |
| 2. <i>Land Stations</i>  | 7 500  | 300  |
| 3. <i>Mobile Stations</i>  | 7 500  | 300  |
| 4. <i>Radiodetermination Stations</i>  | 7 500 e)   | 500 e)   |
| 5. <i>Broadcasting Stations<br/>(other than television)</i>  | 7 500  | 100  |

| Frequency Bands<br>(lower limit exclusive,<br>upper limit inclusive)<br>and<br>Categories of Stations   | Tolerances<br>applicable until<br>1st January, 1966 * to<br>transmitters in use<br>and to those to be<br>installed before<br>1st January, 1964 | Tolerances<br>applicable to new<br>transmitters installed<br>after 1st January,<br>1964 and to all<br>transmitters after<br>1st January, 1966* |
|---|--|--|
|   | * 1st January, 1970 in the case of all<br>tolerances marked with an asterisk.  |  |
| 6. <i>Broadcasting Stations</i><br>(television, sound and vision)<br>in the band 470-960 Mc/s :<br>-power 100 W or less<br>-power above 100 W   | 7 500<br>7 500   | 100<br>1 000 c/s   |
| <b>Band : 2 450 to 10 500 Mc/s</b><br>1. <i>Fixed Stations</i> :<br>-power 100 W or less<br>-power above 100 W<br>2. <i>Land Stations</i><br>3. <i>Mobile Stations</i><br>4. <i>Radiodetermination Stations</i> : | 7 500<br>7 500<br>7 500<br>7 500<br>7 500 e)   | 300 f)<br>100 g)<br>300<br>300<br>2 000 e)   |
| <b>Band : 10.5 to 40 Gc/s</b><br>1. <i>Fixed Stations</i><br>2. <i>Radiodetermination Stations</i>  | —<br>—   | 500<br>7 500 e)  |

### Notes Referring to Table of Frequency Tolerances

*a)* At the present time some administrations permit those ships' transmitters fulfilling the role of standby to a main transmitter not only for distress but also for traffic purposes to operate with a tolerance of 5 000. These administrations should make every effort to ensure that by 1st January, 1966, all ships' transmitters operating in the band 10—535 kc/s, other than ships' emergency transmitters, have a frequency tolerance of 1 000.

*b)* In the area covered by the North American Regional Broadcasting Agreement (NARBA) the tolerance of 20 c/s may continue to be applied.

*c)* For ship transmitters, of power 50 W or less, using frequencies below 13 Mc/s in tropical regions, the tolerance of 50 can be increased to 200 since these transmitters are sometimes used in such regions in the same circumstances as those of the band 1 605—4 000 kc/s.

*d)* This tolerance is not applicable to survival craft stations operating on the frequency 243 Mc/s.

*e)* Where specific frequencies are not assigned to radar stations the bandwidth occupied by the emissions of such stations shall be maintained wholly within the band allocated to the service and the indicated tolerance does not apply.

*f)* For transmitters using time division multiplex the tolerance of 300 may be increased to 500.

*g)* This tolerance applies only to such emissions for which the necessary bandwidth does not exceed 3 000 kc/s; for larger bandwidth emissions a tolerance of 300 applies.



## Former reference

APP 4

## Source

Committee: 6  
Doc. No.: 485

## New reference

APP 4

## APPENDIX 4

**Table of Tolerances for the Levels of Spurious Emissions**

(See Article 12)

1. The following table indicates the tolerances which shall apply to the mean power of any spurious emission supplied by a transmitter to the antenna transmission line.

2. Furthermore, spurious radiation from any part of the installation other than the antenna system, i.e., the antenna and its transmission line, shall not have an effect greater than would occur if this antenna system were supplied with the maximum permissible power at that spurious emission frequency.

(MOD)

3. These tolerances shall not, however, apply to ships' emergency transmitters or survival craft stations.

4. For technical or operational reasons, specific services may demand tolerances tighter than those specified in the Table.

5. The final date by which all equipment shall meet the tolerances specified in Column B is 1st January, 1970. Nevertheless, all administrations recognize the urgent need to implement Column B tolerances for all equipment at the earliest possible dates and will endeavour to ensure that necessary changes are made to all transmitters under their jurisdiction well before this date and wherever possible by 1st January, 1966.

6. No tolerance is specified for transmitters operating on fundamental frequencies above 235 Mc/s. For these transmitters the levels of spurious emissions shall be as low as practicable.

| Fundamental<br>Frequency<br>Band  | The mean power of any spurious emission supplied to the antenna transmission line shall not exceed the values specified as tolerances in Columns A and B below  |   |
|---|---|---|
|   | A   | B   |
|   | Tolerances applicable until 1st January, 1970 to transmitters now in use and to those installed before 1st January, 1964  | Tolerances applicable to all transmitters installed after 1st January, 1964 and to all transmitters after 1st January, 1970 |
| Below 30 Mc/s   | 40 decibels below the mean power of the fundamental without exceeding the power of 200 milliwatts   | 40 decibels below the mean power of the fundamental without exceeding the power of 50 milliwatts <sup>1) 2) 3)</sup>        |
| <b>30 Mc/s to 235 Mc/s:</b><br><br>for transmitters having mean power:<br><br>— greater than 25 watts<br><br><br><br><br><br><br><br><br>— 25 watts or less | <div>60 decibels below the mean power of the fundamental without exceeding 1 milliwatt <sup>4</sup></div> <div>40 decibels below the mean power of the fundamental without exceeding 25 microwatts and without the necessity for reducing this value below 10 microwatts <sup>4</sup></div> |   |

<sup>1)</sup> For transmitters of mean power exceeding 50 kilowatts and which operate below 30 Mc/s over a frequency range approaching an octave or more, a reduction below 50 milliwatts is not mandatory, but a minimum attenuation of 60 decibels shall be provided and every effort should be made to keep within the 50 milliwatts limit.

<sup>2)</sup> For hand-portable equipment of mean power less than 5 watts which operates in the frequency band below 30 Mc/s the attenuation shall be at least 30 decibels but every effort should be made to attain 40 decibels attenuation.

<sup>3)</sup> For mobile transmitters which operate below 30 Mc/s any spurious emission shall be at least 40 decibels below the fundamental without exceeding the value of 200 milliwatts, but every effort should be made to keep within the 50 milliwatts limit wherever practicable.

<sup>4)</sup> For frequency modulated maritime mobile radio-telephone equipment which operates above 30 Mc/s the mean power of any spurious emission falling in any other international maritime mobile channel, due to products of modulation, shall not exceed a limit of 10 microwatts and the mean power of any other spurious emission on any discrete frequency within the international maritime mobile band shall not exceed a limit of 2.5 microwatts. Where, exceptionally, transmitters of mean power above 20 watts are employed, these limits may be increased in proportion to the mean power of the transmitter.

## APPENDIX 5

(See Article 27, Section II)

**Examples of Necessary Bandwidths and Designations of Emissions**

The necessary bandwidth may be determined by one of the following methods :

- a)* use of the formulae included in the following Table which also gives examples of necessary bandwidths and designation of corresponding emissions ;
- b)* computation in accordance with C.C.I.R. Recommendations ;
- c)* measurement, in cases not covered by *a)* or *b)* above.

The value so determined should be used when the full designation of an emission is required.

However, the necessary bandwidth so determined is not the only characteristic of an emission to be considered in evaluating the interference that may be caused by that emission.

In the formulation of the Table, the following terms have been employed :

- $B_n$  = Necessary bandwidth in cycles per second.
- $B$  = Telegraph speed in bauds.
- $N$  = Maximum possible number of black plus white elements to be transmitted per second, in facsimile and television.
- $M$  = Maximum modulation frequency in cycles per second.
- $C$  = Sub-carrier frequency in cycles per second.
- $D$  = Half the difference between the maximum and minimum values of the instantaneous frequency. Instantaneous frequency is the rate of change of phase.
- $t$  = Pulse duration in seconds.
- $K$  = An overall numerical factor which varies according to the emission and which depends upon the allowable signal distortion.

| Description and Class of Emission              | Necessary Bandwidth in cycles per second  | Examples  |                         |
|--|---|---|-------------------------|
|  |   | Details   | Designation of Emission |
| I. AMPLITUDE MODULATION                        |   |   |                         |
| Continuous wave Telegraphy, A1                 | $B_n = BK$<br>$K = 5$ for fading circuits   | Morse code at 25 words per minute, $B = 20$ , $K = 5$ ;<br>Bandwidth: 100 c/s.  | 0.1A1                   |
|  | $K = 3$ for non-fading circuits   | Four-channel time-division multiplex, 7-unit code, 42.5 bauds per channel, $B=170$ , $K = 5$ ;<br>Bandwidth: 850 c/s. | 0.85A1                  |
| Telegraphy modulated by an audio frequency, A2 | $B_n = BK + 2M$<br>$K = 5$ for fading circuits<br>$K = 3$ for non-fading circuits | Morse code at 25 words per minute, $B = 20$ , $M = 1\ 000$ , $K = 5$ ;<br>Bandwidth: 2 100 c/s.                       | 2.1A2                   |
| Telephony, A3                                  | $B_n = M$ for single sideband   | Double sideband telephony, $M = 3\ 000$ ;<br>Bandwidth: 6 000 c/s.  | 6A3                     |
|  | $B_n = 2M$ for double sideband  | Single sideband telephony, reduced carrier, $M = 3\ 000$ ;<br>Bandwidth: 3 000 c/s.                                   | 3A3A                    |
|  |   | Telephony, two independent sidebands, $M = 3\ 000$ ;<br>Bandwidth: 6 000 c/s.   | 6A3B                    |

| Description and Class of Emission                         | Necessary Bandwidth in cycles per second  | Examples  |                         |
|---|---|---|-------------------------|
|   |   | Details   | Designation of Emission |
| Sound Broadcasting,<br>A3                                 | $B_n = 2M$<br>$M$ may vary between 4 000 and 10 000 depending on the quality desired.           | Speech and music, $M = 4\,000$ ;<br>Bandwidth: 8 000 c/s.   | 8A3                     |
| Facsimile, carrier modulated by tone and by keying.<br>A4 | $B_n = KN + 2M$<br>$K = 1.5$  | The total number of picture elements (black plus white) transmitted per second is equal to the circumference of the cylinder multiplied by the number of lines per unit length and by the speed of rotation of the cylinder in revolutions per second.<br><br>Diameter of cylinder = 70 mm.,<br>number of lines per mm. = 5,<br>speed of rotation = 1 r.p.s.,<br>$N = 1\,100$ , $M = 1\,900$ ;<br>Bandwidth: 5 450 c/s. | 5.45A4                  |
| Television (Vision and Sound),<br>A5 and F3               | Refer to relevant C.C.I.R. documents for the bandwidths of the commonly used television systems | Number of lines = 625;<br>Number of lines per second = 15 625;<br>Video bandwidth : 5 Mc/s.;<br><br>Total vision bandwidth: 6.25 Mc/s.;<br>FM sound bandwidth including guard bands: 0.75 Mc/s.,<br>Total bandwidth : 7 Mc/s.   | 6 250A5C<br>750F3       |

| Description and Class of Emission | Necessary Bandwidth in cycles per second   | Examples  |                         |
|-----------------------------------|--|---|-------------------------|
|                                   |  | Details   | Designation of Emission |
| II. FREQUENCY MODULATION          |  |   |                         |
| Frequency-shift Telegraphy<br>F1  | $B_n = 2.6D + 0.55B$<br>for $1.5 < \frac{2D}{B} < 5.5$<br>$B_n = 2.1D + 1.9B$<br>for $5.5 \leq \frac{2D}{B} \leq 20$ | Four-channel time-division multiplex with 7-unit code, 42.5 bauds per channel, $B = 170$ , $D = 200$ ;<br>$\frac{2D}{B} = 2.35$ , therefore the first formula in Column 2 applies;<br>Bandwidth: 613 c/s. | 0-6F1                   |
| Commercial Telephony,<br>F3       | $B_n = 2M + 2DK$<br><br>$K$ is normally 1 but under certain conditions a higher value may be necessary.              | For an average case of commercial telephony, $D = 15\ 000$ , $M = 3\ 000$ ;<br>Bandwidth: 36 000 c/s.   | 36F3                    |
| Sound Broadcasting,<br>F3         | $B_n = 2M + 2DK$   | $D = 75\ 000$ , $M = 15\ 000$ and assuming $K = 1$ ;<br>Bandwidth: 180 000 c/s.   | 180F3                   |

| Description and Class of Emission    | Necessary Bandwidth in cycles per second  | Examples  |                         |
|--------------------------------------|---|---|-------------------------|
|                                      |   | Details   | Designation of Emission |
| Facsimile, F4                        | $B_n = KN + 2M + 2D$<br>$K = 1.5$   | (See facsimile, amplitude modulation)<br><br>Diameter of cylinder = 70 mm.,<br>number of lines per mm. = 5,<br>speed of rotation = 1 r.p.s.,<br>$N = 1\,100$ , $M = 1\,900$ , $D = 10\,000$ ;<br><br>Bandwidth: 25 450 c/s. | 25-5F4                  |
| Four-frequency duplex Telegraphy, F6 | If the channels are not synchronized,<br>$B_n = 2.6D + 2.75B$<br>where $B$ is the speed of the higher speed channel.<br><br>If the channels are synchronized the bandwidth is as for F1, $B$ being the speed of either channel. | Four-frequency duplex system with 400 c/s. spacing between frequencies, channels not synchronized, 170 bauds keying in each channel, $D = 600$ , $B = 170$ ;<br><br>Bandwidth: 2 027 c/s.                                   | 2-05F6                  |



| Description and Class of Emission | Necessary Bandwidth in cycles per second  | Examples  |                         |
|-----------------------------------|---|---|-------------------------|
|                                   |   | Details   | Designation of Emission |
| III. PULSE MODULATION             |   |   |                         |
| Unmodulated Pulse, P0             | $B_n = \frac{K}{t}$ <p><math>K</math> depends upon the ratio of pulse duration to pulse rise time. Its value usually falls between 1 and 10 and in many cases it does not need to exceed 6.</p> | $t = 3 \times 10^{-6}$ , $K = 6$ ;<br>Bandwidth: $4 \times 10^6$ c/s. | 4 000 P0                |
| Modulated Pulse, P2 or P3         | The bandwidth depends on the particular types of modulation used, many of these being still in the development stage.   | —   | —                       |

## APPENDIX 6

(See Article 16)

**Reports of Monitoring Data**

1. Reports of measurements of frequency should contain as much as necessary of the following information :
  - a)* identification of the monitoring station (administration or organization, and location);
  - b)* date of measurement;
  - c)* time of measurement (G.M.T.);
  - d)* call sign or other means of identification, or both, of the station measured;
  - e)* class of emission;
  - f)* assigned frequency or reference frequency;
  - g)* frequency tolerance;
  - h)* measured frequency;
  - i)* accuracy of measurement;
  - j)* departure from assigned or reference frequency;
  - k)* additional information (e.g., period covered by measurement, drift of measured frequency during that period, quality of received signal and conditions of reception);
  - l)* remarks.
2. Reports of measurements of field strength should contain as much as necessary of the following information :
  - a)* identification of the monitoring station (administration or organization, and location);
  - b)* date of measurement;
  - c)* time of measurement (G.M.T.);
  - d)* call sign and/or other means of identification of the station measured;
  - e)* class of emission;
  - f)* assigned frequency;
  - g)* value of measured field;
  - h)* estimated accuracy of measurement;
  - i)* component of polarisation measured;
  - j)* other elements or characteristics of the measurement;
  - k)* remarks.

3. Reports of observations of spectrum occupancy should as far as practicable be made in the form recommended by the International Frequency Registration Board and contain the following information ;
  - a) identification of the monitoring station (administration or organization, and location);
  - b) date of the measurement;
  - c) time of measurement (G.M.T.);
  - d) call sign or other identification, or both, of the station monitored;
  - e) class of emission;
  - f) class of station;
  - g) measured frequency;
  - h) signal strength according to the QSA code;
  - i) bandwidth occupied;
  - j) information as to the locality or area in which reception is intended;
  - k) remarks.
4. In providing these data the symbols contained in the Radio Regulations or in the Preface to the International Frequency List should be used as far as possible.

#### APPENDIX 7

#### **Report of an Irregularity or of an Infringement of the Telecommunication Convention or of the Radio Regulations**

(See Article 16)

##### *Particulars concerning the station infringing the Regulations :*

1. Name<sup>1)</sup> if known (in BLOCK letters) .....
2. Call sign or other identification (in BLOCK letters) .....
3. Nationality, if known .....
4. Frequency used (kc/s or Mc/s) .....
5. Class of emission <sup>2)</sup> .....

*Particulars concerning the station, the centralizing office or inspection service reporting the irregularity or infringement :*

6. Name (in BLOCK letters) .....
7. Call sign or other identification (in BLOCK letters) .....
8. Nationality .....
9. Approximate position <sup>3)</sup> .....

*Particulars of the irregularity or infringement :*

10. Name <sup>4)</sup> of the station (in BLOCK letters) in communication with the station committing the irregularity or infringement .....
11. Call sign or other identification (in BLOCK letters) of the station in communication with the station committing the irregularity or infringement .....
12. Time <sup>5)</sup> and date .....
13. Nature of the irregularity or infringement <sup>6)</sup> .....
14. Extracts from ship log and other documents supporting the report (to be continued on the back of the form if necessary) .....

*Particulars concerning the transmitting station interfered with <sup>7)</sup> :*

15. Name of the station (in BLOCK letters) .....
16. Call sign or other identification (in BLOCK letters) .....
17. Frequency assigned (kc/s or Mc/s) .....
18. Frequency measured at the time of the interference .....
19. Class of emission and bandwidth .....
20. Receiving location <sup>3) 8)</sup> (in BLOCK letters) where the interference was troublesome .....
21. Certificate:

I certify that the foregoing report represents, to the best of my knowledge, a complete and accurate account of what took place

Signatures <sup>9)</sup> ..... Dates .....

### Instructions for filling in this form

- <sup>1)</sup> Each report shall refer only to one station (see note 4).
- <sup>2)</sup> See Article 2.
- <sup>3)</sup> Applicable only to ships and aircraft; the position shall be expressed either in latitude and longitude (Greenwich) or by a true bearing in degrees and distance in nautical miles, or in kilometres from some well-known place.
- <sup>4)</sup> If both communicating stations infringe the Regulations, a separate report shall be made for each of these stations.
- <sup>5)</sup> The time must be expressed as Greenwich Mean Time (G.M.T.) by a group of four figures (0001 to 2400). If the infringement is prolonged or repeated, the times shall be shown.
- <sup>6)</sup> A separate report is required for each irregularity or infringement, unless they have obviously all been made by the same person and within a short time. All reports shall be forwarded in duplicate, and whenever practicable should be typewritten (indelible pencil and carbon paper may be used).
- <sup>7)</sup> This information is to be given only in case of a complaint about interference.
- <sup>8)</sup> In the case of land or fixed stations position shall be expressed in latitude and longitude (Greenwich).
- <sup>9)</sup> This report shall be signed by the operator who has reported the infringement and countersigned by the Master of the ship or aircraft, or the officer in charge of the station in the case of an infringement reported by a station of the mobile service.

When the report originates from a centralizing office or from an inspection service it shall be signed by the head of that office or service and countersigned by an official of the administration transmitting it.

### For use of Administrations only

1. Company controlling the installation of the station against which complaint is made .....
2. Name of operator of the station held responsible for the irregularity or infringement of the Regulations .....
3. Action taken .....

**Former reference**

APP 1a

**Source**

Committee: 6

Doc. No.: 319

**New reference**

APP 8

**APPENDIX 8****Report of Harmful Interference**

- (See Article 15)

*Particulars concerning the station causing the interference :*

- A. Name or call sign and category of station .....
- B. Frequency measured .....
- C. Class of emission .....
- D. Bandwidth .....
- E. Field strength .....
- F. Nature of interference .....

*Particulars concerning the transmitting station interfered with :*

- G. Name or call sign and category of station .....
- H. Frequency assigned .....
- I. Frequency measured .....
- J. Class of emission .....
- K. Bandwidth .....
- L. Field strength .....

*Particulars furnished by the receiving station experiencing the interference :*

- M. Name of station .....
- N. Geographic location of station .....
- O. Dates and times of occurrence of harmful interference .....
- P. Other particulars .....
- Q. Requested action .....

(For convenience and brevity telegraphic reports shall be in the format above, using the letters in the order listed in lieu of the explanatory titles, and an "X" after any such letter if no information on this particular item is reported.)

APPENDIX 9  
Service Documents  
(See Articles 8, 9, 10 and 20)  
**List I. International Frequency List**

| Assigned frequency (kc/s or Mc/s) <sup>1</sup>   |  |  |  |  |  |  |  |  |  |  |  |  | Transmitting<br>Antenna Cha-<br>racteristics <sup>4)</sup> | Remarks |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|
| Dates  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 2  |  |  |  |  |  |  |  |  |  |  |  |  | 9  | 13      |
| Location of transmitting station   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Reception  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 4  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 5  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 6  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 7  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| 8  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Power (kW)   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Azimuth of maximum radiation (ND if a transmitting antenna with non-directional characteristics is used) |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Angular width of radiation main lobe   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Antenna gain (db)  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Maximum hours of operation of the circuit to each locality or area (G.M.T.)                              |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Megacycle order of the other frequencies normally utilized for the same circuit <sup>4</sup>             |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Operating Administration or Company <sup>5</sup>   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Postal and telegraphic address of the administration responsible for the station <sup>5</sup>            |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Results of examination <sup>6</sup> and investigations <sup>7</sup> , by the I.F.R.B.                    |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Remarks related to the finding by the I.F.R.B.   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |
| Other remarks <sup>8</sup>   |  |  |  |  |  |  |  |  |  |  |  |  |  |         |

<sup>1</sup> In the case of television broadcasting stations in Region 1, the Frequency in this column is that of the sound and vision carriers (See Appendix 1 to the Radio Regulation, Geneva, 1959). <sup>2</sup> See, Nos. 9-122 and 9-123, of the Radio Regulations, Geneva, 1959. <sup>3</sup> A symbol instead of a date indicates an assignment notified pursuant to No. 272 of the Extraordinary Administrative Radio Conference Agreement (Geneva, 1951), or, in the frequency bands above 27·500 kc/s, an assignment for which the notice was received by the I.F.R.B. before 1 April 1952. <sup>4</sup> See Appendix 1 to the Radio Regulations, Geneva, 1959. <sup>5</sup> Columns 12a and 12b contain numbers or letters which are explained in the Preface to the International Frequency List. <sup>6</sup> See Article 9, Section II, of the Radio Regulations, Geneva, 1959. <sup>7</sup> See, Nos. 9-031, 9-032, 9-136 and 9-137, of the Radio Regulations, Geneva, 1959. <sup>8</sup> Including dates referred to in, Nos. 9-029, 9-030, 9-041, 9-046 and 9-049, of the Radio Regulations, Geneva, 1959.

**List II. List of Fixed Stations Operating International Circuits**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the transmitting station | Call Sign (Identification) | Assigned Frequency (kc/s or Mc/s) | Locality(ies) or Area(s) with which communication is established | Remarks |
|----------------------------------|----------------------------|-----------------------------------|--|---------|
| 1                                | 2                          | 3                                 | 4  | 5       |

**List IIIA. List of Broadcasting Stations Operating in Bands below 5 950 kc/s**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the transmitting station | Assigned frequency in kc/s | Call sign (Identification) | Geographical co-ordinates of the transmitter site (longitude and latitude in degrees and minutes) | Zones or areas of reception | Power (kW) | Azimuth of maximum radiation (ND if a transmitting antenna with non-directional characteristics is used) | Maximum hours of operation (G.M.T.) | Operating Administration or Company | Other remarks |
|----------------------------------|----------------------------|----------------------------|---|-----------------------------|------------|--|-------------------------------------|-------------------------------------|---------------|
| 1                                | 2                          | 3                          | 4   | 5                           | 6          | 7  | 8                                   | 9                                   | 10            |



**List IIIB. List of Broadcasting Stations Operating in Bands  
between 5 950 and 26 100 kc/s**

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

|    | Name of the transmitting station | Geographical co-ordinates of the transmitter site (longitude and latitude in degrees and minutes) | Assigned frequency (kc/s) | Call sign (Identification) | Zone(s) or area(s) of reception | Power (kW) | Transmitting antenna characteristics |                                      |                    |                    | Hours of operation (G.M.T.) | Name, postal and telegraphic address of Administration | Remarks |
|----|----------------------------------|---|---------------------------|----------------------------|---------------------------------|------------|--------------------------------------|--------------------------------------|--------------------|--------------------|-----------------------------|--|---------|
|    |                                  |   |                           |                            |                                 |            | Azimuth of maximum radiation         | Angular width of radiation main lobe | Antenna gain in db | Angle of elevation | Type of antenna             |  |         |
| 1  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 2  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 3  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 4  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 5  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 6  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 7  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 8  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 9  |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 10 |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 11 |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 12 |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 13 |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |
| 14 |                                  |   |                           |                            |                                 |            |                                      |                                      |                    |                    |                             |  |         |

**List IV. List of Coast Stations***Part A. Alphabetical index of coast stations.*

| Name of the station | Call sign | See part B, page |
|---------------------|-----------|------------------|
| 1                   | 2         | 3                |

*Part B. Particulars of coast stations.*

Names of countries arranged in alphabetical order of abbreviations.  
Names of stations in alphabetical order.

| Name of the station <sup>1)</sup> | Call sign | Emission                                  |       |                          | Service |                              | Charges <sup>4)</sup> <sup>5)</sup> | Geographical position of the transmitting antenna (longitude and latitude in degrees, minutes and seconds) | Remarks <sup>6)</sup> <sup>7)</sup> |
|-----------------------------------|-----------|---|-------|--------------------------|---------|------------------------------|-------------------------------------|--|-------------------------------------|
|                                   |           | Frequencies <sup>2)</sup><br>kc/s or Mc/s | Class | Power (kW) <sup>3)</sup> | Nature  | Hours of service<br>(G.M.T.) |                                     |  |                                     |
| 1                                 | 2         | 3   | 4     | 5                        | 6       | 7                            | 8                                   | 9  | 10                                  |

<sup>1)</sup> Indicate for each country the coast station or coast stations to which radiotelegrams intended for high frequency transmission to ship stations should be sent.

<sup>2)</sup> The normal working frequency is printed in heavy type. In the case of duplex telephony, frequencies used for transmission and reception are indicated in conformity with N° 35-04.

<sup>3)</sup> In the case of directive antennae, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from true north clockwise.

<sup>4)</sup> The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given at the end of this List.

<sup>5)</sup> If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should, if necessary, be stated.

<sup>6)</sup> Indicate if radar service is provided.

<sup>7)</sup> Information concerning the times of transmission of traffic lists, and the hours of watch keeping of the coast station on the various frequencies, etc.

## List V. List of Ship Stations

### *Particulars of ship stations*

The information concerning these stations shall be published in two or three lines in the following order :

#### *1st line :*

- call sign, name of the ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names (in this case, the name and the call sign shall be separated by a fraction bar) and the service symbols (see Appendix 10) ;
- nature of service ;
- hours of service in the form of a symbol or a reference.

Times not indicated by a symbol shall be given in Greenwich mean time (G.M.T.).

#### *2nd and 3rd lines :*

below the call sign :

- the basic ship charge per word for a radiotelegram <sup>1)</sup> ;
- if appropriate, the basic ship charge for a radiotelephone call of three minutes. <sup>1)</sup>

This information shall be followed by a note reference to indicate the administration or private enterprise to which the accounts should be addressed. In case of a change of address of the operating authority, a second note reference after the charge should indicate the new address and the date from which the change will take effect ;

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<sup>1)</sup> These charges are fixed by each administration or private enterprise.

- when two or more ships of the same nationality bear the same name, and also where the accounts for the charges should be sent directly to the owner of the ship, the name of the shipping line or of the firm to which the ship belongs shall be given by means of a note reference ;
- the country having jurisdiction over the station (abbreviated indication) ;
- the country having jurisdiction over the station (abbreviated indicated by means of the following abbreviations printed in heavy type :

## Radiotelegraphy :

**w** = 110 — 150 kc/s  
**x** = 405 — 535 kc/s  
**y** = 1 605 — 3 800 kc/s  
**z** = 4 000 — 25 110 kc/s

## Radiotelephony :

**t** = 1 605 — 4 000 kc/s  
**u** = 4 000 — 23 000 kc/s  
**v** = 156 — 174 Mc/s

These abbreviations should, if necessary, be followed by references to brief notes and indications of the frequencies for which the transmitters are adjusted which shall appear at the end of the List.

The meanings of abbreviations shall be printed at the foot of every second page of the List.

# **List VI. List of Radiodetermination and Special Service Stations**

(For navigational purposes, this List should be used with caution.  
See Article 43.)

## *Part A. Alphabetical index of stations.*

| Name of the station | Call sign | Nature of the service | See part B, page |
|---------------------|-----------|-----------------------|------------------|
| 1                   | 2         | 3                     | 4                |

*Part B. Particulars of stations.*

*1. Direction-finding stations*

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Geographical position (longitude and latitude in degrees, minutes and seconds) of:<br><i>a)</i> the receiving antenna of the direction-finding station<br><i>b)</i> the transmitting antenna of the direction-finding station<br><i>c)</i> the transmitting antenna of the station mentioned in Column 8 | Call sign | Frequencies (kc/s or Mc/s) and classes of emission |   |   | Power (kW) | Name and call sign of the station with which communication should be established if the direction-finding station is not equipped with a transmitter | Charges | Remarks<br><i>a)</i> sectors in which bearings are normally accurate and references to national or international publications other than the present List<br><i>b)</i> hours of service (G.M.T.), etc. |
|---------------------|--|-----------|--|---|---|------------|--|---------|--|
|                     |  |           | For calling the direction-finding station          | For transmitting to the direction-finding station the signals necessary for taking bearings | For the transmission of the bearings by the direction-finding station |            |  |         |  |
| 1                   | 2  | 3         | 4  | 5   | 6   | 7          | 8  | 9       | 10   |

2. Radiobeacon stations

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| 1                                      | 2 | 3 | 4 | 5   | 6 | 7 | 8 | 9   | 10 | 11 |  |
|--|---|---|---|---|---|---|---|---|----|----|--|
| Name of the station                    |   |   |   | Geographical position of the transmitting antenna of the radiobeacon (longitude and latitude in degrees, minutes and seconds) |   |   |   | Characteristic signal of the radiobeacon  |    |    |  |
| Call sign of the radiobeacon (if any)  |   |   |   | Emission  |   |   |   | Name and call sign of the station to which requests for the emission of beacon signals may be addressed |    |    |  |
| Frequency (kc/s or Mc/s)               |   |   |   | Normal range in nautical miles  |   |   |   |   |    |    |  |
| Class                                  |   |   |   | Calling frequency of the station indicated in column 9 (kc/s or Mc/s)   |   |   |   |   |    |    |  |
| Frequency of modulation (if any) (c/s) |   |   |   | Remarks   |   |   |   |   |    |    |  |
|  |   |   |   | a) sectors normally reliable and references to national or international publications other than this List;                   |   |   |   |   |    |    |  |
|  |   |   |   | b) hours of service (G.M.T.);   |   |   |   |   |    |    |  |
|  |   |   |   | c) description of the emission;   |   |   |   |   |    |    |  |
|  |   |   |   | d) charges, etc.  |   |   |   |   |    |    |  |

3. *Ocean-station vessels*

Ocean Regions in alphabetical order.  
Names of stations in alphabetical order.

|   | Name of the station | Geographical position assigned to the station | Call sign of the station vessel | Frequency for calling the station (kc/s or Mc/s) | Radiobeacon           |                                       |                   |  |                                | Direction-finding  |  | Remarks                       |
|---|---------------------|---|---------------------------------|--|-----------------------|---------------------------------------|-------------------|--|--------------------------------|--|--|-------------------------------|
|   |                     |   |                                 |  | Characteristic signal | Transmitting frequency (kc/s or Mc/s) | Class of emission | Frequency of modulation (if any) (c/s) | Normal range in nautical miles | Frequency for transmitting to the station the signals necessary for taking bearings (kc/s or Mc/s) | Frequency for the transmission by the station of the bearings (kc/s or Mc/s) | Power of the transmitter (kW) |
| 1 | 2                   | 3   | 4                               | 5  | 6                     | 7                                     | 8                 | 9                                      | 10                             | 11   | 12   | 13                            |

#### 4. Direction-finder calibration stations

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Geographical co-ordinates of the transmitting antenna of the radiobeacon (longitude and latitude in degrees, minutes and seconds) | Characteristic signal | Call sign of the radiobeacon (if any) | Emission                 |       |  | Normal range in nautical miles | Name and call sign of the station to which requests may be addressed | Calling frequency of the station mentioned in column 9 (kc/s or Mc/s) | Remarks |
|---------------------|---|-----------------------|---------------------------------------|--------------------------|-------|--|--------------------------------|--|---|---------|
|                     |   |                       |                                       | Frequency (kc/s or Mc/s) | Class | Frequency of modulation (if any) (c/s) |                                |  |   |         |
| 1                   | 2   | 3                     | 4                                     | 5                        | 6     | 7                                      | 8                              | 9  | 10  | 11      |

#### 5. Stations transmitting time signals

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Method <sup>1)</sup> |
|---------------------|-----------|----------------------------|-------------------|----------------------------|----------------------|
| 1                   | 2         | 3                          | 4                 | 5                          | 6                    |

<sup>1)</sup> General instructions concerning time signals.



### 6. Stations transmitting standard frequencies

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|----------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                          | 4                 | 5                          | 6       |

### 7. Stations transmitting regular meteorological bulletins

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Remarks <sup>1)</sup> |
|---------------------|-----------|--------------------------|-------------------|----------------------------|-----------------------|
| 1                   | 2         | 3                        | 4                 | 5                          | 6                     |

<sup>1)</sup> General instructions concerning meteorological bulletins including code used.

### 8. Stations transmitting notices to navigators

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|----------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                          | 4                 | 5                          | 6       |

### 9. Stations transmitting medical advice

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Hours of Service (G.M.T.) | Remarks |
|---------------------|-----------|----------------------------|-------------------|---------------------------|---------|
| 1                   | 2         | 3                          | 4                 | 5                         | 6       |

### 10. Stations transmitting epidemiological bulletins

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Remarks |
|---------------------|-----------|----------------------------|-------------------|----------------------------|---------|
| 1                   | 2         | 3                          | 4                 | 5                          | 6       |

### 11. Stations transmitting Ursigrams

Names of the countries arranged in alphabetical order of abbreviations.  
Names of the stations in alphabetical order.

| Name of the station | Call sign | Frequencies (kc/s or Mc/s) | Class of Emission | Times of Emission (G.M.T.) | Remarks and nature of information |
|---------------------|-----------|----------------------------|-------------------|----------------------------|-----------------------------------|
| 1                   | 2         | 3                          | 4                 | 5                          | 6                                 |

*Note:* The Secretary General, if he considers it necessary, may introduce in this List additional sections to cover new systems that may be developed and used.

**List VIII. List of International Monitoring Stations.***Part I. Centralizing offices.*

Names of countries arranged in alphabetical order of abbreviations.

- National centralizing office (postal and telegraphic address, telephone number, any other information).

*Part II**A. Particulars of monitoring stations carrying out frequency measurements.*

Names of countries arranged in alphabetical order of abbreviations.

Names of stations in alphabetical order.

- Names of stations in alphabetical order.
- Name and geographical co-ordinates of the station (longitude and latitude in degrees and minutes).
- Hours of service (G.M.T.).
- Ranges of measurable frequencies (kc/s or Mc/s).
- Accuracy of measurements. <sup>1)</sup>
- Remarks.

*B. Particulars of monitoring stations carrying out field strength measurements.*

Names of countries arranged in alphabetical order of abbreviations.

Names of stations in alphabetical order.

- Name and geographical co-ordinates of the station (longitude and latitude) in degrees and minutes.
- Hours of service (G.M.T.).

---

<sup>1)</sup> Indicates the maximum attainable accuracy for each frequency range.

- Ranges of frequencies (kc/s or Mc/s).
- Maximum and minimum values of measurables field strengths.
- Accuracy of measurements in db. <sup>1)</sup>
- Remarks.

*C. Particulars of monitoring stations carrying out direction-finding measurements.*

Names of countries arranged in alphabetical order of abbreviations.

Names of stations in alphabetical order.

- Name and geographical co-ordinates of the station (longitude and latitude in degrees, minutes and seconds).
- Hours of service (G.M.T.).
- Ranges of frequencies (kc/s or Mc/s).
- Type of antennae in use.
- Remarks.

*D. Particulars of monitoring stations carrying out bandwidth measurements.*

Names of countries arranged in alphabetical order of abbreviations.

Names of stations in alphabetical order.

- Name and geographical co-ordinates of the station (longitude and latitude in degrees and minutes).
- Hours of service (G.M.T.).
- Ranges of frequencies (kc/s or Mc/s).

---

<sup>1)</sup> Indicates the maximum attainable accuracy for each frequency range.

- Method(s) of measurement. <sup>1)</sup>
- Resolution at —60 db (if appropriate).
- Remarks.

*E. Particulars of monitoring stations carrying out automatic spectrum occupancy surveys.*

Names of countries arranged in alphabetical order of abbreviations.

Names of stations in alphabetical order.

- Name and geographical co-ordinates of the station (longitude and latitude in degrees and minutes).
- Hours of service (G.M.T.).
- Ranges of frequencies (kc/s or Mc/s).
- Method(s) employed.
- Remarks.

<sup>1</sup> See the Recommendations and relevant reports of the C.C.I.R.

### Radio Communication Statistics

| Part I. Number of Stations                        |                  |       |                  |                  |       | Part II. Traffic                                     |                           |                        |                       |
|---|------------------|-------|------------------|------------------|-------|--|---------------------------|------------------------|-----------------------|
| Maritime mobile                                   |                  |       |                  |                  |       | Of coast stations transmitting public correspondence |                           |                        |                       |
| Coast stations transmitting public correspondence |                  |       | Ship stations    |                  |       | Number of  |                           |                        |                       |
| Radio-tele-graph                                  | Radio-tele-phone | Mixed | Radio-tele-graph | Radio-tele-phone | Mixed | Radio-tele-grams transmitted                         | Radio-tele-grams received | Radio-tele-phone calls | Radio medical advices |

## APPENDIX 10

## Service Document Symbols

*(See Article 20 and Appendix 9)*

|     |   |
|-----|---|
| ✕   | Station on board a warship or a military or naval aircraft ("GS") <sup>1)</sup>   |
| ■   | Station classified as situated in a region of heavy traffic (Article 32) ("TI") <sup>1)</sup>   |
| ○   | By day ("HJ") <sup>1)</sup>   |
| ●   | By night ("HN") <sup>1)</sup>   |
| [ ] | A ship which carries lifeboats equipped with radio apparatus; a number inside the brackets shows the number of such lifeboats ("S") <sup>1)</sup> |
| ▼   | High-traffic ship ("HS") <sup>1)</sup>  |
| ⊙   | Radar facilities available ("R") <sup>1)</sup>  |
| AL  | Aeronautical radionavigation land station   |
| AM  | Aeronautical radionavigation mobile station   |
| AT  | Amateur station   |
| AX  | Aeronautical fixed station  |
| BC  | Broadcasting station, sound   |
| BT  | Broadcasting station, television  |
| C   | Continuous operation during hours shown   |
| Ca  | Cargo ship  |
| CO  | Station open to official correspondence exclusively   |
| CP  | Station open to public correspondence   |
| CR  | Station open to limited public correspondence   |
| CV  | Station open exclusively to correspondence of a private agency  |

---

<sup>1)</sup> This symbol shown in parenthesis, may be used in notifications.

|      |  |
|------|--|
| D30° | Directive antenna having maximum radiation in the direction of 30° (expressed in degrees from true North, from 0 to 360 clockwise) |
| DR   | Directive antenna provided with a reflector  |
| EX   | Experimental station   |
| FA   | Aeronautical station   |
| FB   | Base station   |
| FC   | Coast station  |
| FE   | Earth station (Space service)  |
| FL   | Land station   |
| FP   | Port station   |
| FR   | Receiving station only, connected with the general network of telecommunication channels.  |
| FS   | Land station established solely for the safety of life   |
| FX   | Fixed station  |
| GMT  | Greenwich mean time  |
| H    | Scheduled operation  |
| H8   | 8-hour service provided by a ship station of the second category   |
| H16  | 16-hour service provided by a ship station of the second category  |
| H24  | Continuous throughout the twenty-four hours  |
| HJ   | Day service  |
| HN   | Night service  |
| HT   | Transition period service  |
| HX   | Intermittent throughout the twenty-four hours, or station having no specific working hours   |
| I    | Intermittent operation during the time indicated   |
| LR   | Radiolocation land station   |
| MA   | Aircraft station   |
| ME   | Space station  |
| ML   | Land mobile station  |

|    |  |
|----|--|
| MO | Mobile station   |
| MR | Radiolocation mobile station   |
| MS | Ship station   |
| ND | Non-directional antenna  |
| NL | Maritime radionavigation land station                                    |
| OT | Station open exclusively to operational traffic of the service concerned |
| Pa | Passenger ship   |
| RC | Non-directional radiobeacon  |
| RD | Directional radiobeacon  |
| RG | Radio direction-finding station  |
| RM | Maritime radionavigation mobile station                                  |
| RT | Revolving radiobeacon  |
| SM | Meteorological aids station  |
| SS | Standard frequency station   |
| TS | Television, sound channel  |
| TV | Television, video channel  |

## APPENDIX 11

### **Documents with which Ship and Aircraft Stations shall be provided**

(See Articles 18, 20, 21, 23, 28, and Appendix 9)

MOD

#### **Section I. Ship stations for which a Radiotelegraph Installation is required by International Agreement**

These stations shall be provided with :

1. licence provided for by Article 18 ;
2. certificates of the operator or operators ;



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 877-E  
14 December, 1959

COMMITTEE 5

COMMUNICATION BY THE CHAIRMAN OF COMMITTEE 5

The Delegation of Spain has handed in the undermentioned amendments to the record of statements made by ~~that~~ Delegation at the 15th, 19th and 22nd Meetings of Committee 5. These amendments were not raised until after the Final Meeting of Committee 5 at which the Summary Records in question were adopted. They have not therefore been adopted by the Committee.

Dr. Miroslav Joachim  
Chairman of Committee 5

Annex: 1



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A N N E X

AMENDMENTS

Document No. 699 - Summary Record of the 15th Meeting of Committee 5

On page 10, in point 7, replace the paragraph relating to the statement by the Spanish Delegate (paragraph 4 towards the bottom of the page), by the following:

"The Delegate of Spain doubted that it would be advisable to recommend the use of such oscillators, since unless they were operated by very knowledgeable and highly-trained personnel, they were liable to work on frequencies other than those assigned."

On page 12, towards the middle of the page, replace the paragraph relating to the Spanish Delegate's statement by the following:

"The Delegate of Spain said that his Delegation had abstained from voting because, while recognizing the importance of domestic broadcasting, it felt that, in certain cases, international broadcasting could be as, or more, important. That was so in countries like Spain, in the case of programmes for emigrants for whom broadcasting provided the only link with their fatherland. On the other hand, Committee 4 had endowed the term 'priority' with a concrete meaning having a totally absolute significance. His Delegation failed to see how, in that sense, priority could be accepted for domestic broadcasting over international broadcasting; however, it could accept the inclusion in the new Regulations of provisions stipulating that, once the technical arrangement of frequencies for HF broadcasting had been completed, the I.F.R.B. should give special and preferential consideration to the requirements for domestic broadcasting in the HF bands of specific countries which could not, because of propagation conditions, make use of medium or tropical broadcasting bands."

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Document No. 703 - Summary Record of the 19th Meeting of Committee 5

Page 1: last paragraph, and page 2, first four paragraphs:

Change the statement attributed to the Delegate of Spain to read:

"The Delegate of Spain maintained what he had said, as shown in the Annex to Document No. 618. For certain bands, the I.F.R.B. had made entries for the European Area without being in any way authorized so to do. Those entries had been made in accordance with the plans drawn up by the

Copenhagen Conferences, but the results of those conferences could only be considered, within the Union, as special agreements, without binding force or obligation for non-signatory countries. Those Conferences had discriminated against certain countries. Thus, for example, the Broadcasting Conference assigned various exclusive channels to several countries and frequencies from the lowest part of the corresponding band, while for other countries it reserved no exclusive channel, and assigned frequencies from the top of the band to them, which were less suitable, without any reasons of a geographical, cultural, or demographic kind to justify such action. Take Spain, for example. Incidentally, the results of the Broadcasting Conference had been accepted by twenty-four countries only, out of forty or so in the European Area. Something similar could be said of the Maritime Radio Conference.

" For all those reasons, his Delegation was submitting a proposal which would not oblige the other European countries to accept the Copenhagen plans, which were not equitable. That proposal appeared in Document No. 545. It made allowance for the rights of countries in the neighbouring African Area, since those latter countries could not be expected to pay for the sins committed in the European Area.

" In reply to the objection raised by other delegations, he would point out that although the Copenhagen Conference was provided for in an Atlantic City Additional Protocol, that Protocol had been signed by the European countries only, and could not be considered as a duty imposed on the countries of the European Area by the Union. Incidentally, the Conference had given itself plenipotentiary status, which was not provided for in the Protocol. Although the Protocol stated that the Conference could (invite other countries of the European Area), Spain had not been invited. Nor had the Protocol been respected, where it stipulated that there should be an equitable allocation of frequencies aiming to allow at least one exclusive frequency for each country.

" Similarly, the Copenhagen Conventions had violated the principle laid down in No. 87 of the Radio Regulations by failing to take account of the frequencies used at the time by existing stations in non-signatory countries. That had been the case of the Spanish stations.

" The Copenhagen Conferences had instituted an unfair distribution. Moreover, there was no Union provision whatsoever stipulating the adoption of the Copenhagen plans, such as the frequency list which should be shared out among all countries, including those which were not signatories. Thus, a legal principle was at stake. Therefore, the problem affected every Member of the Union"

Page 12: replace the paragraph beginning "The Delegate of Spain" at the bottom of the page, by the following:

"The Delegate of Spain said that, since it was claimed that there was a distinction between the countries which had voted according to whether they belonged to the European Zone or not - and that constituted a most unusual state of affairs - he would like it to be made known which countries among those that had voted were parties to the Copenhagen Conventions, so that it might be shown that practically the only countries which were in favour of the frequency list being based on the Copenhagen Plans were those which had benefited from the inequitable distribution resulting from those Conferences."

Document No. 805 Summary Record of the 22nd Meeting of Committee 5.

Page 2, last paragraph, read as follows:

"The Delegate of Spain said that Document No. DT 545 and Document No. 866 were completely equivalent. The use of an asterisk in Column 2a, instead of in Column 2d, was just a matter of lay-out which in no wise affected the principles embodied in Document No. DT 545. The changes to Article 11 in Document No. 866 were thus perfectly in accordance with the rest of the article. Such changes did not destroy the Copenhagen Plan, but merely left it what it had always been, i.e., a special agreement between certain countries in the European Area."

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 878-E  
16 December, 1959

## PLENARY MEETING

### MINUTES

of the

### TWENTY-SECOND PLENARY MEETING

11 December, 1959, at 9.00 p.m.

Chairman: Mr. Charles J. Acton (Canada)  
Vice-Chairman: Mr. Juan A. Autelli (Argentine Republic)  
Deputy Secretary of  
the Conference: Mr. Clifford Stead

### Subjects discussed:

1. Fifteenth series of texts submitted by the Drafting Committee (Document No. 791 with Corrigendum No. 1)
2. Sixth and sixteenth series of texts submitted by the Drafting Committee (Documents Nos. 663 and 792)
3. Seventeenth series of texts submitted by the Drafting Committee (Document No. 796)



Delegations of the following countries were present:

Afghanistan; P.R. of Albania; Argentine Republic; Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Burma; Brazil; P.R. of Bulgaria; Canada; China; Colombia; Belgian Congo; Korea; Cuba; Denmark; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungarian P.R.; India; Iran; Ireland; Iceland; Israel; Italy; Japan; Luxembourg; Malaya; Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Philippines; P.R. of Poland; Portugal; Portuguese Oversea Provinces; United Arab Republic; Federal Republic of Germany; F.P.R. of Yugoslavia; Roumanian P.R.; United Kingdom of Great Britain and Northern Ireland; Sudan (Republic of); Sweden; Switzerland; Czechoslovakia; United States Territories; the Overseas Territories for the international relation of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Turkey; Union of South Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

Recognized Private Operating Agencies: B.B.C.

International Organizations: I.C.A.O., C.I.N., I.A.T.A., I.B.T.O.

1. Fifteenth Series of Texts submitted by the Drafting Committee (Document No. 791 with Corrigendum No. 1.

Document No. 791, with corrigendum No. 1 was examined page by page and was approved with drafting changes.

2. Sixth and Sixteenth Series of texts submitted by the Drafting Committee (Documents Nos. 663 and 792.

Documents Nos. 663 and 792 were examined page by page and were approved with drafting changes and various suggestions to eliminate discrepancies between the two sets of texts.

During the discussion, the Delegate of India, supported by the Delegate of Pakistan, asked for the deletion of paragraph 4.2 on the grounds that there were three distinct tables for figure spelling, that given in the existing Appendix 11, the I.C.A.O. table, and the one given in paragraph 4.2, while Committee 7 had agreed that they should not prejudge the adoption of any particular table.

The Delegates of Italy, France and the United Kingdom were in favour of retaining paragraph 4.2, the latter pointing out that all the examples quoted were based on it.

The Indian proposal to delete paragraph 4.2 was put to the vote by a show of hands and was rejected by 40 votes to 3, with 9 abstentions.

3. Seventeenth Series of texts submitted by the Drafting Committee (Document No. 796)

The Chairman of Committee 5 (Dr. Joachim, Czechoslovakia), introducing the first series of texts from his Committee in Document No. 796, paid tribute to Working Group 5A1, which had been faced with one of the most difficult tasks in the whole Conference.

Document No. 796 was then examined page by page.

The Delegate of Mexico considered that the expression "the applicability of new transmission techniques" in Number 359d was not clear.

The Delegate of the U.S.S.R. also thought the expression unclear; it should be deleted.

The Delegates of France, the United States, Belgium and the F.P.R. of Yugoslavia thought that the words should be maintained to cover future progress in such fields as ionospheric and tropospheric scatter propagation.

After a short discussion, at the suggestion of Mr. Gracie, Vice-Chairman of the I.F.R.B., it was agreed to amend the phrase to read "and the development of new transmission techniques."

The Delegate of the U.S.S.R. wished to refer to Article 11a as a whole. In view of the experimental nature of the proposed procedure for frequency management for high-frequency broadcasting purposes, Article 11a should be removed from the body of the Radio Regulations and should be relegated to an appendix. At least two years' experience would be required before the Administrative Council could study the effectiveness of the procedure in order to make suitable recommendations to Administrations.

The Delegate of the People's Republic of Bulgaria had already proposed in Committee 5 that Article 11a be regarded as a temporary **test** procedure. He supported the proposal of the Delegate of the U.S.S.R.

The U.S.S.R. proposal was put to the vote by a show of hands and was rejected by 43 votes to 9, with 10 abstentions.

Article 11a was thus retained in the body of the Regulations.

The Delegate of the People's Republic of Bulgaria reserved the right of his Administration to approve Article 11a or not.

The Delegate of Mexico would have liked to make a full statement on the position as regards high-frequency broadcasting, but time was short. He would therefore be brief.

Article 11a was an interesting experiment that might give good results in the future. But how would it solve the problem for new and



developing countries? Everyone had said that there would be full co-operation but no concrete answers had been given. Although Mexico would give its fullest cooperation (as it had always done), he was still not entirely satisfied and would have to reserve the position of the Mexican Administration should the I.F.R.B., in practice, be unable to meet the frequency requirements of that Administration. It was not possible to wait for six years with nothing but a plan whose realization was constantly being postponed.

On a proposal by the Delegate of New Zealand, it was agreed to delete the words "or until their successors are duly elected" in Number 363.

Document No. 796 was approved with drafting changes and typographical corrections.

Reservations were then made as follows:

The Delegate of Spain said: "Before Article 11 is approved, I should like to explain the position of Spain as regards this Article. The Spanish Delegation has said in Committee 5 (see Documents Nos. 40, 545, 618, 703, 805, DT 499 and DT 719) that in the bands 415-1 605 kc/s and 150-255 kc/s, in the European area, the position represented by the entries in the Radio Frequency Record is markedly unsatisfactory both from the legal standpoint in the framework of the Union and from the practical standpoint, as regards the distribution of frequencies among the countries of the area.

" Since, because of lack of time, Committee 5 could not accept the texts proposed by Spain, although it had approved its principle, the Spanish Delegation wishes to make the fullest reservations concerning its acceptance of Article 11 insofar as it refers to the above-mentioned bands and the European area. In particular, for these bands, we cannot respect paragraph 339 *et* number 87 of the Regulations so long as the International Frequency Register is based on the Copenhagen Plans."

The Delegate of Turkey said: "The problem facing many countries in the European Broadcasting Area is now well known to many delegations. We should like to give a resumé for the benefit of those who did not take part in the Committee meetings.

" A conference of the countries in the European Area was convened in Copenhagen in 1948 as stipulated in the Additional Protocol annexed to the Atlantic City Radio Regulations. This conference drew up broadcasting plans covering the long and medium waves, but the distribution of frequencies in this plan was far from being satisfactory and workable, as many countries which were represented were treated like step-brothers in the assignment of frequencies. The countries which were not invited to attend the meeting were given some frequencies without much regard to their actual needs and some new countries were in the process of creating their own administrations.

" The resulting plan was so inequitable and so unjust that a long list of countries made reservations amounting to a rejection of this plan. Revision of the plan was continually postponed and, although the Copenhagen agreement stipulated that the frequencies in the Plan would bear as a date of notification in the International Frequency List the date of the signature of the agreement, for some unknown reason the I.F.R.B. gave some of the entries registration dates in Column 2a. The events which have taken place since 1948 show that even the signatory countries have not stuck to the Copenhagen Plan, although many of the non-signatories have patiently waited for positive action to give them a chance to satisfy their broadcasting needs without having to go counter to the statutes of the Union and the spirit of international cooperation. It is now apparent that this spirit has been circulating in a one-way street without a destination.

" The Copenhagen agreement has so far not been an all-binding arrangement within the Union. It has stayed in the air all these years and the only way to give it a chance for long and respected life is by not insisting on registering the frequency assignments in the Plan and by arranging a future conference of the plenipotentiaries of the European Area for a revision of the Plan.

" We say the Plan cannot be accorded final acceptance at present because close to 50% of the countries concerned will have to be given equal shares in the service thus afforded. As an example, I could once again remind you that, although Turkey covers the largest area in Europe outside the Soviet Union, with an area of 770,000 square kilometres (293,000 square miles) and a population of 25 million, she was given only three frequencies in the medium-frequency band, one only of which was unshared, but it happened to be too high to be of any use in Turkish terrain. In the meantime, some of the other members kept for themselves ten or more frequencies, sometimes exceeding 20, many of them unshared. One glance at the Plan or at Document DT 774 which contains the relevant statistics will reveal the nature of this Plan.

" In view of the unacceptable decision taken by this Conference regarding the Copenhagen Plan, especially in connection with the application of Article 11 of the new Radio Regulations, our Delegation is compelled to declare that the Turkish Government reserves the right to take the necessary measures to meet the frequency requirements of Turkey with adequate coverage for broadcasting in the said bands."

The Delegate of the Roumanian People's Republic asked for the Minutes to record his Administration's reservation with regard to the procedure described in Article 11a.

The Delegate of the Federal Republic of Germany said that his Administration found it difficult to accept the new provisions in Article 11, in the light of the Copenhagen Plan. He would hand in a statement for insertion in the Final Acts.

The Delegate of the Hungarian People's Republic said: "The Delegation of the Hungarian People's Republic reserves full rights as regards the compulsory application of the rules contained in Article 11a of the Radio Regulations, Geneva, 1959."

The Delegate of Cuba reserved the position of his Administration with regard to Article 11a. He had hoped that the new provisions would have done something to meet the requirements of new and developing countries, but he now found that the treatment granted those countries would be no better in the future than it had been in the past.

The Delegate of Portugal said: "Since Portugal has not ratified the Copenhagen Convention and in the light of the reservation it made at that Conference and the other reservations we have heard here, Portugal reserves its position as regards the application of Article 11 of the Regulations to band 525 - 1 605 kc/s.

" A written text will be handed to the Secretariat for inclusion in the Final Acts."

The Delegate of Israel said: "The Israeli Delegation finds itself in a position similar to that of the Delegations of Spain, Turkey, the Federal Republic of Germany and Portugal. The Government of the State of Israel was not a signatory to the Copenhagen Plan annexed to the European Broadcasting Convention. Consequently, it cannot accept the provisions with regard to the Copenhagen Plan and reserves its right to take any action it deems necessary to meet the requirements for broadcasting in the medium-frequency band 522 to 1 605 kc/s."

The Delegate of Austria said that Austria had been unable to sign the Copenhagen Plan because of the inadequate and inappropriate frequency allocations to Austria. He wished it to be recorded that Austria's signature of the new Radio Regulations would not imply recognition of the Copenhagen Broadcasting Plan and he reserved his Administration's position as regards the application of Article 11.

The Delegate of Czechoslovakia had voted against the retention of Article 11a in the body of the Regulations. He reserved his Administration's position on the matter.

The Delegate of the People's Republic of Poland said: "The Administration of the People's Republic of Poland submits the following declaration containing our objections to the procedure of frequency management for the HF broadcasting service:

" Our Administration, like any other Administration, desires the future improvement of the HF broadcasting service. We are particularly interested in this question and have submitted a proposal (Document No. DT 168, Committee 5, 15 September, 1959) in which a new procedure of frequency management for HF broadcasting is given.

" In our opinion, this procedure could be regarded as a basis for a recommendation to be put into practice temporarily until further experience has been gained in this matter.

" In the meantime,, a new procedure was adopted at the Plenary Meeting on 11 December 1959, shown in Article 11a of the Radio Regulations and due to enter into force on 1 March 1960. We are convinced that approval of this procedure as part of the Radio Regulations is premature because it should be preceded by a sufficiently long time for the requisite experience to be gained. Only as a result of such experience would it be possible to adopt appropriate provisions for inclusion in the new Radio Regulations.

" For the above reasons, the Administration of the People's Republic of Poland reserves its right not to be bound by the procedure laid down in Article 11a of the Radio Regulations when its interests so require."

The meeting rose at 11.50 p.m.

Rapporteur:  
H. Heaton

Deputy Secretary of the Conference:  
Clifford Stead

Chairman:  
Charles J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 879-E  
15 December, 1959

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PLENARY MEETING

MINUTES

of the

TWENTY-THIRD PLENARY MEETING

Saturday, 12 December 1959, at 10.10 a.m.

Chairman : Mr. Charles J. Acton (Canada)  
Vice-Chairmen : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)  
Deputy Secretary  
of the Conference : Mr. Clifford Stead

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Subjects discussed :

1. Document No. 806 (a letter from the Head of the Moroccan Delegation).
  2. Eighteenth Series of Blue Sheets (Document No. 803).
  3. Note by the Chairman on Proposal No. 5574 (Document No. 807).
  4. Minutes of the Fourteenth Plenary Meeting (Document No. 821).
- 



The following countries were represented:

Afghanistan; the People's Republic of Albania; Saudi Arabia; the Argentine Republic; Australia (Commonwealth of); Austria; Belgium; the Bielorussian Soviet Socialist Republic; Brazil; the People's Republic of Bulgaria; Cambodia; Canada; Ceylon; Chile; the Republic of China; Colombia; the Belgian Congo; the Republic of Korea; Cuba; Denmark; Overseas States of the French Community and French Overseas Territories; Spain; the United States of America; Ethiopia; Finland; France; Greece; the Hungarian People's Republic; the Republic of India; Indonesia (Republic of); Iran; Iraq; Ireland; Iceland; Israel; Italy; Japan; Malaya; Morocco; Mexico; Norway; New Zealand; Pakistan; Paraguay; the Netherlands (Kingdom of); Peru; the Philippines (Republic of); the People's Republic of Poland; Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; the Ukrainian Soviet Socialist Republic; the Roumanian People's Republic; the United Kingdom of Great Britain and Northern Ireland; Sweden; Switzerland; the Czechoslovak Republic; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland is responsible; Thailand; Turkey; Union of South Africa; the Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela.

Recognized Private Operating Agencies:

The Portuguese Marconi Radio Company.

International Organizations:

European Broadcasting Union; International Chamber of Shipping; International Broadcasting and Television Organization.

1. Document No. 806 (a letter from the Head of the Delegation of Morocco).

The Delegate of Italy wondered why the document had been published at all; it dealt with matters with which the Secretariat was perfectly competent to deal.

The Delegate of the United States said that there could be no doubt but that the Government of Morocco was fully entitled to take the kind of action outlined in the letter. As representative of an Administration which operated equipment on Moroccan soil, he assumed that the letter portended no change in such operations without appropriate negotiation.

The Delegate of Morocco explained that since becoming independent his country was trying to centralize its frequency requirements. That involved negotiations with four Administrations, three of which had already agreed to the changes proposed. Negotiations were still continuing.

The Delegate of Spain said that his Administration was one of those concerned. The action called for by Morocco would present no difficulty as far as Spain was concerned.

The Conference took note of Document No. 806.

2. Eighteenth Series of Blue Sheets (Document No. 803)

A number of minor drafting changes were made in this document; some discussion took place in connection with the following points:

Page 18-02 - Definition of "telegraphy"

The Delegate of the Belgian Congo, supported by the Delegate of the Argentine, said that the definition given was ambiguous and misleading. Either the Atlantic City definition should be kept, or the second sentence on Page 18-02, definition 7, should be deleted.

The Delegate of the United States, speaking as Chairman of Working Group 6A and supported by the Delegate of the United Kingdom explained that the Plenipotentiary Conference held rather different views as to what kind of definition was desirable for purely administrative purposes, and the definition represented a compromise, arduously arrived at, between Committee 6 of the Radio and Committee F of the Plenipotentiary Conference. For greater clarity, he would suggest that the second sentence read: " ... telegraphy shall mean, except where otherwise specified, 'a system of telecommunication for the transmission of written matter by the use of a signal code'.".

The proposal of the Delegate of the Belgian Congo for deletion of the second sentence in the definition was rejected by 28 votes to 13, with 17 abstentions, and the definition as amended by the Delegate of the United States was adopted.

The Delegate of Paraguay said that in the Plenipotentiary Conference, his Delegation had made reservations about the definition of "telegraphy". He agreed with the views expressed by the Delegates of the Belgian Congo and Argentina.

The Delegate of the Belgian Congo said he was unable to accept the definition adopted.

It was also agreed that Articles 9 and 33 should be suitably amended by the introduction of references to facsimile telegraphy.

Page 18-04 - Definition of "Land Station" (40)

A proposal by the Delegate of Spain to make the text rather more specific by amending it to read: "a station in the mobile service in a specific place, not intended to be used while in motion", was rejected by 26 votes to 22, with 8 abstentions.

Page 18-05 - Definition of "Port Operations Service" (24a)

It was agreed that in accordance with decisions previously taken in connection with the Fifteenth Series of Blue Sheets, Pages 15-18, the last two lines of the definition should read: "... messages are restricted to the movement and safety of ships and, in emergency, to the safety of persons".

Page 18-06 - Definition of "Radiolocation" (12a) and "Radiolocation Service" (28a)

The Delegate of the Union of Soviet Socialist Republics thought the definitions entirely unsatisfactory; what was that so-called service supposed to comprise?

The Delegate of Mexico said that if "radiolocation" was interpreted to mean detection of mines and mineral deposits, radar and geodetic studies, he could accept the definition.

The Delegate of Switzerland felt that the definitions of radiolocation and radionavigation services, at least in the French text, were unsatisfactory, in that they might lead to divergent interpretations of the Frequency Allocation Table; it was too easy for Administrations to put their own interpretation on them.

The Delegate of Cuba made reservations in connection with definitions 12a) ("Radiolocation") and 51b ("radiolocation mobile station").

Page 18-08 - Definition of "Meteorological Aids Service" (32)

The Delegates of Denmark and the Belgian Congo preferred the original Atlantic City definition, beginning: "A service of emissions of special radio signals ...". The words "A radiocommunication service", as in the proposed definition, were far too broad.

The Delegate of Colombia suggested the introduction of the word "solely", so that the definition would read: "A radiocommunication service used solely for ...".

By 22 votes to 16, with 11 abstentions, it was decided to keep the wording given in Document No. 803.



Page 18-12 - Definition of "Quarter-Power Angular Width of Radiation Main Lobe"

There was some discussion between the Delegate of the United States (speaking as Chairman of Working Group 6A) and the Delegate of Spain as to whether, technically speaking, the definition made sense.

Eventually, the Delegate of France suggested that a small working party to be set up to reconsider the definition.

The Chairman proposed that the Delegates of Mexico and Spain should confer with the Chairman of Working Group 6A for that purpose.

It was so decided.

Page 18-13 - 447a (contents of the International Frequency List)

The Delegate of Australia suggested that the first sentence of paragraph a) should read: "particulars of frequency assignments recorded in the Master International Frequency Register under the provisions of Articles 11 and 11a".

The Representative of the International Frequency Registration Board suggested: "... including particulars of frequency assignments recorded under the provisions of Article 11".

It was eventually decided to make no change.

Page 18-22 - Recommendation regarding "the Practical Needs of Countries in Need of Special Assistance"

The Delegate of Greece withdrew a reservation made at a previous meeting.

Page 18-29 - Resolution relating to the Application, from 1 March, 1960 to 31 December, 1960, of the Procedure specified in Article 11a of the Radio Regulations (Geneva, 1959), for the Bands allocated exclusively to the Broadcasting Service between 5 950 and 26 100 kc/s

The Delegates of the Union of Soviet Socialist Republics, Mexico, the People's Republic of Poland and Czechoslovakia, made reservations on behalf of their Administrations in connection with the procedure in question.

The Delegate of Spain said that the Resolution on Pages 34-50 ("Establishment of the Master International Frequency Register") included amongst other things, provisions under which assignments in accordance with

the plans evolved at the Copenhagen Conferences (1948) would be entered in the Master Register with dates in Column 2a.

For the reasons he had explained on previous occasions, his Delegation thought that the Union was making a serious mistake in maintaining the Column 2A dates for entries of that kind. Countries which were not parties to the Copenhagen Conventions could not be bound by those provisions, and Spain made every reservation in connection therewith.

The Delegates of Turkey and Israel associated themselves with that statement.

Subject to the above amendments and reservations, Document No. 803 was adopted.

3. Note by the Chairman (Proposal No. 5574)

The Chairman explained that Committee 7 had adopted, and referred to the Plenary Meeting, a proposal by the Delegations of Indonesia, Ireland, Israel, and Pakistan to the effect that the Secretary-General be instructed to make records illustrating the proper pronunciation of the newly-adopted "Speaking Table" or, alternatively, to investigate the possibility of using such records as might already exist.

Mr. Stead (Deputy Secretary of the Conference) said that the General Secretariat would make inquiries of I.C.A.O., to ascertain whether the I.C.A.O. record could be made available for I.T.U. purposes. It would also investigate the cost of a new record, made specially for the I.T.U.

It was decided, in accordance with a suggestion by the Delegate of Czechoslovakia, to delete the words: "to Members of the Union" in paragraph 1, under "proposes that:".

Thus amended, Document No. 807 was adopted.

4. Minutes of the Fourteenth Plenary Meeting (Document No. 821)

The Delegate of the Union of Soviet Socialist Republics said that the words: "His Government", on the last line, but one of Page 3, should read: "The Delegation of the Union of Soviet Socialist Republics".

The Delegate of Mexico would submit a text amending the statement attributed to him in the last paragraph on Page 5.

The Delegate of Denmark said that the opening words in the second line of the statement attributed to him on Page 7 should read: "... which, when considered together with Regulation No. 76 ...". On Page 10, read: "The Delegate of Denmark, having proposed the same change as in No. 161a, it was agreed that the Drafting Committee would study the matter" (under "Page 10-08").

The Meeting rose at 1 p.m.

N. G. Langford

Clifford J. Stead

Charles J. Acton

Rapporteur

Deputy Secretary of the  
Conference

Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 880-E  
16 December 1959

## PLENARY MEETING

### A G E N D A

#### Twenty-Sixth Plenary Meeting

Wednesday, 16 December, 1959 at 3 p.m.

1. Texts submitted for second reading = Series B (Pink Document No. 858)
2. Texts submitted for second reading = Series A (Pink Document No. 857).
3. Final Report by Committee C/3 (Document No. 865).
4. Approval of the Minutes of the Thirteenth Plenary Meeting (Document No. 817).
5. Approval of the Minutes of the Fifteenth Plenary Meeting (Document No. 852).
6. Approval of the Minutes of the Sixteenth Plenary Meeting (Document No. 853).
7. Approval of the Minutes of the Seventeenth Plenary Meeting (Document No. 854).
8. Approval of the Minutes of the Eighteenth Plenary Meeting (Document No. 868).
9. Approval of the Minutes of the Nineteenth Plenary Meeting (Document No. 869).
10. Approval of the Minutes of the Twentieth Plenary Meeting (Document No. 873).
11. Approval of the Minutes of the Twenty-first Plenary Meeting (Document No. 874).
12. Miscellaneous.



**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 881-E  
16 November, 1959**

**SERIES E**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Blue Document No. | Series No. | Pages | Former Article | New Article | Pages | Remarks     |
|-------------------|------------|-------|----------------|-------------|-------|-------------|
| 822               | 20         | 20-01 | App. 8         | App. 11     | E-00  | (continued) |
| 813               | 19         | 19-55 | „ 13           | „ 12        | E-04  |             |
| 587               | 3          | 3-01  | „ 9            | „ 13        | E-07  |             |
| 587               | 3          | 3-29  | „ 9 Sec. III   | „ 14        | E-34  |             |
| 861               | 23         | 23-13 | App. 10        | „ 15        | E-37  |             |
| 747               | 13         | 13-14 | „ 11           | „ 16        | E-40  |             |
| 813               | 19         | 19-19 | „ 12           | „ 17        | E-42  |             |
| 813               | 19         | 19-52 | „ 12b          | „ 18        | E-45  |             |
| 813               | 19         | 19-54 | „ 12c          | „ 19        | E-46  |             |
| 747               | 13         | 13-12 | „ 5a           | „ 20        | E-47  |             |
| 551               | 1          | 1-15  | „ 14           | „ 21        | E-49  |             |
| 551               | 1          | 1-16  | „ 14a          | „ 22        | E-50  |             |
| 645               | 5          | 5-11  | „ 15           | „ 23        | E-53  |             |
| 861               | 23         | 23-30 | „ 16           | „ 24        | E-60  |             |
| 813               | 19         | 19-22 | „ 12 zero      | „ 25        | E-61  |             |
| 747               | 13         | 13-11 | „ A            | „ A         | E-92  |             |



3. log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence ;
  - a) all communications relating to distress traffic in full,
  - b) urgency and safety communications,
  - c) communications exchanged between the ship station and land or mobile stations,
  - d) service incidents of all kinds,
  - e) if the ship's rules permit, the position of the ship at least once a day ;
4. Alphabetical List of Call Signs of Stations used in the Maritime Mobile Service ;
5. List of Coast Stations ;
6. List of Ship Stations ;
7. List of Radiodetermination and Special Services Stations ;
8. Radio Regulations and Additional Radio Regulations, also such provisions of the Convention as relate to the radiocommunication service on board ship ;
9. telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams ;
10. if administrations concerned consider it necessary, the Telegraph Regulations.

#### **Section II. For other Radiotelegraph Stations on Ships**

These stations shall be provided with :  
the documents mentioned in items 1 to 6, 8 and 9 of Section I.

#### **Section III. For Stations on Board Ships for which a Radiotelephone Installation is Required by International Agreement**

These stations shall be provided with :

1. licence provided for by Article 18 ;
2. certificates of the operator or operators ;

3. the log (diary of the radio service) in which the following are recorded as they occur, together with the time of their occurrence :
  - a) a summary of all communications relating to distress, urgency and safety traffic ;
  - b) a summary of communications exchanged between the ship station and land or mobile stations ;
  - c) a reference to important service incidents ;
  - d) if the ship's rules permit, the position of the ship at least once a day ;
4. a list of coast stations with which communications are likely to be conducted, showing watchkeeping hours, frequencies and charges ;
5. the provisions of the Radio Regulations and Additional Radio Regulations applicable to the maritime mobile radiotelephone service.

#### **Section IV. For other Radiotelephone Stations on Ships**

These stations shall be provided with :

1. the documents mentioned in items 1 and 2 of Section III ;
2. the documents mentioned in items 3, 4 and 5 of Section III, in accordance with the requirements of the administrations concerned.

#### **Section V. For Ship Stations Equipped with Multiple Installations**

These stations shall be provided with :

1. for each installation, if necessary, the documents mentioned in items 1 to 3 of Section I, or in items 1, 2 and 3 of Section III ;
2. for only one installation, the other documents mentioned in Sections I or III, as appropriate.

**Section VI. For Aircraft Stations**

These stations shall be provided with :

1. the documents mentioned in items 1 and 2 of Section I ;
2. the log (diary of the radio service) as defined in item 3 of Section I, unless administrations have adopted other arrangements for recording all information which the log should contain ;
3. the documents containing official information relating to stations which the aircraft station may use for the execution of its service.



## APPENDIX 12

**Hours of Service for ships in the Second Category**

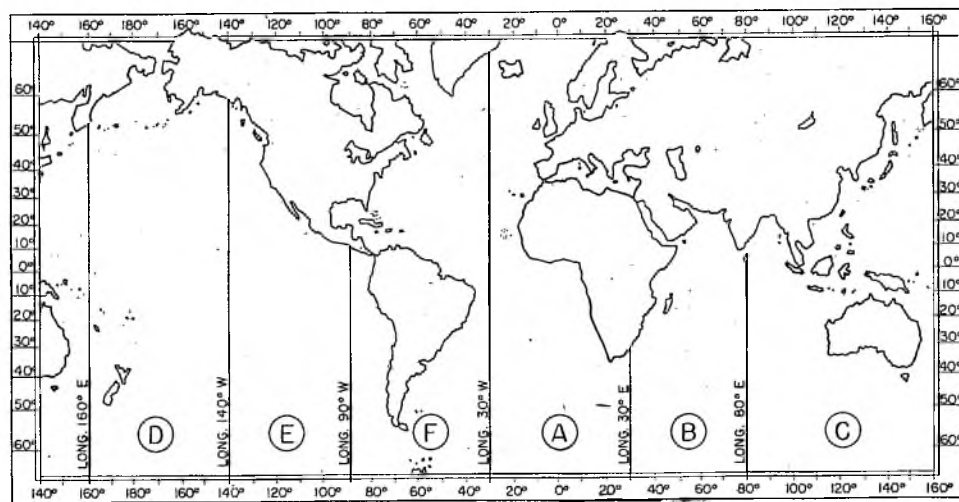
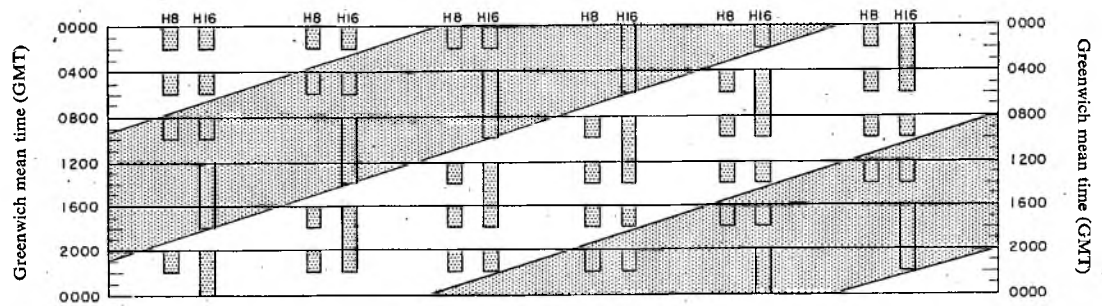
(See Articles 20 and 25)

**Section I. Table**

| Zones   | Western limits                         | Eastern limits.  | Hours of service<br>(Greenwich mean time)<br>(G.M.T.)        |   |
|---|--|--|--|---|
|   |  |  | 8 hours<br>(H8)  | 16 hours<br>(H16)   |
| <b>A</b><br>Eastern Atlantic Ocean, Mediterranean, North Sea, Baltic.                     | Meridian of 30° W, Coast of Greenland. | Meridian of 30° E, to the South of the coast of Africa, Eastern limits of the Mediterranean, of the Black Sea, and of the Baltic, Meridian of 30° E northwards from the coastline of Norway. | from 8 h. 10 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h. | from 0 h. 6 h.<br>8 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h.                |
| <b>B</b><br>Western Indian Ocean, Eastern Arctic Ocean.                                   | Eastern limit of Zone A.               | Meridian of 80° E, Western Coast of Ceylon to Adam's Bridge, thence Westward round the coast of India, Meridian 80° E to northwards from the coastline of the U.S.S.R.                       | from 4 h. 6 h.<br>8 h. 10 h.<br>12 h. 14 h.<br>16 h. 18 h.   | from 0 h. 2 h.<br>4 h. 10 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 24 h. |
| <b>C</b><br>Eastern Indian Ocean, China Sea, Western Pacific Ocean, Eastern Arctic Ocean. | Eastern limit of Zone B.               | Meridian of 160° E, as far as the coast of Kamchatka, Meridian of 160° E northwards from the coastline of the U.S.S.R.   | from 0 h. 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>12 h. 14 h.     | from 0 h. 6 h.<br>8 h. 10 h.<br>12 h. 14 h.<br>16 h. 22 h.                |

| Zones  | Western limits   | Eastern limits   | Hours of service<br>(Greenwich mean time)<br>(G.M.T.)             |   |
|--|--|--|---|---|
|  |  |  | 8 hours<br>(H8)   | 16 hours<br>(H16)   |
| <b>D</b><br>Central Pacific<br>Ocean.                        | Eastern limit of<br>Zone C.  | Meridian of 140°W.   | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>20 h. 22 h.    | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 10 h.<br>12 h. 18 h.<br>20 h. 24 h. |
| <b>E</b><br>Eastern Pacific<br>Ocean.                        | Eastern limit of<br>Zone D.  | Meridian of 90°W, as<br>far as the coast of<br>Central America,<br>thence Western<br>coast of Central<br>America and of<br>Northern America. | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>16 h. 18 h.<br>20 h. 22 h.   | from to<br>0 h. 2 h.<br>4 h. 6 h.<br>8 h. 14 h.<br>16 h. 22 h.                |
| <b>F</b><br>Western Atlantic<br>Ocean and Gulf<br>of Mexico. | Meridian of<br>90°W, Gulf of<br>Mexico, East-<br>ern coast of<br>North Amer-<br>ica. | Meridian of 30°W,<br>coast of Greenland.   | from to<br>0 h. 2 h.<br>12 h. 14 h.<br>16 h. 18 h.<br>20 h. 22 h. | from to<br>0 h. 2 h.<br>4 h. 10 h.<br>12 h. 18 h.<br>20 h. 22 h.              |

## Section II. Diagram



## APPENDIX 13

**Miscellaneous Abbreviations and Signals to be used  
in Radiotelegraphy Communications**

(See Article 29)

**SECTION I. Q CODE****Introduction**

1. The series of groups QRA to QVZ, listed in this Appendix, are for use by all services.

2. The QAA to QNZ series are reserved for the aeronautical service and the QOA to QQZ series are reserved for the maritime services. These series are not listed in these Regulations.

3. Certain Q code abbreviations may be given an affirmative or negative sense by sending YES or NO respectively, immediately following the abbreviation.

4. The meanings assigned to Q code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear should be sent in the same order as shown in the text of the following tables.

5. Q code abbreviations are given the form of a question when followed by a question mark. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark should follow this information.

6. Q code abbreviations, with numbered alternative significations, must be followed by the appropriate figure to indicate the exact meaning intended. This figure should be sent immediately following the abbreviation.

7. All times should be given in Greenwich mean time (G.M.T.) unless otherwise indicated in the question or reply.

## Abbreviations Available for All Services

### A. List of Abbreviations in Alphabetical Order

| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QRA          | What is the name of your station?   | The name of my station is . . .   |
| QRB          | How far approximately are you from my station?  | The approximate distance between our stations is . . . nautical miles (or kilometres).                        |
| QRC          | By what private enterprise (or State Administration) are the accounts for charges for your station settled? | The accounts for charges of my station are settled by the private enterprise . . . (or State Administration). |
| QRD          | Where are you bound and where are you from?   | I am bound for . . . from . . .   |
| QRE          | What is your estimated time of arrival at . . . (or over . . .) (place)?                                    | My estimated time of arrival at (or over . . .) (place) is . . . hours.                                       |
| QRF          | Are you returning to . . . (place)?   | I am returning to . . . (place).<br>or<br>Return to . . . (place).  |
| QRG          | Will you tell me my exact frequency (or that of . . .)?   | Your exact frequency (or that of . . .) is . . . kc/s (or Mc/s).  |
| QRH          | Does my frequency vary?   | Your frequency varies.  |
| QRI          | How is the tone of my transmission?   | The tone of your transmission is . . .<br>1. good<br>2. variable<br>3. bad.                                   |
| QRJ          | How many radiotelephone calls have you to book?   | I have . . . radiotelephone calls to book.  |

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| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QRK          | What is the intelligibility of my signals ( <i>or</i> those of . . .)? | The intelligibility of your signals ( <i>or</i> those of . . .) is . . .<br>1. bad<br>2. poor<br>3. fair<br>4. good<br>5. excellent. |
| QRL          | Are you busy?  | I am busy ( <i>or</i> I am busy with . . .).<br>Please do not interfere.   |
| QRM          | Are you being interfered with?   | I am being interfered with<br>(1. nil<br>2. slightly<br>3. moderately<br>4. severely<br>5. extremely).                               |
| QRN          | Are you troubled by static?  | I am troubled by static<br>(1. nil<br>2. slightly<br>3. moderately<br>4. severely<br>5. extremely).                                  |
| QRO          | Shall I increase transmitter power?                                    | Increase transmitter power.  |
| QRP          | Shall I decrease transmitter power?                                    | Decrease transmitter power.  |
| QRQ          | Shall I send faster?   | Send faster (. . . words per minute).  |
| QRR          | Are you ready for automatic operation?                                 | I am ready for automatic operation.<br>Send at . . . words per minute.   |
| QRS          | Shall I send more slowly?  | Send more slowly (. . . words per minute).   |

| Abbreviation | Question   | Answer or Advice  |
|--------------|--|---|
| QRT          | Shall I stop sending?  | Stop sending.   |
| QRU          | Have you anything for me?  | I have nothing for you.   |
| QRV          | Are you ready?   | I am ready.   |
| QRW          | Shall I inform ... that you are calling him on ... kc/s (or Mc/s)? | Please inform ... that I am calling him on ... kc/s (or Mc/s).  |
| QRX          | When will you call me again?                                       | I will call you again at ... hours (on ... kc/s (or Mc/s)).   |
| QRY          | What is my turn?<br>(Relates to communication)                     | Your turn is Number ... (or according to any other indication).<br>(Relates to communication).  |
| QRZ          | Who is calling me?   | You are being called by ... (on ... kc/s (or Mc/s)).  |
| QSA          | What is the strength of my signals (or those of ...)?              | The strength of your signals (or those of ...) is ...<br>1. scarcely perceptible<br>2. weak<br>3. fairly good<br>4. good<br>5. very good. |
| QSB          | Are my signals fading?   | Your signals are fading.  |
| QSC          | Are you a cargo vessel?<br>(see Article 32, Section V)             | I am a cargo vessel.  |
| QSD          | Is my keying defective?  | Your keying is defective.   |
| QSE          | What is the estimated drift of the survival craft?                 | The estimated drift of the survival craft is ... (figures and units).   |

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| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QSF          | Have you effected rescue?   | I have effected rescue and am proceeding to . . . base (with . . . persons injured requiring ambulance).  |
| QSG          | Shall I send . . . telegrams at a time?   | Send . . . telegrams at a time.   |
| QSH          | Are you able to home on your D/F equipment?   | I am able to home on my D/F equipment (on station . . .).   |
| QSI          |   | I have been unable to break in on your transmission.<br><br><i>or</i><br>Will you inform . . . <i>(call sign)</i> that I have been unable to break in on his transmission (on . . . kc/s <i>(or</i> Mc/s)). |
| QSJ          | What is the charge to be collected to . . . including your internal charge?           | The charge to be collected to . . . including my internal charge is . . . francs.   |
| QSK          | Can you hear me between your signals and if so can I break in on your transmission?   | I can hear you between my signals; break in on my transmission.   |
| QSL          | Can you acknowledge receipt?  | I am acknowledging receipt.   |
| QSM          | Shall I repeat the last telegram which I sent you <i>(or</i> some previous telegram)? | Repeat the last telegram which you sent me <i>(or</i> telegram(s) number(s) . . .).   |
| QSN          | Did you hear me <i>(or</i> . . . <i>(call sign)</i> ) on . . . kc/s <i>(or</i> Mc/s)? | I did hear you <i>(or</i> . . . <i>(call sign)</i> ) on . . . kc/s <i>(or</i> Mc/s).  |
| QSO          | Can you communicate with . . . direct <i>(or</i> by relay)?                           | I can communicate with . . . direct <i>(or</i> by relay through . . .).   |



| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QSP          | Will you relay to . . . free of charge?   | I will relay to . . . free of charge.   |
| QSQ          | Have you a doctor on board ( <i>or</i> is . . . ( <i>name of person</i> ) on board)?                                  | I have a doctor on board ( <i>or</i> . . . ( <i>name of person</i> ) is on board).  |
| QSR          | Shall I repeat the call on the calling frequency?   | Repeat your call on the calling frequency; did not hear you ( <i>or</i> have interference).                                 |
| QSS          | What working frequency will you use?  | I will use the working frequency . . . kc/s ( <i>normally only the last three figures of the frequency need be given</i> ). |
| QSU          | Shall I send or reply on this frequency ( <i>or</i> on . . . kc/s ( <i>or</i> Mc/s)) (with emissions of class . . .)? | Send or reply on this frequency ( <i>or</i> on . . . kc/s ( <i>or</i> Mc/s)) (with emissions of class . . .).               |
| QSV          | Shall I send a series of V's on this frequency ( <i>or</i> . . . kc/s ( <i>or</i> Mc/s))?                             | Send a series of V's on this frequency ( <i>or</i> . . . kc/s ( <i>or</i> Mc/s)).   |
| QSW          | Will you send on this frequency ( <i>or</i> on . . . kc/s ( <i>or</i> Mc/s)) (with emissions of class . . .)?         | I am going to send on this frequency ( <i>or</i> on . . . kc/s ( <i>or</i> Mc/s)) (with emissions of class . . .).          |
| QSX          | Will you listen ( <i>to</i> . . . <i>call sign(s)</i> ) on . . . kc/s ( <i>or</i> Mc/s)?                              | I am listening ( <i>to</i> . . . <i>call sign(s)</i> ) on . . . kc/s ( <i>or</i> Mc/s).                                     |
| QSY          | Shall I change to transmission on another frequency?  | Change to transmission on another frequency ( <i>or</i> on . . . kc/s ( <i>or</i> Mc/s)).                                   |
| QSZ          | Shall I send each word or group more than once?   | Send each word or group twice ( <i>or</i> . . . times).   |
| QTA          | Shall I cancel telegram number . . .?   | Cancel telegram number . . .  |
| QTB          | Do you agree with my counting of words?   | I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.                  |

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QTC          | How many telegrams have you to send?   | I have ... telegrams for you ( <i>or</i> for ...).   |
| QTD          | What has the rescue vessel or rescue aircraft recovered?   | ... ( <i>identification</i> ) has recovered...<br>1. ... ( <i>number</i> ) survivors<br>2. wreckage<br>3. ... ( <i>number</i> ) bodies.  |
| QTE          | What is my TRUE bearing from you?  | Your TRUE bearing from me is ... degrees at ... hours. <i>or</i>   |
|              | What is my TRUE bearing from ... ( <i>call sign</i> )?   | Your TRUE bearing from ... ( <i>call sign</i> ) was ... degrees at ... hours. <i>or</i>  |
|              | What is the TRUE bearing of ... ( <i>call sign</i> ) from ... ( <i>call sign</i> )?  | The TRUE bearing of ... ( <i>call sign</i> ) from ... ( <i>call sign</i> ) was ... degrees at ... hours.   |
| QTF          | Will you give me the position of my station according to the bearings taken by the D/F stations which you control?                   | The position of your station according to the bearings taken by the D/F stations which I control was ... latitude ... longitude ( <i>or other indication of position</i> ) class ... at ... hours. |
| QTG          | Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) (on ... kc/s ( <i>or</i> Mc/s))?        | I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) (on ... kc/s ( <i>or</i> Mc/s)). <i>or</i>   |
|              | Will you request ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s ( <i>or</i> Mc/s)? | I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s ( <i>or</i> Mc/s).   |

| Abbreviation | Question  | Answer or Advice   |
|--------------|---|--|
| QTH          | What is your position in latitude and longitude <i>(or according to any other indication)</i> ?                     | My position is ... latitude ... longitude <i>(or according to any other indication)</i> .  |
| QTI          | What is your TRUE track?  | My TRUE track is ... degrees.  |
| QTJ          | What is your speed?<br><br><i>(Requests the speed of a ship or aircraft through the water or air respectively.)</i> | My speed is ... knots <i>(or ... kilometres per hour or ... statute miles per hour)</i> .<br><br><i>(Indicates the speed of a ship or aircraft through the water or air respectively.)</i> |
| QTK          | What is the speed of your aircraft in relation to the surface of the earth?   | The speed of my aircraft in relation to the surface of the earth is ... knots <i>(or ... kilometres per hour or ... statute miles per hour)</i> .  |
| QTL          | What is your TRUE heading?  | My TRUE heading is ... degrees.  |
| QTM          | What is your MAGNETIC heading?  | My MAGNETIC heading is ... degrees.  |
| QTN          | At what time did you depart from ... <i>(place)</i> ?   | I departed from ... <i>(place)</i> at ... hours.   |
| QTO          | Have you left dock <i>(or port)</i> ?<br><br><i>or</i><br><br>Are you airborne?                                     | I have left dock <i>(or port)</i> .<br><br><i>or</i><br><br>I am airborne.   |
| QTP          | Are you going to enter dock <i>(or port)</i> ?<br><br><i>or</i><br><br>Are you going to alight <i>(or land)</i> ?   | I am going to enter dock <i>(or port)</i> .<br><br><i>or</i><br><br>I am going to alight <i>(or land)</i> .  |
| QTQ          | Can you communicate with my station by means of the International Code of Signals?                                  | I am going to communicate with your station by means of the International Code of Signals.   |
| QTR          | What is the correct time?   | The correct time is ... hours.   |

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QTS          | Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kc/s (or Mc/s)?  | I will send my call sign for tuning purposes or so that my frequency may be measured now (or at ... hours on ... kc/s (or Mc/s). |
| QTT          |  | The identification signal which follows is superimposed on another transmission.   |
| QTU          | What are the hours during which your station is open?  | My station is open from ... to ... hours.  |
| QTV          | Shall I stand guard for you on the frequency of ... kc/s (or Mc/s) (from ... to ... hours)?  | Stand guard for me on the frequency of ... kc/s (or Mc/s) (from ... to ... hours).   |
| QTW          | What is the condition of survivors?  | Survivors are in ... condition and urgently need ...   |
| QTX          | Will you keep your station open for further communication with me until further notice (or until ... hours)?   | I will keep my station open for further communication with you until further notice (or until ... hours).                        |
| QTY          | Are you proceeding to position of incident and if so when do you expect to arrive?   | I am proceeding to the position of incident and expect to arrive at ... hours (on ... date).                                     |
| QTZ          | Are you continuing the search?   | I am continuing the search (for ... aircraft, ship, survival craft, survivors or wreckage).                                      |
| QUA          | Have you news of ... (call sign)?  | Here is news of ... (call sign).   |
| QUB          | Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at ... (place of observation)? | Here is the information requested :<br>...<br>(The units used for speed and distances should be indicated.)                      |

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QUC          | What is the number ( <i>or other indication</i> ) of the last message you received from me ( <i>or from ... (call sign)</i> )? | The number ( <i>or other indication</i> ) of the last message I received from you ( <i>or from ... (call sign)</i> ) is ...  |
| QUD          | Have you received the urgency signal sent by ... ( <i>call sign of mobile station</i> )?                                       | I have received the urgency signal sent by ... ( <i>call sign of mobile station</i> ) at ... hours.  |
| QUE          | Can you use telephony in ... ( <i>language</i> ), with interpreter if necessary; if so, on what frequencies?                   | I can use telephony in ... ( <i>language</i> ), on ... kc/s ( <i>or</i> Mc/s).   |
| QUF          | Have you received the distress signal sent by ... ( <i>call sign of mobile station</i> )?                                      | I have received the distress signal sent by ... ( <i>call sign of mobile station</i> ) at ... hours.   |
| QUG          | Will you be forced to alight ( <i>or land</i> )?   | I am forced to alight ( <i>or land</i> ) immediately.<br><br><i>or</i><br><br>I shall be forced to alight ( <i>or land</i> ) at ... ( <i>position or place</i> ) at ... hours. |
| QUH          | Will you give me the present barometric pressure at sea level?   | The present barometric pressure at sea level is ... ( <i>units</i> ).  |
| QUI          | Are your navigation lights working?  | My navigation lights are working.  |
| QUJ          | Will you indicate the TRUE track to reach you ( <i>or ...</i> )?   | The TRUE track to reach me ( <i>or ...</i> ) is ... degrees at ... hours.  |
| QUK          | Can you tell me the condition of the sea observed at ... ( <i>place or co-ordinates</i> )?                                     | The sea at ... ( <i>place or co-ordinates</i> ) is ...   |

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| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QUL          | Can you tell me the swell observed at ... ( <i>place or co-ordinates</i> )?  | The swell at ... ( <i>place or co-ordinates</i> ) is ...   |
| QUM          | May I resume normal working?   | Normal working may be resumed.   |
| QUN          | Will vessels in my immediate vicinity ...<br>or<br>(in the vicinity of ... latitude longitude ...)<br>or<br>(in the vicinity of ...) please indicate their position, TRUE course and speed?            | My position, TRUE course and speed are ...   |
| QUO          | Shall I search for ...<br>1. aircraft<br>2. ship<br>3. survival craft<br>in the vicinity of ... latitude ... longitude ( <i>or according to any other indication</i> )?                                | Please search for ...<br>1. aircraft<br>2. ship<br>3. survival craft<br>in the vicinity of ... latitude ... longitude ( <i>or according to any other indication</i> ).                       |
| QUP          | Will you indicate your position by ...<br>1. searchlight<br>2. black smoke trail<br>3. pyrotechnic lights?   | My position is indicated by ...<br>1. searchlight<br>2. black smoke trail<br>3. pyrotechnic lights.  |
| QUQ          | Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate your landing? | Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate my landing. |

| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QUR          | Have survivors ...<br>1. received survival equipment<br><br>2. been picked up by rescue vessel<br><br>3. been reached by ground rescue party? | Survivors ...<br>1. are in possession of survival equipment dropped by ...<br>2. have been picked up by rescue vessel<br>3. have been reached by ground rescue party.                                   |
| QUS          | Have you sighted survivors or wreckage? If so, in what position?  | Have sighted ...<br>1. survivors in water<br>2. survivors on rafts<br>3. wreckage<br>in position ... latitude ... longitude (or according to any other indication).                                     |
| QUT          | Is position of incident marked?   | Position of incident is marked by...<br>1. flame or smoke float<br>2. sea marker<br>3. sea marker dye<br>4. ... (specify other marking).  |
| QUU          | Shall I home ship or aircraft to my position?   | Home ship or aircraft ... (call sign)<br>1. to your position by transmitting your call sign and long dashes on ... kc/s (or Mc/s);<br>2. by transmitting on ... kc/s (or Mc/s) TRUE track to reach you. |
| QUW          | Are you in the search area designated as ... (designator or latitude and longitude)?  | I am in the ... (designation) search area.  |
| QUY          | Is position of survival craft marked?   | Position of survival craft was marked at ... hours by...<br>1. flame or smoke float<br>2. sea marker<br>3. sea marker dye<br>4. ... (specify other marking).  |

*B. Lists of Signals According to the Nature of Questions, Answer or Advice*

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
|              | <b>Name</b>  |  |
| QRA          | What is the name of your station ?   | The name of my station is ...  |
|              | <b>Route</b>   |  |
| QRD          | Where are you bound and where are you from ?   | I am bound for ... from ...  |
|              | <b>Position</b>  |  |
| QRB          | How far approximately are you from my station ?  | The approximate distance between our stations is ... nautical miles (or kilometres).                                     |
| QTH          | What is your position in latitude and longitude (or according to any other indication) ? | My position is ... latitude ... longitude (or according to any other indication).  |
| QTN          | At what time did you depart from ... (place) ?   | I departed from ... (place) at ... hours.  |
|              | <b>Quality of Signals</b>  |  |
| QRI          | How is the tone of my transmission ?   | The tone of your transmission is ...<br>1. good<br>2. variable<br>3. bad.  |
| QRK          | What is the intelligibility of my signals (or those of ...) ?                            | The intelligibility of your signals (or those of ...) is ...<br>1. bad<br>2. poor<br>3. fair<br>4. good<br>5. excellent. |



| Abbreviation               | Question  | Answer or Advice  |
|----------------------------|---|---|
| <b>Strength of Signals</b> |   |   |
| QRO                        | Shall I increase transmitter power ?                        | Increase transmitter power.   |
| QRP                        | Shall I decrease transmitter power ?                        | Decrease transmitter power.   |
| QSA                        | What is the strength of my signals<br>(or those of . . .) ? | The strength of your signals (or those of . . .) is . . .<br>1. scarcely perceptible<br>2. weak<br>3. fairly good<br>4. good<br>5. very good. |
| QSB                        | Are my signals fading ?                                     | Your signals are fading.  |
| <b>Keying</b>              |   |   |
| QRQ                        | Shall I send faster ?                                       | Send faster ( . . words per minute).  |
| QRR                        | Are you ready for automatic operation ?                     | I am ready for automatic operation.<br>Send at . . words per minute.  |
| QRS                        | Shall I send more slowly ?                                  | Send more slowly ( . . . words per minute).   |
| QSD                        | Is my keying defective ?                                    | Your keying is defective.   |
| <b>Interference</b>        |   |   |
| QRM                        | Are you being interfered with ?                             | I am being interfered with<br>(1. nil<br>2. slightly<br>3. moderately<br>4. severely<br>5. extremely).  |

MOD

MOD

| Abbreviation  | Question   | Answer or Advice  |
|---|--|---|
| QRN   | Are you troubled by static ?   | I am troubled by static<br>(1. nil<br>2. slightly<br>3. moderately<br>4. severely<br>5. extremely).                                   |
| <b>Adjustment of Frequency</b>                      |  |   |
| QRG   | Will you tell me my exact frequency (or that of . . . ) ?  | Your exact frequency (or that of . . . ) is . . . kc/s (or Mc/s).   |
| QRH   | Does my frequency vary ?   | Your frequency varies.  |
| QTS   | Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at . . . hours) on . . . kc/s (or Mc/s) ? | I will send my call sign for tuning purposes or so that my frequency may be measured now (or at . . . hours) on . . . kc/s (or Mc/s). |
| <b>Choice of Frequency and/or Class of Emission</b> |  |   |
| QSN   | Did you hear me (or . . . (call sign)) on . . . kc/s (or Mc/s) ?   | I did hear you (or . . . (call sign)) on . . . kc/s (or Mc/s).  |
| QSS   | What working frequency will you use ?  | I will use the working frequency . . . kc/s (normally only the last three figures of the frequency need be given).                    |
| QSU   | Shall I send or reply on this frequency (or on . . . kc/s (or Mc/s)) (with emissions of class . . . ) ?                                      | Send or reply on this frequency (or on . . . kc/s (or Mc/s)) (with emissions of class . . . ).  |
| QSV   | Shall I send a series of V's on this frequency (or . . . kc/s (or Mc/s)) ?   | Send a series of V's on this frequency (or . . . kc/s (or Mc/s)).   |

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QSW          | Will you send on this frequency ( <i>or on . . . kc/s (or Mc/s)</i> ) (with emissions of class . . .)? | I am going to send on this frequency ( <i>or on . . . kc/s (or Mc/s)</i> ) (with emissions of class . . .).        |
| QSX          | Will you listen ( <i>to . . . call sign(s)</i> ) on . . . kc/s ( <i>or Mc/s</i> )?                     | I am listening ( <i>to . . . call sign(s)</i> ) on . . . kc/s ( <i>or Mc/s</i> ).                                  |
|              | <b>Change of Frequency</b>   |  |
| QSY          | Shall I change to transmission on another frequency?   | Change to transmission on another frequency ( <i>or on . . . kc/s (or Mc/s)</i> ).                                 |
|              | <b>Establishing Communication</b>  |  |
| QRL          | Are you busy?  | I am busy ( <i>or I am busy with . . .</i> ). Please do not interfere.   |
| QRV          | Are you ready?   | I am ready.  |
| QRX          | When will you call me again?   | I will call you again at . . . hours ( <i>on . . . kc/s (or Mc/s)</i> ).   |
| QRY          | What is my turn?<br>( <i>Relates to communication.</i> )   | Your turn is Number . . . ( <i>or according to any other indication</i> ).<br>( <i>Relates to communication.</i> ) |
| QRZ          | Who is calling me?   | You are being called by . . . ( <i>on . . . kc/s (or Mc/s)</i> ).  |
| QSC          | Are you a cargo vessel?<br>( <i>See Article 32, Section V.</i> )                                       | I am a cargo vessel.   |
| QSR          | Shall I repeat the call on the calling frequency?  | Repeat your call on the calling frequency; did not hear you ( <i>or have interference</i> ).                       |
| QTQ          | Can you communicate with my station by means of the International Code of Signals?                     | I am going to communicate with your station by means of the International Code of Signals.                         |

MOD

| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QUE          | Can you use telephony in ... ( <i>language</i> ), with interpreter if necessary; if so, on what frequencies?        | I can use telephony in ... ( <i>language</i> ) on ... kc/s ( <i>or</i> Mc/s).                                       |
|              | <b>Time</b>   |   |
| QTR          | What is the correct time?   | The correct time is ... hours.  |
| QTU          | What are the hours during which your station is open?   | My station is open from ... to ... hours.   |
|              | <b>Charges</b>  |   |
| QRC          | By what private enterprise ( <i>or</i> State Administration) are the accounts for charges for your station settled? | The accounts for charges of my station are settled by the private enterprise ... ( <i>or</i> State Administration). |
| QSJ          | What is the charge to be collected to ... including your internal charge?   | The charge to be collected to ... including my internal charge is ... francs.                                       |
|              | <b>Transit</b>  |   |
| QRW          | Shall I inform ... that you are calling him on ... kc/s ( <i>or</i> Mc/s)?  | Please inform ... that I am calling him on ... kc/s ( <i>or</i> Mc/s).  |
| QSO          | Can you communicate with ... direct ( <i>or</i> by relay)?  | I can communicate with ... direct ( <i>or</i> by relay through ...).  |
| QSP          | Will you relay to ... free of charge?   | I will relay to ... free of charge.   |
| QSQ          | Have you a doctor on board ( <i>or</i> is... ( <i>name of person</i> ) on board)?                                   | I have a doctor on board ( <i>or</i> ... ( <i>name of person</i> ) is on board).                                    |
| QUA          | Have you news of ... ( <i>call sign</i> )?  | Here is news of ... ( <i>call sign</i> ).   |

| Abbreviation                      | Question   | Answer or Advice   |
|-----------------------------------|--|--|
| QUC                               | What is the number ( <i>or other indication</i> ) of the last message you received from me ( <i>or from . . . (call sign)</i> )? | The number ( <i>or other indication</i> ) of the last message I received from you ( <i>or from . . . (call sign)</i> ) is . . .  |
| <b>Exchange of Correspondence</b> |  |  |
| QRJ                               | How many radiotelephone calls have you to book?  | I have . . . radiotelephone calls to book.   |
| QRU                               | Have you anything for me?  | I have nothing for you.  |
| QSG                               | Shall I send . . . telegrams at a time?  | Send . . . telegrams at a time.  |
| QSI                               |  | I have been unable to break in on your transmission. .<br><i>or</i><br>Will you inform . . . ( <i>call sign</i> ) that I have been unable to break in on his transmission (on . . . kc/s ( <i>or</i> Mc/s)). |
| QSK                               | Can you hear me between your signals and if so can I break in on your transmission?  | I can hear you between my signals; break in on my transmission.  |
| QSL                               | Can you acknowledge receipt?   | I am acknowledging receipt.  |
| QSM                               | Shall I repeat the last telegram which I sent you ( <i>or some previous telegram</i> )?  | Repeat the last telegram which you sent me ( <i>or telegram(s) number(s) . . .</i> ).  |
| QSZ                               | Shall I send each word or group more than once?  | Send each word or group twice ( <i>or . . . times</i> ).   |
| QTA                               | Shall I cancel telegram number . . . ?   | Cancel telegram number . . .   |

| Abbreviation    | Question   | Answer or Advice  |
|-----------------|--|---|
| QTB             | Do you agree with my counting of words?  | I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.        |
| QTC             | How many telegrams have you to send?   | I have ... telegrams for you ( <i>or</i> for ...).  |
| QTV             | Shall I stand guard for you on the frequency of ... kc/s ( <i>or</i> Mc/s) (from ... to ... hours)?                  | Stand guard for me on the frequency of ... kc/s ( <i>or</i> Mc/s) (from ... to ... hours).                        |
| QTX             | Will you keep your station open for further communication with me until further notice ( <i>or</i> until ... hours)? | I will keep my station open for further communication with you until further notice ( <i>or</i> until ... hours). |
| <b>Movement</b> |  |   |
| QRE             | What is your estimated time of arrival at ... ( <i>or</i> over) ( <i>place</i> )?                                    | My estimated time of arrival at ... ( <i>or</i> over ...) ( <i>place</i> ) is ... hours.                          |
| QRF             | Are you returning to ... ( <i>place</i> )?   | I am returning to ... ( <i>place</i> ).<br><i>or</i><br>Return to ... ( <i>place</i> ).                           |
| QSH             | Are you able to home on your D/F equipment?  | I am able to home on my D/F equipment (on station ...).   |
| QTI             | What is your TRUE track?   | My TRUE track is ... degrees.   |
| QTJ             | What is your speed?  | My speed is ... knots ( <i>or</i> ... kilometres per hour <i>or</i> ... statute miles per hour).                  |
|                 | (Requests the speed of a ship or aircraft through the water or air respectively.)                                    | (Indicates the speed of a ship or aircraft through the water or air respectively.)                                |

| Abbreviation | Question  | Answer or Advice   |
|--------------|---|--|
| QTK          | What is the speed of your aircraft in relation to the surface of the earth?     | The speed of my aircraft in relation to the surface of the earth is ... knots ( <i>or</i> ... kilometres per hour <i>or</i> ... statute miles per hour). |
| QTL          | What is your TRUE heading?  | My TRUE heading is ... degrees.  |
| QTM          | What is your MAGNETIC heading?  | My MAGNETIC heading is ... degrees.  |
| QTN          | At what time did you depart from ... ( <i>place</i> )?                          | I departed from ... ( <i>place</i> ) at ... hours.   |
| QTO          | Have you left dock ( <i>or</i> port)?   | I have left dock ( <i>or</i> port).  |
|              | Are you airborne?   | I am airborne.   |
| QTP          | Are you going to enter dock ( <i>or</i> port)?                                  | I am going to enter dock ( <i>or</i> port).  |
|              | Are you going to alight ( <i>or</i> land)?                                      | I am going to alight ( <i>or</i> land).  |
| QUG          | Will you be forced to alight ( <i>or</i> land)?                                 | I am forced to alight ( <i>or</i> land) immediately.   |
|              |   | I shall be forced to alight ( <i>or</i> land) at ... ( <i>position or place</i> ) at ... hours.  |
| QUJ          | Will you indicate the TRUE track to reach you ( <i>or</i> ...)?                 | The TRUE track to reach me ( <i>or</i> ...) is ... degrees at ... hours.   |
| QUN          | Will vessels in my immediate vicinity ...                                       | My position, TRUE course and speed are ...   |
|              | (in the vicinity of ... latitude longitude ...)                                 |  |
|              | (in the vicinity of ...) please indicate their position, TRUE course and speed? |  |

(MOD)

| Abbreviation                   | Question   | Answer or Advice   |
|--------------------------------|--|--|
| <b>Meteorology</b>             |  |  |
| QUB                            | Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at ... <i>(place of observation)</i> ? | Here is the information requested ...<br><i>(The units used for speed and distances should be indicated.)</i>  |
| QUH                            | Will you give me the present barometric pressure at sea level?   | The present barometric pressure at sea level is ... <i>(units)</i> .   |
| QUK                            | Can you tell me the condition of the sea observed at ... <i>(place or co-ordinates)</i> ?  | The sea at ... <i>(place or co-ordinates)</i> is ...   |
| QUL                            | Can you tell me the swell observed at ... <i>(place or co-ordinates)</i> ?   | The swell at ... <i>(place or co-ordinates)</i> is ...   |
| <b>Radio Direction-finding</b> |  |  |
| QTE                            | What is my TRUE bearing from you?  | Your TRUE bearing from me is ... degrees at ... hours.   |
|                                | <i>or</i>  |  |
|                                | What is my TRUE bearing from ... <i>(call sign)</i> ?  | Your TRUE bearing from ... <i>(call sign)</i> was ... degrees at ... hours.  |
|                                | <i>or</i>  |  |
|                                | What is the TRUE bearing of ... <i>(call sign)</i> from ... <i>(call sign)</i> ?   | The TRUE bearing of ... <i>(call sign)</i> from ... <i>(call sign)</i> was ... degrees at ... hours.   |
| QTF                            | Will you give me the position of my station according to the bearings taken by the D/F stations which you control?   | The position of your station according to the bearings taken by the D/F stations which I control was ... latitude ... longitude <i>(or other indication of position)</i> class ... at ... hours. |



| Abbreviation | Question   | Answer or Advice  |
|--------------|--|---|
| QTG          | <p>Will you send two dashes of ten seconds each followed by your call sign (repeated . . . times) (on . . . kc/s (or Mc/s))?</p> <p style="text-align: right;"><i>or</i></p> <p>Will you request . . . to send two dashes of ten seconds followed by his call sign (repeated . . . times) on . . . kc/s (or Mc/s)?</p> | <p>I am going to send two dashes of ten seconds each followed by my call sign (repeated . . . times) (on . . . kc/s (or Mc/s)).</p> <p style="text-align: right;"><i>or</i></p> <p>I have requested . . . to send two dashes of ten seconds followed by his call sign (repeated . . . times) on . . . kc/s (or Mc/s).</p> |
|              | <b>Suspension of Work</b>  |   |
| QRT          | Shall I stop sending?  | Stop sending.   |
| QUM          | May I resume normal working?   | Normal working may be resumed.  |
|              | <b>Urgency</b>   |   |
| QUD          | Have you received the urgency signal sent by . . . (call sign of mobile station)?  | I have received the urgency signal sent by . . . (call sign of mobile station) at . . . hours.  |
| QUG          | Will you be forced to alight (or land)?  | <p>I am forced to alight (or land) immediately.</p> <p style="text-align: right;"><i>or</i></p> <p>I shall be forced to alight (or land) at . . . (position or place) at . . . hours.</p>   |
|              | <b>Distress</b>  |   |
| QUF          | Have you received the distress signal sent by . . . (call sign of mobile station)?   | I have received the distress signal sent by . . . (call sign of mobile station) at . . . hours.   |
| QUM          | May I resume normal working?   | Normal working may be resumed.  |
|              | <b>Search and Rescue</b>   |   |
| QSE          | What is the estimated drift of the survival craft?   | The estimated drift of the survival craft is . . . (figures and units).   |

| Abbreviation | Question   | Answer or Advice   |
|--------------|--|--|
| QSF          | Have you effected rescue?  | I have effected rescue and am proceeding to . . . base (with . . . persons injured requiring ambulance).   |
| QTD          | What has the rescue vessel or rescue aircraft recovered?   | . . . ( <i>identification</i> ) has recovered<br>1. . . . ( <i>number</i> ) survivors<br>2. wreckage<br>3. . . . ( <i>number</i> ) bodies.                                   |
| QTW          | What is the condition of survivors?  | Survivors are in . . . condition and urgently need . . .   |
| QTY          | Are you proceeding to position of incident and if so when do you expect to arrive?   | I am proceeding to the position of incident and expect to arrive at . . . hours (on . . . date).   |
| QTZ          | Are you continuing the search?   | I am continuing the search (for . . . aircraft, ship, survival craft, survivors or wreckage).  |
| QUI          | Are your navigation lights working?  | My navigation lights are working.  |
| QUN          | Will vessels in my immediate vicinity . . .<br><i>or</i><br>(in the vicinity of . . . latitude longitude . . .)<br><i>or</i><br>(in the vicinity of . . .)<br>please indicate their position, TRUE course and speed? | My position, TRUE course and speed are . . .   |
| QUO          | Shall I search for . . .<br>1. aircraft<br>2. ship<br>3. survival craft<br>in the vicinity . . . latitude . . . longitude ( <i>or according to any other indication</i> )?   | Please search for . . .<br>1. aircraft<br>2. ship<br>3. survival craft<br>in the vicinity of . . . latitude . . . longitude ( <i>or according to any other indication</i> ). |

| Abbreviation | Question  | Answer or Advice  |
|--------------|---|---|
| QUP          | Will you indicate your position by ...<br>1. searchlight<br>2. black smoke trail<br>3. pyrotechnic lights?  | My position is indicated by ...<br><br>1. searchlight<br>2. black smoke trail<br>3. pyrotechnic lights.   |
| QUQ          | Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water ( <i>or</i> land) to facilitate your landing? | Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water ( <i>or</i> land) to facilitate my landing. |
| QUR          | Have survivors ...<br>1. received survival equipment<br><br>2. been picked up by rescue vessel<br>3. been reached by ground rescue party?   | Survivors ...<br>1. are in possession of survival equipment dropped by ...<br>2. have been picked up by rescue vessel<br>3. have been reached by ground rescue party.                       |
| QUS          | Have you sighted survivors or wreckage? If so, in what position?  | Have sighted ...<br>1. survivors in water<br>2. survivors on rafts<br>3. wreckage in position ... latitude ... longitude ( <i>or according to any other indication</i> ).                   |
| QUT          | Is position of incident marked?   | Position of incident is marked by...<br>1. flame or smoke float<br>2. sea marker<br>3. sea marker dye<br>4. ... ( <i>specify other marking</i> ).   |

| Abbreviation | Question  | Answer or Advice   |
|--------------|---|--|
| QUU          | Shall I home ship or aircraft to my position?   | Home ship or aircraft ... ( <i>call sign</i> )<br>1. to your position by transmitting your call sign and long dashes on ... kc/s ( <i>or</i> Mc/s);<br>2. by transmitting on ... kc/s ( <i>or</i> Mc/s) TRUE-track to reach you. |
| QUW          | Are you in the search area designated as ... ( <i>designator or latitude and longitude</i> )? | I am in the ... ( <i>designation</i> ) search area.  |
| QUY          | Is position of survival craft marked?   | Position of survival craft was marked at ... hours by ...<br>1. flame or smoke float<br>2. sea marker<br>3. sea marker dye<br>4. ... ( <i>specify other marking</i> ).   |
| QTT          | Identification  | The identification signal which follows is superimposed on another transmission.   |

## SECTION II. MISCELLANEOUS ABBREVIATIONS AND SIGNALS

| Abbreviation<br>or Signal | Definition   |
|---------------------------|--|
| AA                        | All after ... (used after a question mark to request a repetition).  |
| AB                        | All before ... (used after a question mark to request a repetition).   |
| ADS                       | Address (used after a question mark to request a repetition).  |
| AR                        | End of transmission (.—.—.— to be sent as one signal).   |
| AS                        | Waiting period (.—.—.— to be sent as one signal).  |
| BK                        | Signal used to interrupt a transmission in progress.   |
| BN                        | All between ... and ... (used after a question mark to request a repetition).  |
| BQ                        | A reply to an RQ.  |
| CFM                       | Confirm (or I confirm).  |
| CL                        | I am closing my station.   |
| COL                       | Collate (or I collate).  |
| CP                        | General call to two or more specified stations (see Article 31).   |
| CQ                        | General call to all stations (see Article 31).   |
| CS                        | Call sign (used to request a call sign).   |
| DDD                       | Used to identify the transmission of the distress message by a station not itself in distress (see No. 36-80).           |
| DE                        | From (used to precede the call sign of the calling station).   |
| DF                        | Your bearing at ... hours was ... degrees, in the doubtful sector of this station, with a possible error of ... degrees. |
| DO                        | Bearing doubtful. Ask for another bearing later (or at ... hours).   |
| E                         | East (Cardinal).   |
| ER                        | Here ...   |
| ETA                       | Estimated time of arrival.   |
| ITP                       | The punctuation counts.  |
| K                         | Invitation to transmit.  |
| KMH                       | Kilometers per hour.   |
| KTS                       | Nautical miles per hour (Knots).   |
| MIN                       | Minute (or Minutes).   |

ADD

ADD

ADD

| Abbreviation<br>or Signal | Definition  |
|---------------------------|---|
| MPH                       | Statute miles per hour.   |
| MSG                       | Prefix indicating a message to or from the master of a ship concerning its operation or navigation.   |
| N                         | North (Cardinal).   |
| NIL                       | I have nothing to send to you.  |
| NO                        | No ( <i>Negative</i> ).   |
| NW                        | Now.  |
| OK                        | We agree ( <i>or It is correct</i> ).   |
| OL                        | Ocean Letter.   |
| P                         | Prefix indicating a private radiotelegram.  |
| PBL                       | Preamble ( <i>used after a question mark to request a repetition</i> ).   |
| R                         | Received.   |
| REF                       | Reference to ... ( <i>or Refer to ...</i> ).  |
| RPT                       | Repeat ( <i>or I repeat</i> ) ( <i>or Repeat ...</i> ).   |
| RQ                        | Indication of a request.  |
| S                         | South (Cardinal).   |
| SIG                       | Signature ( <i>used after a question mark to request a repetition</i> ).  |
| SLT                       | Radiomaritime Letter.   |
| <u>SOS</u>                | Distress Signal (... — — — ... <i>to be sent as one signal</i> ).   |
| SS                        | Indicator preceding the name of a ship station.   |
| SVC                       | Prefix indicating a service telegram.   |
| SYS                       | Refer to your service telegram.   |
| TFC                       | Traffic.  |
| TR                        | Used by a land station to request the position and next port of call of a mobile station ( <i>see No. 30-21</i> ) ; used also as a prefix to the reply. |
| TTT                       | This group when sent three times constitutes the safety signal ( <i>see No. 36-109</i> ).   |
| TU                        | Thank you.  |
| TXT                       | Text ( <i>used after a question mark to request a repetition</i> ).   |
| <u>VA</u>                 | End of work (... — — — <i>to be sent as one signal</i> ).   |
| W                         | West (Cardinal).  |

(MOD)

| Abbreviation<br>or Signal | Definition  |
|---------------------------|---|
| WA                        | Word after . . . ( <i>used after a question mark to request a repetition</i> ).           |
| WB                        | Word before . . . ( <i>used after a question mark to request a repetition</i> ).          |
| WD                        | Word(s) or Group(s).  |
| XQ                        | Prefix used to indicate an operating communication in the fixed service.                  |
| XXX                       | This group when sent three times constitutes the urgency signal ( <i>see No. 36-98</i> ). |
| YES                       | Yes ( <i>Affirmative</i> ).   |

## APPENDIX 14

The following codes may be used by fixed circuits only

(See C.C.I.R. Recommendation 251).

## SINPO signal reporting code

| Rating<br>scale | S                  | I                   | N        | P                          | O                 |
|-----------------|--------------------|---------------------|----------|----------------------------|-------------------|
|                 | Signal<br>strength | Degrading effect of |          |                            | Overall<br>rating |
|                 |                    | Interference        | Noise    | Propagation<br>disturbance |                   |
| 5               | Excellent          | Nil                 | Nil      | Nil                        | Excellent         |
| 4               | Good               | Slight              | Slight   | Slight                     | Good              |
| 3               | Fair               | Moderate            | Moderate | Moderate                   | Fair              |
| 2               | Poor               | Severe              | Severe   | Severe                     | Poor              |
| 1               | Barely<br>audible  | Extreme             | Extreme  | Extreme                    | Unusable          |

SINPFEMO signal reporting code

|              | S               | I                   | N        | P                       | F                   | E          | M                          | O              |
|--------------|-----------------|---------------------|----------|-------------------------|---------------------|------------|----------------------------|----------------|
| Rating scale | Signal strength | Degrading effect of |          |                         | Frequency of fading | Modulation |                            | Overall rating |
|              |                 | Interference        | Noise    | Propagation disturbance |                     | Quality    | Depth                      |                |
| 5            | Excellent       | Nil                 | Nil      | Nil                     | Nil                 | Excellent  | Maximum                    | Excellent      |
| 4            | Good            | Slight              | Slight   | Slight                  | Slow                | Good       | Good                       | Good           |
| 3            | Fair            | Moderate            | Moderate | Moderate                | Moderate            | Fair       | Fair                       | Fair           |
| 2            | Poor            | Severe              | Severe   | Severe                  | Fast                | Poor       | Poor or Nil                | Poor           |
| 1            | Barely audible  | Extreme             | Extreme  | Extreme                 | Very fast           | Very poor  | Continuously overmodulated | Unusable       |

*Special remarks :*

- A signal report shall consist of the code word SINPO or SINPFEMO followed by a group of five or eight numerals, rating, respectively, the five or eight characteristics of the particular signal code.
- The letter X shall be used instead of a numeral for characteristics not rated.
- Although the code word SINPFEMO is intended for radiotelephony, it may be used for radiotelegraphy.
- The overall rating for radiotelegraphy shall be as indicated in Tables I and II, below.



TABLE I

| Overall rating   | Mechanized Operations  |
|--|--|
| 5. Excellent<br>4. Good<br>3. Fair<br>2. Poor<br>1. Unusable | 4-channel time-division multiplex<br>2-channel time-division multiplex<br>Marginal single start-stop printer<br>BK's, XQ's and call signs readable<br>Unreadable |

TABLE II

| Overall rating   | Morse Operation   |
|--|---|
| 5. Excellent<br>4. Good<br>3. Fair<br>2. Poor<br>1. Unusable | High speed<br>100 wpm<br>50 wpm<br>BK's, XQ's and call signs readable<br>Unreadable |

e) The overall rating for telephony shall be as indicated in Table III.

TABLE III

| Overall rating                     | Operating condition  | Quality                                 |
|------------------------------------|--|---|
| 5. Excellent<br>4. Good<br>3. Fair | Signal quality unaffected<br>Signal quality slightly affected<br>Signal quality seriously affected.<br>Channel usable by operators or by experienced subscribers | } Commercial<br>} Marginally commercial |
| 2. Poor<br>1. Unusable             | Channel just usable by operators<br>Channel unusable by operators  |   |

## APPENDIX 15

**Table of Frequencies to be used by Ship Stations in the Bands  
between 4 and 27.5 Mc/s  
allocated exclusively to the Maritime Mobile Service**  
(see Articles 32, 35 and Appendix 17)

1. This Appendix contains two Sections, A and B.

For the use of frequencies in the Band 4 to 27.5 Mc/s for radiotelegraphy (Section A) see also Nos. 32-80 to 32-107 of Article 32.

For the use of frequencies in the Band 4 to 23 Mc/s for radiotelephony (Section B) see also Nos. 35-34 to 35-40 of Article 35.

2. *In the table in Section A :*

- a) the assignable frequencies in a given band for each usage are :

- indicated by the lowest and highest frequency, in heavy type, assigned in that band ;
- regularly spaced, the number of assignable frequencies and the spacing in kc/s being indicated in italics ;

- b) the vertical arrows indicate the harmonic relationship between the frequencies assigned in the different bands.

3. *In the table in Section B :*

the working frequencies (carrier waves) in a given band are :

- indicated by the lowest and highest frequency, in heavy type, in that band ;
- regularly spaced, where there are more than two ; the number of frequencies and the spacing in kc/s being indicated in italics.

## SECTION A

**Frequencies assignable to Ship Radiotelegraph Stations using the  
Maritime Mobile Service Bands between 4 and 27.5 Mc/s**

| BAND<br>(Mc/s) |        | LIMITS   |  | k c/s  |   |  |        | LIMITS |  |
|----------------|--------|--|--|--|---|--|--------|--------|--|
|                |        | Assignable Frequencies<br>Wide-Band Telegraphy,<br>facsimile and<br>Special Transmission Systems | Assignable Working Frequencies<br>for High Traffic Ships             | Calling Frequencies                            | Assignable Working Frequencies<br>for Low Traffic Ships |  |        |        |  |
|                |        |  |  |  | GROUP A   | GROUP B  |        |        |  |
| 4              | 4 140  | 4 142-----4 158<br>5 Frequencies<br>spaced 4   | 4 161-----4 176<br>11 Frequencies<br>spaced 1.5                      | 4 178-----4 186<br>9 Frequencies<br>spaced 1   | 4 188---4 212   | 4 212.5-4 236.5<br>98 Frequencies<br>spaced 0.5    | 4 238  |        |  |
| 6              | 6 211  | 6 213-----6 237<br>7 Frequencies<br>spaced 4   | 6 241.5-----6 264<br>11 Frequencies<br>spaced 2.25                   | 6 267-----6 279<br>9 Frequencies<br>spaced 1.5 | 6 282---6 318   | 6 318.75-6 354.75<br>98 Frequencies<br>spaced 0.75 | 6 357  |        |  |
| 8              | 8 280  | 8 282-----8 318<br>10 Frequencies<br>spaced 4  | 8 322-----8 352<br>11 Frequencies<br>spaced 3                        | 8 356---*-8 372<br>9 Frequencies<br>spaced 2   | 8 376---8 424   | 8 425---8 473<br>98 Frequencies<br>spaced 1        | 8 476  |        |  |
| 12             | 12 421 | 12 424-----12 468<br>12 Frequencies<br>spaced 4  | 12 474 12 478.5 12 483-----12 528<br>11 Frequencies<br>spaced 4.5    | 12 534-----12 558<br>9 Frequencies<br>spaced 3 | 12 564---12 636   | 12 637.5-12 709.5<br>98 Frequencies<br>spaced 1.5  | 12 714 |        |  |
| 16             | 16 562 | 16 564-----16 620<br>15 Frequencies<br>spaced 4  | 16 626 16 632 16 638 16 644-----16 704<br>11 Frequencies<br>spaced 6 | 16 712-----16 744<br>9 Frequencies<br>spaced 4 | 16 752---16 848   | 16 850---16 946<br>98 Frequencies<br>spaced 2      | 16 952 |        |  |
| 22             | 22 100 | 22 102-----22 146<br>12 Frequencies<br>spaced 4  | 22 151 22 157-----22 217<br>11 Frequencies<br>spaced 6               | 22 225-----22 265<br>9 Frequencies<br>spaced 5 | 22 272.5-22 332.5                                       | 22 335---22 395<br>50 Frequencies<br>spaced 2.5    | 22 400 |        |  |
| 25             | 25 070 | Assignable Working Frequencies to Ships of all Categories  |  |  |   |  |        | 25 110 |  |
|                |        | 25 075-----25 105<br>11 Frequencies spaced 3   |  |  |   |  |        |        |  |

\* For particular conditions concerning the use of 8364 kc/s see No. 32-85.

## SECTION B

**Carrier Frequencies in kc/s for Ship Radiotelephone Stations using the  
Maritime Mobile Service Bands between 4 and 23 Mc/s**

| LIMITS         |        | kc/s   |   | LIMITS |
|----------------|--------|--|---|--------|
| BAND<br>(Mc/s) |        | Radiotelephone<br>(Double sideband)<br>Calling frequencies | Radiotelephone<br>(Single sideband)<br>Upper sideband working frequencies |        |
| 4              | 4 133  |  | 4 133      and      4 136.5   | 4 140  |
| 6              | 6 200  |  | 6 200.5 - - - - * - - - - 6 207.5<br><i>3 Frequencies<br/>spaced 3.5</i>  | 6 211  |
| 8              | 8 265  | 8 269  | 8 273      and      8 276.5   | 8 280  |
| 12             | 12 400 | 12 403.5   | 12 407 - - - - - 12 417.5<br><i>4 Frequencies<br/>spaced 3.5</i>          | 12 421 |
| 16             | 16 530 | 16 533.5   | 16 537 - - - - - 16 558<br><i>7 Frequencies<br/>spaced 3.5</i>            | 16 562 |
| 22             | 22 070 | 22 074   | 22 078 - - - - - 22 095.5<br><i>6 Frequencies<br/>spaced 3.5</i>          | 22 100 |

\* For particular conditions concerning the use of 6204 kc/s see No. 35-35.

## APPENDIX 16

**Phonetic Alphabet and Figure Code**

(See Article 33)

1. When it is necessary to spell out call signs, service abbreviations and words, the following table shall be used :

| Figure or mark<br>to be transmitted * | Letter to be<br>transmitted | Word to be<br>used | Spoken as **                                 |
|---------------------------------------|-----------------------------|--------------------|--|
| 1                                     | A                           | Alfa               | <u>AL</u> FAH                                |
| 2                                     | B                           | Bravo              | <u>BRAH</u> VOH                              |
| 3                                     | C                           | Charlie            | <u>CHAR</u> LEE <i>or</i><br><u>SHAR</u> LEE |
| 4                                     | D                           | Delta              | <u>DELL</u> TAH                              |
| 5                                     | E                           | Echo               | <u>ECK</u> OH                                |
| 6                                     | F                           | Foxtrot            | <u>FOKS</u> TROT                             |
| 7                                     | G                           | Golf               | <u>GOLF</u>                                  |
| 8                                     | H                           | Hotel              | <u>HOH</u> <u>TELL</u>                       |
| 9                                     | I                           | India              | <u>IN</u> DEE AH                             |
| 0                                     | J                           | Juliett            | <u>JEW</u> LEE <u>ETT</u>                    |
| Comma                                 | K                           | Kilo               | <u>KEY</u> LOH                               |
| Fraction bar                          | L                           | Lima               | <u>LEE</u> MAH                               |
| Break signal                          | M                           | Mike               | MIKE   |
| Full stop (period)                    | N                           | November           | NO <u>VEM</u> BER                            |

MOD

\* Each transmission of figures or marks is preceded and followed by the words "as a number" or "as a mark" respectively, spoken twice, e.g., the number 1959 will read: "as a number, as a number Alfa, India, Echo, India, as a number, as a number".

\*\* The syllables to be emphasized are underlined.

| <i>Letter to be<br/>transmitted</i> | <i>Word to be<br/>used</i> | <i>Spoken as *</i>                                 |
|-------------------------------------|----------------------------|--|
| O                                   | Oscar                      | <u>OSS</u> CAH                                     |
| P                                   | Papa                       | PAH <u>PAH</u>                                     |
| Q                                   | Quebec                     | KEH <u>BECK</u>                                    |
| R                                   | Romeo                      | <u>ROW</u> ME OH                                   |
| S                                   | Sierra                     | SEE <u>AIR</u> RAH                                 |
| T                                   | Tango                      | <u>TANG</u> GO                                     |
| U                                   | Uniform                    | YOU NEE<br><u>FORM</u> or<br>OO NEE<br><u>FORM</u> |
| V                                   | Victor                     | <u>VIK</u> TAH                                     |
| W                                   | Whiskey                    | <u>WISS</u> KEY                                    |
| X                                   | X-ray                      | <u>ECKS</u> <u>RAY</u>                             |
| Y                                   | Yankee                     | <u>YANG</u> KEY                                    |
| Z                                   | Zulu                       | <u>ZOO</u> LOO                                     |

2. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

---

\* The syllables to be emphasized are underlined.

## APPENDIX 17

**Duplex Channelling of the Maritime Mobile Radiotelephone Bands  
4 000 - 23 000 kc/s**

1. The following Table indicates the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radiotelephone service between 4 000 and 23 000 kc/s.

2. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprises a transmitting and a receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, as far as possible, harmful interference between the services of different coast stations.

3. Assignments to stations utilizing single sideband or independent sideband emissions shall be considered to be in accordance with the following Table if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double sideband emissions in accordance with the Table.

3.1. Stations employing double sideband emission (A3) or two channel independent sideband emission (A3B) should operate with assigned frequencies at the values listed in the Table.

3.2. Stations using single sideband single channel emissions (A3A, A3H or A3J) should operate either in the upper half or in the lower half of the channels designated by the centre frequencies in the Table.

3.2.1. A station operating in the upper half of the channel should use upper sideband emission with its carrier frequency at a value listed in the Table; its assigned frequency would then be 1 400 cycles higher than that listed in the Table.

- 3.2.2. A station operating in the lower half of the channel should use upper sideband emission, its carrier frequency being the appropriate following amounts below the midband frequency of the channel as listed in the Table :

| Band               | Carrier frequency relative to midband frequency of channel as listed in Table |
|--------------------|---|
| 4 and 8 Mc/s       | — 3 100 c/s   |
| 12, 16 and 22 Mc/s | — 3 300 c/s   |

The frequencies assigned to such stations should be 1 400 cycles higher than the value indicated above for their carrier frequencies.

4. If an administration assigns frequencies other than those indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with this Appendix.



**Table of Transmitting Frequencies (in kc/s)**

| Series No. | 4 Mc/s Band             |                        | 8 Mc/s Band             |                        | 12 Mc/s Band            |                        | 16 Mc/s Band            |                        | 22 Mc/s Band            |                        |
|------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|
|            | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency | Coast Station Frequency | Ship Station Frequency |
| 1          | 4 371.1                 | 4 066.1                | 8 748.1                 | 8 198.1                | 13 133.5                | 12 333.5               | 17 293.5                | 16 463.5               | 22 653.5                | 22 003.5               |
| 2          | 4 377.4                 | 4 072.4                | 8 754.4                 | 8 204.4                | 13 140.5                | 12 340.5               | 17 300.5                | 16 470.5               | 22 660.5                | 22 010.5               |
| 3          | 4 383.8                 | 4 078.8                | 8 760.8                 | 8 210.8                | 13 147.5                | 12 347.5               | 17 307.5                | 16 477.5               | 22 667.5                | 22 017.5               |
| 4          | 4 390.2                 | 4 085.2                | 8 767.2                 | 8 217.2                | 13 154.5                | 12 354.5               | 17 314.5                | 16 484.5               | 22 674.5                | 22 024.5               |
| 5          | 4 396.6                 | 4 091.6                | 8 773.6                 | 8 223.6                | 13 161.5                | 12 361.5               | 17 321.5                | 16 491.5               | 22 681.5                | 22 031.5               |
| 6          | 4 403.0                 | 4 098.0                | 8 780.0                 | 8 230.0                | 13 168.5                | 12 368.5               | 17 328.5                | 16 498.5               | 22 688.5                | 22 038.5               |
| 7          | 4 409.4                 | 4 104.4                | 8 786.4                 | 8 236.4                | 13 175.5                | 12 375.5               | 17 335.5                | 16 505.5               | 22 695.5                | 22 045.5               |
| 8          | 4 415.8                 | 4 110.8                | 8 792.8                 | 8 242.8                | 13 182.5                | 12 382.5               | 17 342.5                | 16 512.5               | 22 702.5                | 22 052.5               |
| 9          | 4 422.2                 | 4 117.2                | 8 799.2                 | 8 249.2                | 13 189.5                | 12 389.5               | 17 349.5                | 16 519.5               | 22 709.5                | 22 059.5               |
| 10         | 4 428.6                 | 4 123.6                | 8 805.6                 | 8 255.6                | 13 196.5                | 12 396.5               | 17 356.5                | 16 526.5               | 22 716.5                | 22 066.5               |
| 11         | 4 434.9                 | 4 129.9                | 8 811.9                 | 8 261.9                |                         |                        |                         |                        |                         |                        |

ADD

## APPENDIX 18

(See Article 35)

**Table of Transmitting Frequencies for the Bands 156 to 174 Mc/s  
for Radiotelephony in the International Maritime Mobile Service \***

| Channel<br>designators | Transmit Frequencies<br>Mc/s      |                          | Intership          | Port Operations     |                  | Public<br>Corres-<br>pondence |
|------------------------|-----------------------------------|--------------------------|--------------------|---------------------|------------------|-------------------------------|
|                        | Ship<br>Stations                  | Coast<br>Stations        |                    | Single<br>Frequency | Two<br>Frequency |                               |
| 1                      | 156-05**                          | 160-65                   |                    |                     | 10               | 8                             |
| 2                      | 156-10                            | 160-70                   |                    |                     | 8                | 10                            |
| 3                      | 156-15**                          | 160-75                   |                    |                     | 9                | 9                             |
| 4                      | 156-20                            | 160-80                   |                    |                     | 11               | 7                             |
| 5                      | 156-25                            | 160-85                   |                    |                     | 6                | 12                            |
| 6                      | 156-30                            |                          | 1                  |                     |                  |                               |
| 7                      | 156-35                            | 160-95                   |                    |                     | 7                | 11                            |
| 8                      | 156-40                            |                          | 2                  |                     |                  |                               |
| 9                      | 156-45                            | 156-45                   | 5                  | 5                   |                  |                               |
| 10                     | 156-50                            |                          | 3                  | ***                 |                  |                               |
| 11                     | 156-55                            | 156-55                   |                    | 3                   |                  |                               |
| 12                     | 156-60                            | 156-60                   |                    | 1                   |                  |                               |
| 13                     | 156-65                            | 156-65                   | 4                  | 4                   |                  |                               |
| 14                     | 156-70                            | 156-70                   |                    | 2                   |                  |                               |
| 15                     | Guard band 156-725 - 156-775 Mc/s |                          |                    |                     |                  |                               |
| 16                     | 156-80                            | 156-80                   | CALLING AND SAFETY |                     |                  |                               |
| 17                     | Guard band 156-825 - 156-875 Mc/s |                          |                    |                     |                  |                               |
| 18                     | 156-90                            | 161-50                   |                    |                     | 3                |                               |
| 19                     | 156-95                            | 161-55                   |                    |                     | 4                |                               |
| 20                     | 157-00                            | 161-60                   |                    |                     | 1                |                               |
| 21                     | 157-05                            | 156-05**<br>or<br>161-65 |                    |                     | 5                |                               |
| 22                     | 157-10                            | 161-70                   |                    |                     | 2                |                               |
| 23                     | 157-15                            | 156-15**<br>or<br>161-75 |                    |                     |                  | 5                             |
| 24                     | 157-20                            | 161-80                   |                    |                     |                  | 4                             |
| 25                     | 157-25                            | 161-85                   |                    |                     |                  | 3                             |
| 26                     | 157-30                            | 161-90                   |                    |                     |                  | 1                             |
| 27                     | 157-35                            | 161-95                   |                    |                     |                  | 2                             |
| 28                     | 157-40                            | 162-00                   |                    |                     |                  | 6                             |

\* For assistance in understanding the Table, see notes a) to g) below.

\*\* See Note e). \*\*\* See Note f).

## NOTES REFERRING TO THE TABLE

- a) The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
- b) The figures in the columns headed "Port Operations" and "Public Correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in orders to avoid harmful interference between the services of neighbouring coast stations.
- c) During ice seasons, ship stations shall avoid harmful interference to communications on 156.30 Mc/s (Channel 6) between icebreakers and assisted ships.
- d) Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures printed in heavy type can obtain a reasonably adequate use of available services.
- e) The frequencies 156.05 and 156.15 Mc/s marked \*\* are used as ship station frequencies in Channels 1 and 3 respectively and as coast station frequencies in Channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- f) Channel 10 marked \*\*\* is also available for port operations in Region 2.
- g) In the United States of America, the frequencies 156.35, 156.90, 156.95, 157.05, 157.10, 157.15 and 157.20 Mc/s are not available for use in accordance with this Table. These frequencies will be used for other functions in the maritime mobile services.

ADD

## APPENDIX 19

**Technical Characteristics for Transmitters and Receivers  
used in the Maritime Mobile Service in the 156-174 Mc/s Band**

1. Only frequency modulation with a pre-emphasis of 6 db/octave (phase modulation) shall be used.
2. The frequency deviation corresponding to 100% modulation shall approach 15 kc/s as nearly as practicable. In no event shall the frequency

deviation exceed  $\pm 15$  kc/s. However, it is recognized that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference.

3. When transmitting on any of the frequencies designated in the Table in Appendix 18, the emission of each station shall be polarized vertically at the source.
4. The audio frequency bandwidth shall be limited to 3 000 c/s.

## APPENDIX 20

### **Automatic Receiving Equipment for Radiotelegraph and Radiotelephone Alarm Signals**

1. The automatic devices intended for the reception of the radiotelegraph alarm signal shall fulfil the following conditions :
  - a) The equipment shall respond to the alarm signal transmitted by the telegraphic emissions of at least class A2 or B (but see No. 12-11).
  - b) The equipment shall respond to the alarm signal through interference (provided it is not continuous) caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the apparatus.
  - c) The equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal.
  - d) The equipment shall possess a minimum sensitivity such that with negligible atmospheric interference, it is capable of being operated by the alarm signal transmitted by the emergency transmitter of a ship station at any distance from

this station up to the normal range fixed for this transmitter by the International Convention for the Safety of Life at Sea, and preferably at greater distances.

- e) The equipment shall give warning of any fault which would prevent the apparatus from performing its normal functions during watch hours.

2. The automatic devices intended for the reception of the radio-telephone alarm signal shall fulfil the following conditions :

- a) The equipment shall respond to the alarm signal through intermittent interference caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the equipment.
- b) The equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal.
- c) The equipment shall be effective beyond the range at which speech transmission is satisfactory and it should, as far as practicable, give warning of faults that would prevent the apparatus from performing its normal function during watch hours.

## APPENDIX 21

### Specimen Form of Statement of Account for Radiotelegrams and Radiotelephone Calls

(See Article 40)

*Account between country A and country B*

in respect of  $\left\{ \begin{array}{l} \text{radiotelegraph} \\ \text{radiotelephone} \end{array} \right.$

traffic exchanged via country A's coast stations  
during the month of . . .

[illegible]

\* A or B as appropriate.

## APPENDIX 22

**Payment of Balance of Accounts**

§ 1. The currencies used for payment, as well as the rules for conversion of the balances expressed in gold francs into the currency of payment, referred to in Nos. 41-43 and 41-46 of the Radio Regulations, shall be the following :

**A. Currencies of Payment**

§ 2. (1) The currencies used for the payment of the gold franc balances of international radiotelegraph and radiotelephone accounts shall be in accordance with the following :

(2) If the country to which the creditor administration or recognized private operating agency belongs has made a special monetary agreement with the country to which the debtor administration or recognized private operating agency belongs, the currency shall be as designated by that agreement.

(3) If no special monetary agreement exists between these countries, the creditor country may request that this payment be made :

- a) in the money of a country where the central bank of issue or other official institution freely buys and sells gold or gold currency for the national money at fixed rates determined by law or by virtue of an agreement with the government (money referred to hereinafter as "gold currency") ;
- b) or in the money of a country with a free rate of exchange (money referred to hereinafter as "free currency"), the gold parity of which is fixed by the International Monetary Fund ;
- c) or in the money of a country with a free rate of exchange (free currency), the gold parity of which is determined by domestic law or by an arrangement between the government and an official issuing house of that country ;

- d)* or in its own money, which may not necessarily fulfil the conditions laid down in *a)*, *b)* or *c)* of sub-paragraph (3), above ; in this case, the administrations or recognized private operating agencies concerned must be in agreement.

(4) If the currencies of several countries fulfil the conditions in *a)*, *b)* or *c)* of sub-paragraph (3), above, the creditor administration or recognized private operating agency shall indicate the currency of payment which is convenient to it.

#### **B. Rules for Conversion**

§ 3. (1) Conversion into the currency of payment of the balances in gold francs shall be effected according to the following rules :

(2) If the administrations or recognized private operating agencies belong to countries between which special monetary agreements exist, conversion shall be made :

- a)* at the choice of the debtor administration or recognized private operating agency either directly into the currency of the creditor country at the gold parity fixed for such currency by the International Monetary Fund ; or through the currency of the debtor country on the basis of the gold parity approved for this currency by the International Monetary Fund ; the result obtained in the currency of the creditor country or of the debtor country shall, if necessary, be converted into the currency of payment in conformity with special monetary agreements between the two countries ;
- b)* in the absence of a gold parity approved by the International Monetary Fund for both the currency of the creditor country and the currency of the debtor country, at the gold par rate of a currency fulfilling the conditions prescribed in sub-paragraphs (3) *a)*, (3) *b)* or (3) *c)* of § 2, above ; the result obtained shall then be converted into the currency of the debtor country at the current official rate of exchange for such currency in that country, and thence, if necessary, into



the currency of payment, in conformity with the special monetary agreements ;

- c) at the choice of the debtor administration or recognized private operating agency either directly into the currency of the creditor country and at the gold parity fixed for that currency by a law of the country, or by an arrangement between the government and an official issuing house, or through the currency of the debtor country and at the gold parity determined for that currency by a law of the country or by an arrangement between the government and an official issuing house ; the result obtained in the currency of the creditor country or in the currency of the debtor country shall, if necessary, be converted into the currency of payment in conformity with the special monetary agreements between the two countries.

(3) If the administrations or recognized private operating agencies belong to countries which have not made any special monetary agreement, conversion shall be made as follows :

- a) if the currency in which payment is made is a gold currency, at the gold par rate of such currency ;
- b) if the currency in which payment is made is a free currency for which a gold parity has been fixed by the International Monetary Fund, at the gold parity approved by the Fund, or at the gold par rate determined by domestic law, or by an arrangement between the government and an official issuing house ;
- c) if the currency in which payment is made is a free currency for which the International Monetary Fund has not fixed any gold parity, either at the gold par rate determined by domestic law or by an arrangement between the government and an official issuing house, or through another free currency with a gold parity fixed by the Fund ; the result obtained shall be converted into the currency in which payment is made at the official rate in force in the debtor country the day or the day before the transfer is effected or the cheque or draft is purchased.

(4) If, by agreement between the two administrations or recognized private operating agencies concerned, the currency in which payment is made is that specified in sub-paragraph (3) *d*) of § 2., above, the balance in gold francs shall be converted into any gold currency or free currency ; the result obtained shall be converted into the currency of the debtor country, and thence into the currency of the creditor country at the official rate of exchange in force in the debtor country on the day or the day before the transfer is effected or the cheque or draft is purchased.

## APPENDIX 23

### Procedure for Obtaining Radio Direction-Finding Bearings and Positions

(See Article 43)

#### Section I. General Instructions

§ 1. Stations of the aeronautical mobile service shall use such special procedures as may be in force as a result of agreements concluded between administrations. However, if they have need to participate in direction-finding operations with stations of the maritime mobile service, the provisions of this Appendix shall be applicable.

§ 2. Before calling one or more radio direction-finding stations for the purpose of asking for a bearing or position, a mobile station shall ascertain from the appropriate list :

- a) the call signs of the stations to be called to obtain the desired bearings or position ;
- b) the frequency on which the radio direction-finding stations keep watch, and the frequency or frequencies on which they take bearings ;
- c) the radio direction-finding stations which, being linked by special circuits, can be grouped operationally with the radio direction-finding station to be called.

§ 3. The procedure to be followed by the mobile station depends on varying circumstances. Generally, the following shall be taken into account :

- a) If the radio direction-finding stations do not keep watch on the same frequency (whether it be the frequency on which bearings are taken or another frequency), a separate request for the bearings shall be made to each station or group of stations using a given frequency.
- b) If all the radio direction-finding stations concerned keep watch on the same frequency, and if they are able to take bearings on a common frequency (which may be different from the listening frequency), the mobile station shall call all of them at the same time, in order that all these stations may take simultaneous bearings on the same transmission.
- c) If several radio direction-finding stations are grouped by means of special circuits, only one of them, the radio direction-finding control station, shall be called even if all are furnished with transmitting apparatus. In that case, however, the mobile station shall, if appropriate, specify in the call, by means of call signs, the radio direction-finding stations from which it wishes to obtain bearings.

§ 4. The List of Radiodetermination and Special Service Stations contains information relating to :

- a) the type of signal and class of emission to be used for obtaining the bearings ;
- b) the duration of the transmission to be made by the mobile station ;
- c) the time used by the radio direction-finding station in question, if different from Greenwich mean time (G. M. T.).

## Section II. Rules of Procedure

§ 5. The following rules of procedure applicable to radiotelegraphy and radiotelephony are based on the use of radiotelegraphy. When used for radiotelephony, appropriate phrases may replace the service abbreviations.

### *To obtain a bearing*

§ 6. (1) The mobile station shall call the radio direction-finding station or the radio direction-finding control station on the listening frequency indicated in the List. Depending on the type of information desired, the calling station shall transmit the appropriate service abbreviation followed, if the radio direction-finding station is a mobile station, by the service abbreviation QTH ? It shall indicate, if necessary, the frequency on which it is going to transmit to enable its bearing to be taken, and then await instructions.

(2) The radio direction-finding station called shall request the calling station, by means of the appropriate service abbreviation, to transmit for the bearing. If necessary, it shall indicate the frequency to be used for this purpose and the number of times the transmission is to be repeated.

(3) After having changed, if necessary, to its new transmitting frequency, the calling station shall transmit two dashes of approximately ten seconds each, followed by its call sign. It shall repeat this signal as often as the radio direction-finding station requires.

(4) The radio direction-finding station shall determine the direction and, if possible, the sense of the bearing, and its classification (see paragraph 7).

(5) If the radio direction-finding station is not satisfied with the operation, it shall request the calling station to repeat the transmission described in (3).

(6) The radio direction-finding station shall transmit the information to the calling station in the following order :

- a) the appropriate service abbreviation ;

- b) three digits indicating the true bearing in degrees from the radio direction-finding station ;
- c) class of bearing ;
- d) time of observation ;
- e) if the radio direction-finding station is mobile, its own position in latitude and longitude, preceded by the service abbreviation QTH.

(7) As soon as the calling station has received the result of the observation, it shall repeat the message, if this is considered necessary to obtain confirmation. The radio direction-finding station then shall confirm that the repetition is correct or, if necessary, correct it by repeating the message. When the radio direction-finding station is sure that the calling station has received the message correctly, it shall transmit the signal "end of work". The calling station shall repeat this signal to indicate that the operation is finished.

(8) In the absence of information to the contrary, the calling station may assume that the sense of the bearing was determined. If the radio direction-finding station has not determined the sense, it shall indicate this in the information transmitted, or report the bearing and its reciprocal.

#### *Classification of Bearings*

§ 7. (1) To estimate the accuracy and determine the corresponding class of a bearing :

- a) An operator should generally, and particularly in the maritime mobile radio direction-finding service on frequencies below 3 000 kc/s, use the observational characteristics of bearings shown in the following Table.
- b) The operators at a radio direction-finding station, when facilities and time permit, may take into account the probability of error in the bearing. A bearing is considered as belonging to a particular class if there is a probability of less than one in twenty that the bearing

error would exceed the numerical values specified for that class in the Table shown on the following page. This probability should be determined from an analysis of the five components that make up the total variance of the bearing (instrumental, site, propagation, random-sampling and observational components).

*To obtain a position determined by two or more radio direction-finding stations organized as a group*

§ 8. (1) If the calling station wishes to be informed of its position by a group of radio direction-finding stations, it shall call the control station as is indicated in § 6. (1) above, and request its position by means of the appropriate service abbreviation.

(2) The control station shall reply to the call and, when the radio direction-finding stations are ready, request, by means of the appropriate service abbreviation, that the calling station transmit. When the position has been determined, the control station shall transmit to the calling station :

- a) the appropriate service abbreviation ;
- b) the position, in latitude and longitude or, if appropriate, in relation to a known geographical position ;
- c) the class of position as defined in the following subparagraph ;
- d) the time of observation.

(3) According to its estimate of the accuracy of the observations, the control station shall classify the position in one of the four following classes :

Class A : positions which the operator may reasonably expect to be accurate to within 5 nautical miles ;

**TABLE**  
**Classification of Bearings**

| Class | Bearing Error<br>(Degrees) | Observational Characteristics |                          |             |              |                             |                            |
|-------|----------------------------|-------------------------------|--------------------------|-------------|--------------|-----------------------------|----------------------------|
|       |                            | Signal<br>Strength            | Bearing<br>Indication    | Fading      | Interference | Bearing Swing<br>(Degrees)  | Duration of<br>Observation |
| A     | $\pm 2$                    | very good<br>or good          | definite<br>(sharp null) | negligible  | negligible   | less than 3                 | adequate                   |
| B     | $\pm 5$                    | fairly good                   | blurred                  | slight      | slight       | more than 3<br>less than 5  | short                      |
| C     | $\pm 10$                   | weak                          | severely<br>blurred      | severe      | strong       | more than 5<br>less than 10 | very short                 |
| D     | more than<br>$\pm 10$      | scarcely<br>perceptible       | ill-defined              | very severe | very strong  | more than 10                | inadequate                 |

Class B: positions which the operator may reasonably expect to be accurate to within 20 nautical miles;

Class C: positions which the operator may reasonably expect to be accurate to within 50 nautical miles;

Class D: positions which the operator may not expect to be accurate to within 50 nautical miles.

(4) However, for frequencies above 3 000 kc/s, where the distance limits specified in the preceding sub-paragraph may not be appropriate, the control station may classify the position in accordance with current C.C.I.R. Recommendations.

*To obtain simultaneous bearings from two or more radio direction-finding stations organized as a group*

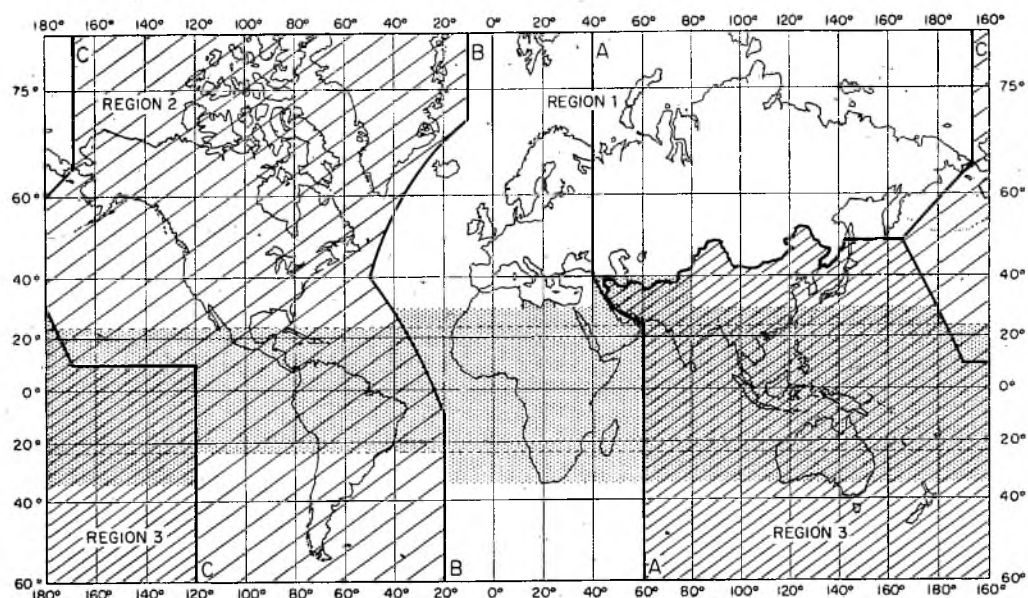
§ 9. On a request for bearings, the control station of a group of radio direction-finding stations shall proceed as indicated in § 8 above. It then shall transmit the bearings observed by each station of the group, each bearing being preceded by the call sign of the station which observed it.



## APPENDIX 24

**Chart of Regions as Defined in Table of Frequency Allocations**

(See Nos. 5-01 to 5-08 and 5-11)



The shaded part represents the Tropical Zone as defined in No. 5-11.

## APPENDIX 25

**Frequency Allotment Plan for Coast Radiotelephone Stations  
Operating in the Exclusive Maritime Mobile Bands  
between 4 000 and 23 000 kc/s**

*Note 1* The power indicated in this Plan is the mean power as defined in No.1-96 of these Regulations.

*Note 2* It is recommended that when countries bring additional frequencies into use the assistance of the International Frequency Registration Board should be sought in choosing specific frequencies so as to avoid harmful interference to assignments which are in conformity with the following Frequency Allotment Plan.

**Section I**

**Frequencies for which the date of 3 December, 1951,  
shall be inserted in Column 2a of the Master International Frequency Register**

| Fre-<br>quency<br>in kc/s                   | Country                | Power<br>in kW | Remarks |
|---|------------------------|----------------|---------|
| (1)   | (2)                    | (3)            | (4)     |
| 4371-1<br><br><br><br><br><br><br>(cont'd.) | South Africa           | 2              |         |
|   | Cook or Hervey Islands | 0.1            |         |
|   | Malaya                 | 0.5            |         |
|   | Nigeria                | 0.3            |         |
|   | Netherlands New Guinea | 1              |         |
|   | Nyasaland              | 0.03           |         |
|   | Panama Republic        | 2.5            |         |
|   | Western Samoa          | 0.25           |         |

| Fre-<br>quency<br>in kc/s | Country`  | Power<br>in kW | Remarks  |
|---------------------------|---|----------------|--|
| (1)                       | (2)   | (3)            | (4)  |
| 4371.1<br>(cont'd.)       | Singapore   | 0.5            |  |
|                           | Somaliland (Italian Admin-<br>istration)                                      | 0.03           |  |
|                           | Ukraine   | 15             |  |
|                           | U.S.S.R. (Southern Asia)  | 5              |  |
|                           | U.S.S.R. (Northern Asia)  | 15             |  |
|                           | U.S.S.R. (Europe)   | 15             |  |
|                           | U.S.S.R. (Far East)   | 15             |  |
|                           | U.S.S.R. (North West)   | 15             |  |
|                           | Uruguay   | 5              |  |
| 4377.4                    | United States (West)  | 20             | <sup>1)</sup> Second frequency for Japan<br><sup>2)</sup> Second frequency for the<br>U.S.S.R. (Southern Asia) |
|                           | South Georgia   | 0.3            |  |
|                           | Japan <sup>1)</sup>   | 0.2            |  |
|                           | Pakistan  | 3.5            |  |
|                           | Papua and Trust Territory<br>of New Guinea                                    | 0.25           |  |
|                           | United Kingdom  | 20             |  |
|                           | U.S.S.R. (Southern Asia) <sup>2)</sup><br>Directional antenna<br>azimuth 80°) | 3              |  |
|                           |   |                |  |

| Fre-<br>quency<br>in kc/s | Country                           | Power<br>in kW | Remarks  |
|---------------------------|-----------------------------------|----------------|--|
| (1)                       | (2)                               | (3)            | (4)  |
| 4383·8                    | South Africa                      | 3              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><sup>2)</sup> Second frequency for the U.S.S.R. (Far East) |
|                           | Brazil                            | 3              |  |
|                           | Denmark <sup>1)</sup>             | 5              |  |
|                           | Ethiopia                          | 2              |  |
|                           | Fiji                              | 0·4            |  |
|                           | India (South)                     | 5              |  |
|                           | Macao                             | 0·15           |  |
|                           | Mexico                            | 2·5            |  |
|                           | Norway <sup>1)</sup>              | 5              |  |
|                           | Sweden <sup>1)</sup>              | 5              |  |
|                           | Portuguese Timor                  | 0·5            |  |
|                           | U.S.S.R. (Far East) <sup>2)</sup> | 10             |  |
| 4390·2<br><br>(cont'd.)   | Cameroon                          | 1              |  |
|                           | Chile (South)                     | 0·1            |  |
|                           | Congo (Republic of)               | 1              |  |
|                           | Ivory Coast                       | 1              |  |
|                           | Dahomey                           | 1              |  |
|                           | France                            | 20             |  |
|                           | Gabon                             | 1              |  |
|                           | Guinea                            | 1              |  |

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                        | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)                         |
|--------------------------------------|---|---------------------------|--|
| <b>4390.2</b><br>(cont'd.)           | Madagascar                                | 1                         |  |
|                                      | Mali                                      | 1                         |  |
|                                      | Martinique                                | 2                         |  |
|                                      | Mauritania                                | 1                         |  |
|                                      | Monaco                                    | 1                         |  |
|                                      | New Caledonia                             | 1                         |  |
|                                      | Reunion                                   | 0.5                       |  |
|                                      | S. Pierre and Miquelon                    | 0.5                       |  |
|                                      | Togo                                      | 1                         |  |
| <b>4396.6</b>                        | Germany <sup>1)</sup>                     | 6                         | <sup>1)</sup> Second frequency for Germany |
|                                      | Australia (East)                          | 1                         |  |
|                                      | United States (East)                      | 20                        |  |
|                                      | Indonesia                                 | 3                         |  |
|                                      | United Arab Republic<br>(Egyptian Region) | 3                         |  |
|                                      | Uruguay                                   | 5                         |  |
| <b>4403</b><br><br>(cont'd.)         | Ceylon                                    | 1                         |  |
|                                      | Cuba                                      | 3                         |  |
|                                      | Finland                                   | 3                         |  |

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                     | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)   |
|--------------------------------------|--|---------------------------|--|
| <b>4403</b><br>(cont'd.)             | Iceland <sup>1)</sup>                  | 1                         | <sup>1)</sup> Iceland requires two 40-minute periods per day.  |
|                                      | Italy                                  | 10                        |  |
|                                      | Japan                                  | 2.5                       |  |
|                                      | New Hebrides                           | 0.2                       |  |
| <b>4409.4</b>                        | Germany                                | 6                         | <sup>1)</sup> Third frequency for the United States (East)   |
|                                      | Canaries                               | 5                         |  |
|                                      | China (Central)                        | 3                         | <sup>2)</sup> Second frequency for the U.S.S.R. (Northern Asia)  |
|                                      | Spain                                  | 5                         |  |
|                                      | United States (East) <sup>1)</sup>     | 20                        | <sup>3)</sup> Second frequency for the U.S.S.R. (North-West)   |
|                                      | Solomon Islands/Aus                    | 0.25                      |  |
|                                      | Kenya                                  | 0.5                       |  |
|                                      | Poland                                 | 5                         |  |
|                                      | U.S.S.R. (Northern Asia) <sup>2)</sup> | 5                         |  |
|                                      | U.S.S.R. (North West) <sup>3)</sup>    | 5 (HJ)<br>2 (HN)          |  |
| <b>4415.8</b><br><br>(cont'd.)       | Angola <sup>1)</sup>                   | 1                         | <sup>1)</sup> Time sharing if necessary between Portugal, Angola, Portuguese Guinea, Cape Verde Islands, S. Tomé and Príncipe on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                                      | Netherlands Antilles <sup>1)</sup>     | 1                         |  |
|                                      | Canada (East and Central)              | 12                        |  |
|                                      | Cape Verde <sup>1)</sup>               | 0.1                       |  |

| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks  |
|---------------------------|------------------------------------|----------------|--|
| (1)                       | (2)                                | (3)            | (4)  |
| 4415.8<br>(cont'd.)       | Portuguese Guinea <sup>1)</sup>    | 0.1            | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, Portuguese Guinea, Cape Verde Islands, S. Tomé and Príncipe on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                           | Portuguese Indies                  | 0.5            |  |
|                           | Indonesia                          | 0.5            |  |
|                           | Japon <sup>2)</sup>                | 0.2            |  |
|                           | Mozambique                         | 0.5            | <sup>2)</sup> Third frequency for Japan.   |
|                           | New Zealand                        | 1              | <sup>3)</sup> Second frequency for the U.S.S.R. (Europe)   |
|                           | Netherlands <sup>1)</sup>          | 10             |  |
|                           | Portugal <sup>1)</sup>             | 5              |  |
|                           | S. Tomé and Príncipe <sup>1)</sup> | 0.5            |  |
|                           | Surinam <sup>1)</sup>              | 0.35           |  |
|                           | U.S.S.R. (Europe) <sup>3)</sup>    | 2              |  |
|                           | Yugoslavia                         | 1              |  |
| 4422.2<br><br>(cont'd.)   | Chile (North)                      | 0.2            | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.                                   |
|                           | Colombia                           | 2              |  |
|                           | Denmark <sup>1)</sup>              | 5              |  |
|                           | United States (Central)            | 1              |  |
|                           | France <sup>2)</sup>               | 20             | <sup>2)</sup> Second frequency for France.   |
|                           | Gambia                             | 0.7            |  |
|                           | Ghana                              | 3              |  |

| Frequency<br>in kc/s    | Country               | Power<br>in kW | Remarks   |
|-------------------------|-----------------------|----------------|---|
| (1)                     | (2)                   | (3)            | (4)   |
| 4422.2<br>(cont'd.)     | Hawaii                | 3              | 1) The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries. |
|                         | India (North)         | 5              |   |
|                         | Italy 3)              | 10             |   |
|                         | Norway 1)             | 5              | 3) Second frequency for Italy.  |
|                         | Philippines           | 3              |   |
|                         | Sweden 1)             | 5              |   |
|                         | Venezuela             | 2              |   |
| 4428.6<br><br>(cont'd.) | Argentina (South) 1)  | 0.5            | 1) Second frequency for Argentina (South).  |
|                         | Bermuda               | 3              | 2) Second frequency for Poland.   |
|                         | Canada (West)         | 0.4            |   |
|                         | China (East)          | 10             |   |
|                         | United States (South) | 0.4            |   |
|                         | Greece                | 3.5            |   |
|                         | Israel                | 3.5            |   |
|                         | Nicaragua             | 0.1            |   |
|                         | New Zealand           | 0.3            |   |
|                         | Poland 2)             | 2.5            |   |



| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                 | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)  |
|--------------------------------------|------------------------------------|---------------------------|---|
| <b>4428·6</b><br>(cont'd.)           | Dominican Republic                 | 0·15                      | <sup>3)</sup> Second frequency for the United Kingdom.      |
|                                      | United Kingdom <sup>3)</sup>       | 15                        |   |
|                                      | Turkey                             | 3·5                       |   |
| <b>4434·9</b>                        | Argentina (North)                  | 20                        | <sup>1)</sup> Second frequency for the United States (East) |
|                                      | Australia (West)                   | 0·25                      |   |
|                                      | Belgium                            | 3                         | <sup>2)</sup> Second frequency for Ukraine.                 |
|                                      | Bulgaria                           | 0·5                       |   |
|                                      | Belgian Congo                      | 1                         |   |
|                                      | United States (East) <sup>1)</sup> | 20                        |   |
|                                      | Hongkong                           | 3                         |   |
|                                      | Iran                               | 1                         |   |
|                                      | Ukraine <sup>2)</sup>              | 5 (HJ)<br>3 (HN)          |   |

| Fre-<br>quency<br>in kc/s | Country                | Power<br>in kW | Remarks   |
|---------------------------|------------------------|----------------|---|
| (1)                       | (2)                    | (3)            | (4)   |
| 8748·1                    | South Africa           | 2              |   |
|                           | Cook or Hervey Islands | 0·1            |   |
|                           | Persian Gulf           | 0·5<br>(HJ)    |   |
|                           | Greenland              | 0·05           |   |
|                           | Malaya                 | 0·5            |   |
|                           | Panama Republic        | 2·5            |   |
|                           | Western Samoa          | 0·25           |   |
|                           | Sierra Leone           | 0·5            |   |
|                           | Singapore              | 0·5            |   |
|                           | Ukraine                | 15             |   |
|                           | U.S.S.R. (Europe)      | 15             |   |
|                           | U.S.S.R. (Far East)    | 15             |   |
|                           | U.S.S.R. (North West)  | 15             |   |
|                           | Uruguay                | 1              |   |
| 8754·4                    | Bahamas                | 0·5            | <sup>1)</sup> Ethiopia will use this frequency<br>from 0800 to 1600 G.M.T.<br><br><sup>2)</sup> Second frequency for Japan. |
|                           | United States (West)   | 20             |   |
|                           | Ethiopia <sup>1)</sup> | 1              |   |
|                           | South Georgia          | 0·3            |   |
|                           | Solomon Is/Aus         | 0·25           |   |
|                           | Indonesia              | 0·5            |   |
|                           | Japan <sup>2)</sup>    | 0·2            |   |
|                           | United Kingdom         | 20             |   |

| Fre-<br>quency<br>in kc/s      | Country  | Power<br>in kW | Remarks  |
|--------------------------------|--|----------------|--|
| (1)                            | (2)  | (3)            | (4)  |
| <b>8760·8</b>                  | South Africa   | 3              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><sup>2)</sup> Second frequency for the U.S.S.R. (Southern Asia, Caspian and Aral Sea.) |
|                                | Australia (West)   | 0·13           |  |
|                                | Cambodia   | 0·2            |  |
|                                | Chile (South)  | 0·1            |  |
|                                | Denmark <sup>1)</sup>  | 5              |  |
|                                | Laos   | 0·2            |  |
|                                | Nicaragua  | 0·1            |  |
|                                | Norway <sup>1)</sup>   | 5              |  |
|                                | Dominican Republic   | 0·15           |  |
|                                | Sweden <sup>1)</sup>   | 5              |  |
|                                | U.S.S.R. (Southern Asia <sup>2)</sup><br>(Directional antenna azimuth 80°) | 3              |  |
|                                | Viet-Nam   | 0·2            |  |
| <b>8767·2</b><br><br>(cont'd.) | Cameroon   | 1              |  |
|                                | Congo (Republic of)  | 1              |  |
|                                | Ivory Coast  | 1              |  |
|                                | Dahomey  | 1              |  |
|                                | France   | 20             |  |

| Fre-<br>quency<br>in kc/s      | Country                                    | Power<br>in kW | Remarks |
|--------------------------------|--|----------------|---------|
| (1)                            | (2)  | (3)            | (4)     |
| <b>8767.2</b><br>(cont'd.)     | Gabon                                      | 1              |         |
|                                | Guinea                                     | 1              |         |
|                                | Hawaii                                     | 3              |         |
|                                | India (South)                              | 5              |         |
|                                | Macao                                      | 0.15           |         |
|                                | Madagascar                                 | 1              |         |
|                                | Mali                                       | 1              |         |
|                                | Morocco                                    | 1              |         |
|                                | Martinique                                 | 2              |         |
|                                | Mauritania                                 | 1              |         |
|                                | Monaco                                     | 1              |         |
|                                | Reunion                                    | 0.5            |         |
|                                | S. Pierre and Miquelon                     | 0.5            |         |
|                                | Portuguese Timor                           | 0.5            |         |
|                                | Togo                                       | 1              |         |
| <b>8773.6</b><br><br>(cont'd.) | Burma                                      | 2.5            |         |
|                                | United States (East)                       | 20             |         |
|                                | Papua and Trust Territory<br>of New Guinea | 0.25           |         |
|                                | United Arab Republic                       |                |         |
|                                | Egyptian Region                            | 3              |         |

| Fre-<br>quency<br>in kc/s<br><br>(1)               | Country<br><br>(2)   | Power<br>in kW<br><br>(3)                        | Remarks<br><br>(4)  |
|--|--|--|---|
| <b>8773·6</b><br>(cont'd.)                         | U.S.S.R. (Northern Asia)   | 15   |   |
| <b>8780</b>  | Ceylon<br>Cuba<br>Faroes<br>Finland<br>Iceland <sup>1)</sup><br>Italy<br>Japan<br>New Caledonia<br>New Hebrides                          | 1<br>3<br>0·2<br>3<br>1<br>10<br>2·5<br>1<br>0·2 | <sup>1)</sup> Iceland requires two 40-minute periods per day. |
| <b>8786·4</b><br><br><br><br><br><br><br>(cont'd.) | Germany<br>Netherlands Antilles<br>Argentina (South) <sup>1)</sup><br>Bulgaria<br>Canada (East and Central)<br>Canaries<br>Belgian Congo | 6<br>1 (HJ)<br>1<br>0·5<br>12<br>5<br>1          | <sup>1)</sup> Second frequency for Argentina (South).         |

| Frequency<br>in kc/s       | Country  | Power<br>in kW | Remarks  |
|----------------------------|--|----------------|--|
| (1)                        | (2)  | (3)            | (4)  |
| <b>8786.4</b><br>(cont,d.) | Spain  | 5              | <sup>2)</sup> Time sharing, if necessary, between India (North) and New Zealand.   |
|                            | India (North) <sup>2)</sup>                        | 5              |  |
|                            | New Zealand <sup>2)</sup>                          | 5              | <sup>3)</sup> Second frequency for the U.S.S.R. (Europe).  |
|                            | Surinam  | 0.35<br>(HJ)   |  |
|                            | U.S.S.R. (Europe) <sup>3)</sup>                    | 2              |  |
| <b>8792.8</b>              | Angola <sup>1)</sup>                               | 1              | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, Portuguese Guinea, Cape Verde Islands and S. Tomé and Príncipe, on the one hand, and Netherlands on the other. |
|                            | Cape Verde <sup>1)</sup>                           | 0.1            |  |
|                            | China (Central)                                    | 3              |  |
|                            | Gilbert and Ellice                                 | 0.25           | <sup>2)</sup> Second frequency for the U.S.S.R. (North West).  |
|                            | Portuguese Guinea <sup>1)</sup>                    | 0.1            |  |
|                            | Portuguese Indies                                  | 0.5            |  |
|                            | Mexico   | 2.5            |  |
|                            | Netherlands <sup>1)</sup>                          | 10             |  |
|                            | Philippines  | 1              |  |
|                            | Poland   | 5              |  |
|                            | Portugal <sup>1)</sup>                             | 5              |  |
|                            | S. Tomé and Príncipe <sup>1)</sup>                 | 0.5            |  |
|                            | U.S.S.R. (North West : Arctic Ocean) <sup>2)</sup> | 3              |  |
|                            | Uruguay  | 5              |  |

| Fre-<br>quency<br>in kc/s | Country  | Power<br>in kW | Remarks   |
|---------------------------|--|----------------|---|
| (1)                       | (2)  | (3)            | (4)   |
| 8799.2                    | Chile (North)  | 0.2            | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.<br><sup>2)</sup> Second frequency for France.<br><sup>3)</sup> Second frequency for Italy.<br><sup>4)</sup> Third frequency for Japan.<br><sup>5)</sup> Second frequency for Ukraine. The Ukraine will not use this frequency outside the hours of 0200 to 0800 G.M.T. and 1000 to 2000 G.M.T. |
|                           | Colombia   | 2              |   |
|                           | Denmark <sup>1)</sup>                                      | 5              |   |
|                           | United States (North and Central)                          | 1              |   |
|                           | France <sup>2)</sup>                                       | 20             |   |
|                           | Indonesia  | 3              |   |
|                           | Italy <sup>3)</sup>  | 10             |   |
|                           | Japan <sup>4)</sup>  | 0.2            |   |
|                           | Mozambique   | 0.5            |   |
|                           | Nigeria  | 0.3            |   |
|                           | Norway <sup>1)</sup>                                       | 5              |   |
|                           | Seychelles   | 0.5            |   |
|                           | Sweden <sup>1)</sup>                                       | 5              |   |
|                           | Ukraine <sup>5)</sup>                                      | 5              |   |
|                           | U.S.S.R. (Southern Asia) (Directional antenna azimuth 80°) | 3              |   |
|                           | Venezuela  | 2              |   |
| 8805.6<br><br>(cont'd.)   | Australia (East)   | 1              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary.   |
|                           | Belgium <sup>1)</sup>                                      | 3              |   |

| Fre-<br>quency<br>in kc/s  | Country                                | Power<br>in kW | Remarks  |
|----------------------------|--|----------------|--|
| (1)                        | (2)                                    | (3)            | (4)  |
| <b>8805·6</b><br>(cont'd.) | Bermuda                                | 3              | <sup>2)</sup> Second frequency for the United Kingdom.                                 |
|                            | Brazil (South of 21° South)            | 3              |  |
|                            | Hongkong                               | 1              | <sup>3)</sup> Second frequency for the U.S.S.R. (Far East).                            |
|                            | Iran                                   | 1              |  |
|                            | Kenya                                  | 0·5            |  |
|                            | United Kingdom <sup>2)</sup>           | 15             |  |
|                            | U.S.S.R. (Far East) <sup>3)</sup>      | 15             |  |
|                            | Yugoslavia                             | 2              |  |
| <b>8811·9</b>              | Germany <sup>1)</sup>                  | 6              | <sup>1)</sup> Second frequency for Germany.  |
|                            | Argentina (North)                      | 20             | <sup>2)</sup> Second frequency for the United States (East).                           |
|                            | China (East)                           | 5              |  |
|                            | United States (East) <sup>2)</sup>     | 20             | <sup>3)</sup> Second frequency for the U.S.S.R. (Northern Asia East of Meridian 60°E). |
|                            | Fiji                                   | 0·5            |  |
|                            | Gambia                                 | 0·7            |  |
|                            | Ghana                                  | 3              |  |
|                            | Greece                                 | 3·5            |  |
|                            | Israel                                 | 3·5            |  |
|                            | Pakistan                               | 3·5            |  |
|                            | Turkey                                 | 3·5            |  |
|                            | U.S.S.R. (Northern Asia) <sup>3)</sup> | 10             |  |



| Fre-<br>quency<br>in kc/s | Country                  | Power<br>in kW | Remarks |
|---------------------------|--------------------------|----------------|---------|
| (1)                       | (2)                      | (3)            | (4)     |
| 13133.5                   | Argentina                | 0.5            |         |
|                           | Greenland                | 0.05           |         |
|                           | Nigeria                  | 0.5            |         |
|                           | Netherlands New Guinea   | 1              |         |
|                           | Panama Republic          | 2.5            |         |
|                           | Ukraine                  | 15             |         |
|                           | U.S.S.R. (Europe)        | 15             |         |
|                           | U.S.S.R. (Far East)      | 15             |         |
|                           | U.S.S.R. (North West)    | 15             |         |
| 13140.5                   | Bahamas                  | 0.5            |         |
|                           | Bermuda                  | 3              |         |
|                           | Cambodia                 | 0.2            |         |
|                           | Fiji                     | 0.5            |         |
|                           | Laos                     | 0.2            |         |
|                           | United Kingdom           | 20             |         |
|                           | U.S.S.R. (Northern Asia) | 15             |         |
|                           | Viet-Nam                 | 0.2            |         |

| Fre-<br>quency<br>in kc/s | Country                           | Power<br>in kW | Remarks   |
|---------------------------|-----------------------------------|----------------|---|
| (1)                       | (2)                               | (3)            | (4)   |
| 13147.5                   | Australia (East)                  | 1              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><br><sup>2)</sup> Second frequency for the U.S.S.R. (Far East). |
|                           | Colombia                          | 2.5            |   |
|                           | Denmark <sup>1)</sup>             | 5              |   |
|                           | Norway <sup>1)</sup>              | 5              |   |
|                           | Pakistan                          | 3              |   |
|                           | Sweden <sup>1)</sup>              | 5              |   |
|                           | U.S.S.R. (Far East) <sup>2)</sup> | 15             |   |
|                           | Venezuela                         | 2.5            |   |
| 13154.5                   | Cameroon                          | 1              |   |
|                           | Congo (Republic of)               | 1              |   |
|                           | Ivory Coast                       | 1              |   |
|                           | Dahomey                           | 1              |   |
|                           | France                            | 20             |   |
|                           | Gabon                             | 1              |   |
|                           | Guinea                            | 1              |   |
|                           | Portuguese Indies                 | 0.5            |   |
|                           | Japan                             | 2.5            |   |
|                           | Macao                             | 0.15           |   |
|                           | Madagascar                        | 1              |   |
|                           | (cont'd.)                         |                |   |

| Fre-<br>quency<br>in kc/s   | Country                         | Power<br>in kW | Remarks  |
|-----------------------------|---------------------------------|----------------|--|
| (1)                         | (2)                             | (3)            | (4)  |
| <b>13154.5</b><br>(cont'd.) | Mali                            | 1              |  |
|                             | Morocco                         | 1              |  |
|                             | Martinique                      | 2              |  |
|                             | Mauritania                      | 1              |  |
|                             | Mozambique                      | 0.5            |  |
|                             | Portuguese Timor                | 0.5            |  |
|                             | Togo                            | 1              |  |
| <b>13161.5</b>              | China (East)                    | 5              | <sup>1)</sup> Second frequency for Ukraine.<br><sup>2)</sup> Second frequency for the U.S.S.R. (Europe). |
|                             | United States (East)            | 20             |  |
|                             | Iran                            | 1              |  |
|                             | Ukraine <sup>1)</sup>           | 5              |  |
|                             | U.S.S.R. (Europe) <sup>2)</sup> | 10             |  |
| <b>13168.5</b>              | Australia (West)                | 0.13           |  |
|                             | Brazil                          | 3              |  |
|                             | Cuba                            | 3              |  |
|                             | Finland                         | 3              |  |
| (cont'd.)                   |                                 |                |  |

| Fre-<br>quency<br>in kc/s   | Country  | Power<br>in kW | Remarks  |
|-----------------------------|--|----------------|--|
| (1)                         | (2)  | (3)            | (4)  |
| <b>13168.5</b><br>(cont'd.) | Iceland <sup>1)</sup>  | 1              | <sup>1)</sup> Iceland requires two 40-minute periods per day.<br><br><sup>2)</sup> Coast stations of the U.S.S.R. shall not cause harmful interference to Italian coast stations.  |
|                             | Italy  | 10             |  |
|                             | Philippines  | 0.4            |  |
|                             | U.S.S.R. (Southern Asia) <sup>2)</sup><br>(Directional antenna<br>azimuth 80°) | 3              |  |
| <b>13175.5</b>              | Angola <sup>1)</sup>   | 1              | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, S. Tomé and Príncipe, Portuguese Guinea, Cape Verde Islands and S. Tomé and Príncipe, on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                             | Netherlands Antilles <sup>1)</sup>   | 1              |  |
|                             | Canada (East)  | 12             |  |
|                             | Cape Verde <sup>1)</sup>   | 0.1            |  |
|                             | Portuguese Guinea <sup>1)</sup>  | 0.1            |  |
|                             | Hawaii   | 3              |  |
|                             | Hongkong   | 3              |  |
|                             | India (South)  | 5              |  |
|                             | Netherlands <sup>1)</sup>  | 10             |  |
|                             | Portugal <sup>1)</sup>   | 5              |  |
|                             | S. Tomé and Príncipe <sup>1)</sup>   | 0.5            |  |
|                             | Surinam <sup>1)</sup>  | 0.35           |  |

| Fre-<br>quency<br>in kc/s | Country                   | Power<br>in kW | Remarks   |
|---------------------------|---------------------------|----------------|---|
| (1)                       | (2)                       | (3)            | (4)   |
| 13182.5                   | Germany                   | 6              | 1) The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries. |
|                           | Argentina (North)         | 10             |   |
|                           | Denmark <sup>1)</sup>     | 5              |   |
|                           | United States (West)      | 20             | 2) Second frequency for France.   |
|                           | France <sup>2)</sup>      | 10             |   |
|                           | India (North)             | 5              | 3) Second frequency for Italy.  |
|                           | Italy <sup>3)</sup>       | 10             |   |
|                           | Japan <sup>4)</sup>       | 0.2            | 4) Second frequency for Japan.  |
|                           | Norway <sup>1)</sup>      | 5              |   |
|                           | Netherlands <sup>5)</sup> | 10             | 5) Second frequency for the Netherlands.  |
|                           | Poland                    | 5              |   |
|                           | Sweden <sup>1)</sup>      | 5              |   |
|                           | Yugoslavia                | 5              |   |
| 13189.5                   | South Africa              | 3              | 1) Time sharing with the United Kingdom, if necessary.  |
|                           | Belgium <sup>1)</sup>     | 3              |   |
|                           | China (Central)           | 3              |   |
|                           | Belgian Congo             | 1              |   |
|                           | Greece                    | 3.5            |   |
|                           | Israel                    | 3.5            |   |
| (cont'd.)                 |                           |                |   |

| Fre-<br>quency<br>in kc/s | Country                                   | Power<br>in kW | Remarks  |
|---------------------------|---|----------------|--|
| (1)                       | (2)                                       | (3)            | (4)  |
| 13189.5<br>(cont'd.)      | Mexico                                    | 2.5            | <sup>2)</sup> Second frequency for the United Kingdom.                                 |
|                           | New Zealand                               | 5              |  |
|                           | United Kingdom <sup>2)</sup>              | 15             |  |
|                           | Turkey                                    | 3.5            |  |
| 13196.5                   | Germany <sup>1)</sup>                     | 6              | <sup>1)</sup> Second frequency for Germany.  |
|                           | Canaries                                  | 5              | <sup>2)</sup> Second frequency for the United States (East).                           |
|                           | Chile                                     | 0.1            | <sup>3)</sup> Second frequency for the U.S.S.R. (Northern Asia East of Meridian 60°E). |
|                           | Spain                                     | 5              |  |
|                           | Unites States (East) <sup>2)</sup>        | 20             | <sup>4)</sup> Third frequency for the U.S.S.R. (Far East).                             |
|                           | Gambia                                    | 0.7            | <sup>5)</sup> Second frequency for the U.S.S.R. (North West).                          |
|                           | Indonesia                                 | 3              |  |
|                           | United Arab Republic<br>(Egyptian Region) | 3              |  |
|                           | U.S.S.R. (Northern Asia) <sup>3)</sup>    | 10             |  |
|                           | U.S.S.R. (Far East) <sup>4)</sup>         | 10             |  |
|                           | U.S.S.R. (North West) <sup>5)</sup>       | 5              |  |
|                           | Uruguay                                   | 5              |  |

| Fre-<br>quency<br>in kc/s<br>(1) | Country<br>(2)              | Power<br>in kW<br>(3) | Remarks<br>(4)   |
|----------------------------------|-----------------------------|-----------------------|--|
| 17293.5                          | Brazil                      | 3                     |  |
|                                  | Ukraine                     | 15                    |  |
|                                  | U.S.S.R. (Europe)           | 15                    |  |
|                                  | U.S.S.R. (North West)       | 15                    |  |
|                                  | Viet-Nam                    | 2                     |  |
| 17300.5                          | Australia (East)            | 1                     | 1) Second frequency for the<br>U.S.S.R. (Northern Asia).   |
|                                  | United Kingdom              | 20                    |  |
|                                  | U.S.S.R. (Northern Asia) 1) | 5                     |  |
|                                  | U.S.S.R. (Far East)         | 5                     |  |
| 17307.5                          | Argentina (North)           | 5                     | 1) The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement. |
|                                  | Denmark 1)                  | 5                     |  |
|                                  | Hawaii                      | 3                     |  |
|                                  | India (North)               | 5                     |  |
|                                  | Norway 1)                   | 5                     |  |
|                                  | Sweden 1)                   | 5                     |  |
| 17314.5                          | Brazil                      | 3                     |  |
|                                  | France                      | 20                    |  |
|                                  | Japan                       | 2.5                   |  |
| (cont'd.)                        |                             |                       |  |

| Fre-<br>quency<br>in kc/s<br>(1) | Country<br>(2)                     | Power<br>in kW<br>(3) | Remarks<br>(4)  |
|----------------------------------|------------------------------------|-----------------------|---|
| <b>17314-5</b><br>(cont'd.)      | Morocco                            | 1                     |   |
|                                  | Martinique                         | 2                     |   |
| <b>17321-5</b>                   | China (Central)                    | 3                     | <sup>1)</sup> Second frequency for Ukraine.<br><sup>2)</sup> Third frequency for the U.S.S.R. (Europe).   |
|                                  | United States (East)               | 20                    |   |
|                                  | Philippines                        | 1                     |   |
|                                  | Ukraine <sup>1)</sup>              | 5                     |   |
|                                  | U.S.S.R. (Europe) <sup>2)</sup>    | 10                    |   |
| <b>17328-5</b>                   | Cuba                               | 3                     | <sup>1)</sup> Iceland requires two 40-minute periods per day.   |
|                                  | Finland                            | 3                     |   |
|                                  | Iceland <sup>1)</sup>              | 1                     |   |
|                                  | Italy                              | 10                    |   |
|                                  | New Zealand                        | 5                     |   |
| <b>17335-5</b><br><br>(cont'd.)  | Angola <sup>1)</sup>               | 1                     | <sup>1)</sup> Time sharing, if necessary, between Portugal, Angola, Cape Verde Islands, Portuguese Guinea, S. Tomé and Príncipe, on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                                  | Netherlands Antilles <sup>1)</sup> | 1                     |   |
|                                  | Canada (East)                      | 12                    |   |
|                                  | Cape Verde <sup>1)</sup>           | 0.1                   |   |



| Fre-<br>quency<br>in kc/s | Country                            | Power<br>in kW | Remarks  |
|---------------------------|------------------------------------|----------------|--|
| (1)                       | (2)                                | (3)            | (4)  |
| 17335.5<br>(cont'd.)      | Chile                              | 0.1            | 1) Time sharing, if necessary, between Portugal, Angola, Cape Verde Islands, Portuguese Guinea, S. Tomé and Príncipe, on the one hand, and Netherlands, Surinam and Netherlands Antilles on the other. |
|                           | Portuguese Guinea <sup>1)</sup>    | 0.1            |  |
|                           | India (South)                      | 5              |  |
|                           | Macao                              | 0.15           |  |
|                           | Mozambique                         | 0.5            | 2) Second frequency for the U.S.S.R. (Far East).   |
|                           | Netherlands <sup>1)</sup>          | 10             |  |
|                           | Poland                             | 5              |  |
|                           | Portugal <sup>1)</sup>             | 5              |  |
|                           | S. Tomé and Príncipe <sup>1)</sup> | 0.5            |  |
|                           | Surinam <sup>1)</sup>              | 0.35           |  |
|                           | Portuguese Timor                   | 0.5            |  |
|                           | U.S.S.R. (Far East) <sup>2)</sup>  | 5              |  |
| 17342.5<br><br>(cont'd.)  | South Africa                       | 3              | 1) The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.                                    |
|                           | Germany                            | 6              |  |
|                           | Denmark <sup>1)</sup>              | 5              |  |
|                           | United States (West)               | 20             | 2) Second frequency for France.  |
|                           | France <sup>2)</sup>               | 20             |  |
|                           | Italy <sup>3)</sup>                | 10             | 3) Second frequency for Italy.   |
|                           | Norway <sup>1)</sup>               | 5              |  |

| Fre-<br>quency<br>in kc/s       | Country                                   | Power<br>in kW | Remarks   |
|---------------------------------|---|----------------|---|
| (1)                             | (2)                                       | (3)            | (4)   |
| <b>17342.5</b><br>(cont'd.)     | Pakistan                                  | 1              | <sup>4)</sup> Second frequency for the Netherlands.               |
|                                 | Netherlands <sup>4)</sup>                 | 10             | <sup>5)</sup> Second frequency for the U.S.S.R. (Europe).         |
|                                 | Sweden <sup>1)</sup>                      | 5              |   |
|                                 | U.S.S.R. (Europe) <sup>5)</sup>           | 2              |   |
| <b>17349.5</b>                  | Belgium <sup>1)</sup>                     | 3              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary. |
|                                 | China (East)                              | 15             |   |
|                                 | Greece                                    | 3.5            | <sup>2)</sup> Second frequency for the United Kingdom.            |
|                                 | Israel                                    | 3.5            |   |
|                                 | United Kingdom <sup>2)</sup>              | 15             |   |
|                                 | Turkey                                    | 3.5            |   |
|                                 | Venezuela                                 | 2.5            |   |
|                                 | Yugoslavia                                | 5              |   |
| <b>17356.5</b><br><br>(cont'd.) | Germany <sup>1)</sup>                     | 6              | <sup>1)</sup> Second frequency for Germany.                       |
|                                 | Canaries                                  | 5              | <sup>2)</sup> Second frequency for the United States (East).      |
|                                 | Spain                                     | 5              |   |
|                                 | United States (East) <sup>2)</sup>        | 20             |   |
|                                 | Indonesia                                 | 3              |   |
|                                 | United Arab Republic<br>(Egyptian Region) | 3              |   |
|                                 |   |                |   |

| Fre-<br>quency<br>in kc/s | Country                                | Power<br>in kW | Remarks  |
|---------------------------|--|----------------|--|
| (1)                       | (2)                                    | (3)            | (4)  |
| 17356.5<br>(cont'd.)      | U.S.S.R. (Northern Asia) <sup>3)</sup> | 15             | <sup>3)</sup> East of meridian 60°E.                             |
|                           | U.S.S.R. (North West) <sup>4)</sup>    | 5              | <sup>4)</sup> Second frequency for the<br>U.S.S.R. (North West), |
|                           | Uruguay                                | 3              |  |

| Fre-<br>quency<br>in kc/s. | Country               | Power<br>in kW | Remarks   |
|----------------------------|-----------------------|----------------|---|
| (1)                        | (2)                   | (3)            | (4)   |
| 22653·5                    | Chile                 | 0·2            |   |
|                            | Ukraine               | 15             |   |
|                            | U.S.S.R. (North West) | 15             |   |
|                            | Viet-Nam              | 2              |   |
| 22660·5                    | Pakistan              | 1              |   |
|                            | United Kingdom        | 20             |   |
|                            | U.S.S.R. (Far East)   | 15             |   |
| 22667·5                    | Australia (East)      | 1              | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement.<br><sup>2)</sup> Second frequency for Japan. |
|                            | Denmark <sup>1)</sup> | 5              |   |
|                            | Finland               | 3              |   |
|                            | Japan <sup>2)</sup>   | 0·2            |   |
|                            | Norway <sup>1)</sup>  | 5              |   |
|                            | Sweden <sup>1)</sup>  | 5              |   |
|                            | Venezuela             | 2·5            |   |
| 22674·5                    | France                | 10             |   |
|                            | Philippines           | 1              |   |

| Fre-<br>quency<br>in kc/s<br><br>(1) | Country<br><br>(2)                  | Power<br>in kW<br><br>(3) | Remarks<br><br>(4)  |
|--------------------------------------|-------------------------------------|---------------------------|---|
| 22681·5                              | China (Central)                     | 3                         | <sup>1)</sup> Second frequency for the<br>U.S.S.R. (North West).  |
|                                      | United States (East)                | 20                        |   |
|                                      | U.S.S.R. (Europe)                   | 10                        |   |
|                                      | U.S.S.R. (North West) <sup>1)</sup> | 5                         |   |
| 22688·5                              | South Africa                        | 3                         | <sup>1)</sup> Second frequency for Poland.  |
|                                      | Italy                               | 10                        |   |
|                                      | Japan                               | 2·5                       |   |
|                                      | Poland <sup>1)</sup>                | 2·5                       |   |
| 22695·5                              | United States (West)                | 20                        |   |
|                                      | Netherlands                         | 10                        |   |
|                                      | Portugal                            | 5                         |   |
| 22702·5<br><br>(cont'd.)             | Germany                             | 6                         | <sup>1)</sup> The stations in Denmark, Nor-<br>way and Sweden are working in<br>accordance with a special mutual<br>time sharing arrangement. Se-<br>cond frequency for these three<br>countries. |
|                                      | Argentina (North)                   | 10                        |   |
|                                      | Denmark <sup>1)</sup>               | 5                         |   |

| Fre-<br>quency<br>in kc/s   | Country                            | Power<br>in kW | Remarks   |
|-----------------------------|------------------------------------|----------------|---|
| (1)                         | (2)                                | (3)            | (4)   |
| <b>22702.5</b><br>(cont'd.) | France <sup>2)</sup>               | 10             | <sup>1)</sup> The stations in Denmark, Norway and Sweden are working in accordance with a special mutual time sharing arrangement. Second frequency for these three countries.<br><br><sup>2)</sup> Second frequency for France.<br><br><sup>3)</sup> Second frequency for Italy. |
|                             | India (South) <sup>3)</sup>        | 5              |   |
|                             | Italy <sup>3)</sup>                | 10             |   |
|                             | Norway <sup>1)</sup>               | 5              |   |
|                             | Sweden <sup>1)</sup>               | 5              |   |
| <b>22709.5</b>              | Belgium <sup>1)</sup>              | 3              | <sup>1)</sup> Time sharing with the United Kingdom, if necessary.<br><br><sup>2)</sup> Second frequency for the United Kingdom.   |
|                             | China (North)                      | 10             |   |
|                             | Poland                             | 5              |   |
|                             | United Kingdom <sup>2)</sup>       | 15             |   |
| <b>22716.5</b>              | Germany <sup>1)</sup>              | 6              | <sup>1)</sup> Second frequency for Germany.<br><br><sup>2)</sup> Second frequency for the United States (East).   |
|                             | Canaries                           | 5              |   |
|                             | Spain                              | 5              |   |
|                             | United States (East) <sup>2)</sup> | 20             |   |
|                             | India (North)                      | 10             |   |

## Section II

Frequencies for which the date of 4 December, 1951, shall be inserted in Column 2b of the Master International Frequency Register.

| Fre-<br>quency<br>in kc/s | Country       | Power<br>in kW | Remarks |
|---------------------------|---------------|----------------|---------|
| (1)                       | (2)           | (3)            | (4)     |
| 4377·4                    | Argentina     | 0·5            |         |
| 4383·8                    | Chile         | 0·2            |         |
| 4403                      | Argentina     | 0·5            |         |
|                           | Belgian Congo | 0·25           |         |
| 4415·8                    | Argentina     | 0·5            |         |
| 4422·2                    | Brazil        | 3              |         |
| 4428·6                    | Yugoslavia    | 2              |         |
| 8760·8                    | Argentina     | 0·5            |         |
| 8767·2                    | Argentina     | 0·5            |         |
| 8773·6                    | Chile         | 0·2            |         |
| 8780                      | Chile         | 0·1            |         |
|                           | Belgian Congo | 0·25           |         |

| Fre-<br>quency<br>in kc/s | Country                                  | Power<br>in kW                | Remarks   |
|---------------------------|--|-------------------------------|---|
| (1)                       | (2)                                      | (3)                           | (4)   |
| 8786·4                    | Netherlands Antilles<br>Chile<br>Surinam | 1 (HN)<br>0·1<br>0·35<br>(HN) |   |
| 8792·8                    | Chile                                    | 0·1                           |   |
| 8799·2                    | Argentina<br>Brazil <sup>1)</sup>        | 0·5<br>3                      | <sup>1)</sup> Notification secondary to that<br>of Argentina on this frequency. |
| 13140·5                   | Chile                                    | 0·1                           |   |
| 13154·5                   | Chile                                    | 0·2                           |   |
| 13168·5                   | Chile                                    | 0·2                           |   |
| 13175·5                   | Argentina                                | 0·5                           |   |
| 13189·5                   | Brazil                                   | 3                             |   |
| 17321·5                   | Iran                                     | 1                             |   |
| 22674·5                   | Israel                                   | 3·5                           |   |
| 22681·5                   | Iran                                     | 1                             |   |



## APPENDIX A

**Studies and Prediction of Radio Propagation and Radio Noise**

Recognizing the vital dependence of maximum utilization of radio frequencies and efficient planning of radiocommunication services upon the fullest use of radio propagation and radio noise data, the Members and Associate Members of the Union shall continue to promote the establishment and operation of world-wide systems of observation stations to obtain data on radio noise and on ionospheric, tropospheric and other phenomena affecting radio propagation. Each Member or Associate Member shall provide, by the best means possible, for the study, co-ordination and rapid dissemination of such data and of their predictions. In formulating and carrying out their programme of work in this field, Members and Associate Members shall take note of the relevant C.C.I.R. Recommendations, Reports, Questions and Study Programmes, particularly regarding the conclusions so far reached, the planning of future studies and the recommended forms of presentation contained in these documents.

CONFERENCE  
ADMINISTRATIVE RADIO  
GENEVA, 1959

Document No. 882-E  
16 December, 1959

## SERIES F

## PLENARY MEETING

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

## SUMMARY

| Blue Document No. | Series No. | Pages     | Former Article | New Article | Pages | Remarks                |
|-------------------|------------|-----------|----------------|-------------|-------|------------------------|
| 573               | 2          | 2-11      | 16             | 12          | F—01  | Chap. IV               |
| 573               | 2          | 2-11      | 17             | 12          | F—01  |                        |
| 747               | 13         | 13-01     | 6              | 12          | F—02  |                        |
| 843               | 21         | 21-01     | 18             | 13          | F—02  |                        |
| 617               | 4          | 4-01      | 13             | 14          | F—05  |                        |
| 764               | 4 bis      | 4 bis-01  | 14             | 15          | F—07  |                        |
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| Resolutions       |            |           |                |             |       |                        |
| 803               | 18         | 18-34     |                |             | F—10  |                        |
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| 803               | 18         | 18-23     |                |             | F—30  |                        |
| 791               | 15         | 15-29     |                |             | F—36  |                        |
| 803               | 18         | 18-33     |                |             | F—36  |                        |
| 573               | 2          | 2-32      |                |             | F—37  |                        |
| 843               | 21         | 21-19     |                |             | F—38  |                        |
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| 573               | 2          | 2-33      |                |             | F—40  |                        |
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| Recommendations   |            |           |                |             |       |                        |
| 791               | 15         | 15-23     |                |             | F—50  | 1st series.<br>1 to 17 |
| 822               | 20         | 20-08     |                |             | F—52  |                        |
| 791               | 15         | 15-28     |                |             | F—52  |                        |
| 856               | 22 bis     | 22 bis-01 |                |             | F—53  |                        |
| 791               | 15         | 15-20     |                |             | F—54  |                        |
| 791               | 15         | 15-26     |                |             | F—56  |                        |
| 747               | 13         | 13-20     |                |             | F—57  |                        |
| 747               | 13         | 13-22     |                |             | F—59  |                        |
| 747               | 13         | 13-25     |                |             | F—59  |                        |
| 747               | 13         | 13-26     |                |             | F—60  |                        |
| 747               | 13         | 13-29     |                |             | F—61  |                        |
| 803               | 18         | 18-20     |                |             | F—63  |                        |
| 791               | 15         | 15-22     |                |             | F—64  |                        |
| 617               | 4          | 4-32      |                |             | F—65  |                        |
| 791               | 15         | 15-25     |                |             | F—66  |                        |
| 747               | 13         | 13-16     |                |             | F—67  |                        |
| 822               | 20         | 20-20     |                |             | F—71  |                        |



| Former reference   | Source                              | New reference   |
|--|-------------------------------------|---|
| <div> Chap.: VI-III<br/> Art. : 16-17-6<br/> Nos. : 395-400 and 232-233 </div> | Committee: 6<br>Doc. No. : 382 Rev. | <div> Chap.: IV<br/> Art. : 12<br/> Nos. : 12-01—12-11 </div> |

## CHAPTER IV

### Measures against interference

#### ARTICLE 12

MOD

#### Technical Characteristics of Equipment and Emissions

- 395                    **12-01**§ 1. (1) The choice and performance of equipment to be used in a station and any emissions therefrom shall satisfy the provisions of these Regulations.
- 396                    **12-02**        (2) Also, as far as is compatible with practical considerations, the choice of transmitting, receiving and measuring equipment shall be based on the most recent advances in the technique as indicated, inter alia, in the C.C.I.R. Recommendations.
- 396a                   **12-03**§ 2.        Transmitting and receiving equipment intended to be used in a given part of the frequency spectrum should be designed to take into account the technical characteristics of equipment likely to be employed in neighbouring parts of the spectrum.
- 396b    MOD           **12-04**§ 3.        To the maximum extent possible, amplitude modulation systems should use single-sideband emissions having characteristics in accordance with the relevant C.C.I.R. Recommendations.
- 397                    **12-05**§ 4. (1) Transmitting stations shall conform to the frequency tolerances specified in Appendix 3.
- 397a                   **12-06**        (2) Transmitting stations shall conform to the tolerances specified for spurious emissions in Appendix 4.
- 397b                   **12-07**        (3) Moreover, every effort should be made to keep frequency tolerances and levels of spurious emissions at the lowest values which the state of the technique and the nature of the service permit.

| Former reference                            | Source   | New reference                                 |
|---|--|---|
| Chap.: VI<br>Art. : 18<br>Nos. : 401 to 411 | Committee: 5<br>Doc. Nos.: 680 Rev.<br>and 429 | Chap.: IV<br>Art.: 13<br>Nos.: 13-01 to 13-15 |

- 398      **12-08§ 5.**      The bandwidths of emissions also shall be kept at the lowest values which the state of the technique and the nature of the service permit. Appendix 5 is provided as a guide for the determination of the necessary bandwidth.
- 399      **12-09§ 6.**      To ensure compliance with these Regulations administrations shall arrange for frequent checks to be made of the emissions of stations under their jurisdiction, the technique of measurements being in accordance with the most recent Recommendations of the C.C.I.R.
- 400      **12-10§ 7.**      Administrations shall co-operate in the detection and elimination of harmful interference, employing where appropriate the facilities described in Article 13 and the procedures detailed in Article 15.
- 232      **12-11§ 8.**      The use of class B emissions is forbidden in all stations, except that such emissions by existing stations may be allowed, for distress calls and distress traffic only, until 1 January 1966.

## ARTICLE 13

### International Monitoring

- 402      **13-01§ 1.**      Administrations agree to continue the development of monitoring facilities to assist in the implementation of these Regulations and to co-operate, to the extent practicable, in the continued development of an international monitoring system.
- 401      **13-02§ 2.**      Monitoring stations participating in the international monitoring system may be operated by an administration or by a public or private enterprise recognized by its administration or by a common monitoring service established by two or more countries or by an international organization.
- 403      MOD      **13-03§ 3.**      Administrations will, as far as they consider practicable, conduct such monitoring of both a general and a specific nature as may be required of them by the International Frequency Registra-

tion Board or by other administrations. In requesting monitoring observations, the Board and administrations should take into account the monitoring facilities set forth in the List of International Monitoring Stations (see Article 20), and should clearly specify both the purpose for which the observations are requested and the parameters of the requested monitoring work (including appropriate schedules). The results of such monitoring forwarded to other administrations may also be sent to the Board, if appropriate.

404

**13-04**§ 4. Each administration or common monitoring service established by two or more countries, or international organization participating in the international monitoring system, shall designate a centralizing office to which all requests for monitoring information shall be addressed and through which monitoring information will be forwarded to the Board or to centralizing offices of other administrations.

404a

**13-05**§ 5. Administrations agree that monitoring requests from international organizations not participating in the international monitoring system should be co-ordinated by the Board and, if appropriate, forwarded by it to administrations.

405

**13-06**§ 6. However, these provisions shall not affect private monitoring arrangements made for special purposes by administrations, international organizations, or public or private enterprises.

406

**13-07**§ 7. The technical standards recommended by the C.C.I.R. to be observed by monitoring stations shall be recognized by the Board as the optimum practicable technical standards for monitoring stations participating in the international monitoring system. However, to meet some needs for monitoring data, stations observing lower technical standards may participate in the international monitoring system at the discretion of their administrations.

- 407 **13-08§ 8.** Administrations or international organizations, having determined whether their monitoring stations meet adequate technical standards, shall notify to the Secretary General pertinent information of the centralizing office and of the stations which may participate in the international monitoring system, as prescribed in Article 20 and Appendix 9.
- 407a **13-09§ 9.** (1) Results of measurements forwarded to the Board or other administrations shall indicate the estimated accuracy obtained at the time the measurements were made.
- 409 **13-10** (2) Where the results supplied by any monitoring station appear to be doubtful or insufficient for its purposes the Board shall advise the administration or international organization concerned giving the appropriate details.
- 409a **13-11§ 10.** When rapid action is required communications between the Board and centralizing offices should be transmitted by the most expeditious means available.
- 409b **13-12§ 11.** To ensure that published monitoring data are current and world-wide in nature, administrations having jurisdiction over monitoring stations listed in the List of International Monitoring Stations (see Article 20) shall make every effort, as practicable, to arrange for monitoring observations to be made by such stations and submitted to the Board as soon as possible after the date of observation.
- 409c **13-13§ 12.** Centralizing offices may request the help of other centralizing offices in order to implement the provisions of this Article and of Article 15.
- 410 **13-14§ 13.** The Board shall record the results supplied by the monitoring stations participating in the international monitoring system.
- 411 **13-15§ 14.** The Board shall prepare periodically, for publication by the Secretary General, summaries of the useful monitoring data received by it including a list of the stations contributing the data.

| Former reference                        | Source                        | New reference                                |
|---|-------------------------------|--|
| Chap.: V<br>Art. : 13<br>Nos. : 372-385 | Committee: 6<br>Doc. No.: 260 | Chap.: IV<br>Art. : 14<br>Nos. : 14-01—14-11 |

## ARTICLE 14

## Interference and Tests

## Section I. General Interference

372

- 14-01§ 1.** All stations are forbidden to carry out :
- unnecessary transmissions ;
  - the transmission of superfluous signals and correspondence ;
  - the transmission of signals without identification (see Article 19).<sup>1</sup>

373

- 14-02§ 2.** All stations shall radiate only as much power as is necessary to ensure a satisfactory service.

374

- 14-03§ 3.** In order to avoid interference :
- locations of transmitting stations and, where the nature of the service permits, locations of receiving stations shall be selected with particular care ;
  - radiation in and reception from unnecessary directions shall be minimized, where the nature of the service permits, by taking the maximum practical advantage of the properties of directional antennae ;
  - the choice and use of transmitters and receivers shall be in accordance with the provisions of Article 12.

375

- 14-04§ 4.** The class of emission to be employed by a station should be such as to achieve minimum interference and to assure efficient spectrum utilization. In selecting the class of emission to meet these objectives every effort shall be made to minimize the bandwidth

372.1

**14-01.1** <sup>1</sup> In the present state of the technique, it is recognized nevertheless that the transmission of identifying signals for certain radio systems (e.g. radio-determination and radio relay systems) is not always possible.

occupied, taking into account the practical and technical considerations of the service to be performed.

376

**14-05**§ 5. If, while complying with the provisions of Article 12, a station causes harmful interference through its spurious emissions, special measures shall be taken to eliminate such interference.

#### **Section II. Industrial Interference**

377

**14-06**§ 6. Administrations shall take all practicable and necessary steps to ensure that the operation of electrical apparatus or installations of any kind, including power networks, does not cause harmful interference to a radio service operating in accordance with the provisions of these Regulations.

378/379 SUP

#### **Section III. Special Cases of Interference**

379a ADD

**14-07**§ 7. Administrations authorising the use of frequencies below 10 kc/s for special national purposes shall ensure that no harmful interference is caused thereby to the services to which the bands above 10 kc/s are allocated.

#### **Section IV. Tests**

380

**14-08**§ 8. (1) Before authorising tests and experiments in any station each administration, in order to avoid harmful interference, shall prescribe the taking of all possible precautions such as the choice of frequency and of time and the reduction or, in all cases where this is possible, the suppression of radiation. Any harmful interference resulting from tests and experiments shall be eliminated with the least possible delay.

380a ADD

**14-09** (2) A station making emissions for tests, adjustments, or experiments, shall transmit at slow speed and at frequent intervals, its identification in accordance with the provisions of Article 19.



| Former reference                          | Source  | New reference                                |
|---|---|--|
| Chap.: V<br>Art. : 14<br>Nos. : 385a-391b | Committees: 5 and 6<br>Doc. Nos.: 679 and 319 | Chap.: IV<br>Art. : 15<br>Nos. : 15-01—15-15 |

- 381 **14-10** (3) Signals for testing and adjustment shall be chosen in such a manner that no confusion will arise with a signal, abbreviation, etc., having a special meaning defined by these Regulations or by the International Code of Signals.
- 382 **14-11** (4) For testing stations in the mobile service see Nos. 29-76 and 29-77.

## ARTICLE 15 \*

**Procedure in a Case of Harmful Interference**

- 385a **15-01**§ 1. It is essential that Members and Associate Members exercise the utmost goodwill and mutual assistance in the application of the provisions of Article 47 of the Convention and of this Article to the settlement of problems of harmful interference.
- 385b **15-02**§ 2. In the settlement of these problems, due consideration shall be given to all factors involved, including the relevant technical and operating factors such as : adjustment of frequencies, characteristics of transmitting and receiving antennae, time sharing, change of channels within multichannel transmissions.
- 385c **15-03**§ 3. When a case of such interference is reported by a receiving station, it shall give to the transmitting station interfered with all possible information which will assist in determining the source and characteristics of the interference.
- 385d **15-04**§ 4. Where practicable, and subject to agreement by administrations concerned, such interference may be dealt with by direct co-ordination between their operating organizations.
- 385e **15-05**§ 5. If a case of interference so justifies, the administration having jurisdiction over the receiving station experiencing the interference shall notify the administration having jurisdiction over the transmitting station being interfered with, giving all possible information.

\* For the purposes of this Article, the term "administration" includes the centralizing office, where appropriate.

- 386           **15-06**§ 6.     If further observations and measurements are necessary to determine the source and characteristics of and to establish the responsibility for the interference, the administration having jurisdiction over the transmitting station interfered with may seek the co-operation of other administrations, particularly of the administration having jurisdiction over the receiving station experiencing the interference, or of other organizations.
- 387           **15-07**§ 7.     Having determined the source and characteristics of the interference, the administration having jurisdiction over the transmitting station interfered with shall inform the administration having jurisdiction over the interfering station, giving all useful information in order that this administration may take such steps as may be necessary to eliminate the interference.
- 388           **15-08**§ 8.     When a safety service suffers interference, or in other cases with the prior approval of the administration having jurisdiction over the transmitting station interfered with, the administration having jurisdiction over the receiving station experiencing the interference may also approach directly the administration having jurisdiction over the interfering station.
- 388a           **15-09**§ 9.     In cases of interference where rapid action is required, communications between administrations shall be transmitted by the quickest means available.
- 388b           **15-10**§ 10.    Full particulars relating to interference shall, whenever possible, be given in the form indicated in Appendix 8.
- 389           **15-11**§ 11.    If the interference persists in spite of actions taken in accordance with the procedures outlined above, the administration having jurisdiction over the transmitting station interfered with may address to the administration having jurisdiction over the interfering station a report of irregularity or infraction in accordance with the provisions of Article 16.
- 390           **15-12**§ 12.    If there is a specialized international organization for a particular service, reports of irregularities and of infractions relating to interference caused by the stations in this service may be addressed to such organization at the same time as to the administration concerned.

| Former reference                      | Source  | New reference                              |
|---------------------------------------|---|--|
| Chap.: V<br>Art.: 15<br>Nos.: 392-394 | Committee: 7<br>Doc. No.: 582   | Chap.: IV<br>Art.: 16<br>Nos.: 16-01—16-03 |
| 391                                   | <b>15-13</b> § 13. (1) If it is considered necessary, and particularly if the steps taken in accordance with the procedures described above have not produced satisfactory results, the administration concerned shall forward details of the case to the International Frequency Registration Board for its information.   |  |
| 391a                                  | <b>15-14</b> (2) In such a case, the administration concerned may also request the Board to act in accordance with the provisions of Section VII of Article 9 ; but it shall then supply the Board with the full facts of the case, including all the technical and operational details and copies of the correspondence.   |  |
| 391b                                  | <b>15-15</b> (3) However, the Board shall not be required to deal with problems of harmful interference between stations operating in the same band and in conformity with the Table of Frequency Allocations, when at least one of these stations is in a class the frequency of which is not required to be notified according to Nos. 9-01 or 9-02 of the Regulations ; or between stations in the band 535-1 605 kc/s in Region 2. Such cases of interference shall be resolved by appropriate bilateral or multilateral arrangements in which administrations should particularly observe the provisions of No. 15-01. |  |

## ARTICLE 16

## Reports of Infringements

|     |   |
|-----|---|
| 392 | <b>16-01</b> § 1. Infringements of the Convention or Radio Regulations shall be reported to their respective administrations by the control organization, stations or inspectors detecting them. For this purpose they shall use forms similar to the specimen given in Appendix 7. |
| 393 | <b>16-02</b> § 2. Representations relating to any serious infringement committed by a station shall be made to the administration of the country having jurisdiction over the station, by the administrations which detect it.  |

- 16-03§ 3.** If an administration has information of an infringement of the Convention or Radio Regulations, committed by a station which it has authorised, it shall ascertain the facts, fix the responsibility and take the necessary action.

#### RESOLUTION No. 1

##### **Relating to the Establishment of the Master International Frequency Register**

The Administrative Radio Conference, Geneva, 1959,

*decides*

#### **1. General**

1.1 The Master International Frequency Register shall be compiled and maintained by the International Frequency Registration Board, preferably by means of a mechanical system.

1.2 The effective date of the Master International Frequency Register shall be the first of May, 1961.

#### **2. Initial entries**

2.1 The Master International Frequency Register shall include :

- a)* the information contained in the Master Radio Frequency Record <sup>1</sup> as on the thirty of April, 1961, subject to the provisions of paragraph 3 below ;
- b)* the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed in the Radio Regulations, Geneva, 1959, for common use by certain services, including frequencies specified in Appendices 15, 17 and 18 of these Regulations.

<sup>1</sup> Master Radio Frequency Record: The interim master register of frequency assignments established and maintained pursuant to the provisions of the Agreement adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951 (E.A.R.C. Agreement).

- c) the allotments in the Plans included in Appendix 25 and 26 to the Radio Regulations, Geneva, 1959.

2.2 An indication of the purpose of the frequencies and allotments under paragraphs 2.1 b) and 2.1 c) shall be included in the entries concerned, which shall not bear any date in Column 2 of the Master International Frequency Register.

### 3. *Methods of transfer*

3.1 Those entries in the Master Radio Frequency Record which will not be complete according to Nos. 269 or 270 of the E.A.R.C. Agreement, Geneva, 1951, or according to Annex 6 to this Resolution, as appropriate, on the date specified above shall not be transferred to the Master International Frequency Register. However, except for the bands above 28 000 kc/s, the Board shall send before the thirtieth of September, 1960, to each administration concerned, a list of incomplete frequency assignments in order that the missing data may be notified as soon as possible, and by the thirty of April, 1961, at the latest.

3.2 In those cases provided for in Annex 1 where an entry shall be transferred after an examination or re-examination, and where the finding of the Board is favourable, the Board shall amend the entry in order that this entry will appear in the Master International Frequency Register in the same way as if the Board had made a favourable finding at the time of notification. If, on the contrary, the finding is unfavourable, the assignment shall be entered in the Master International Frequency Register as if the Board had in the first place made an unfavourable finding at the time of notification.

3.3 Frequency assignments not in conformity with No. 9-16 of the Radio Regulations, Geneva, 1959, shall be indicated, where

appropriate, by an appropriate symbol in the Remarks Column. Moreover, any Remark in the Master Radio Frequency Record which is conscient with the provisions of Article 9 of the Radio Regulations, Geneva, 1959, shall be entered in the Master International Frequency Register.

4. *Additional basic characteristics*

4.1 Inasmuch as the Radio Regulations, Geneva, 1959, stipulate certain basic characteristics heretofore not required, administrations should furnish to the Board these additional characteristics in respect of their initial entries in the Master International Frequency Register as and when possible.

4.2 However, these additional characteristics shall be supplied when an initial entry is involved in any review conducted by the Board under Article 9 of the Radio Regulations, Geneva, 1959.

**ANNEX 1 — Method of Transfer from the Master Radio Frequency Record**  
(see paragraph 3 of this resolution)

| Frequency band<br>kc/s | Regions or<br>Services | Dates recording in Master<br>Radio Frequency<br>Record * |    |      | Transfer to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording in new<br>Master International<br>Frequency Register * |     |      |    | Remarks |
|------------------------|------------------------|--|----|------|-----------------------------|---------------------------------------|--------------------------------------|--|-----|------|----|---------|
|                        |                        | Column   |    |      |                             |                                       |                                      | Column   |     |      |    |         |
|                        |                        | 2a   | 2b | 2c   |                             |                                       |                                      | 2a   | 2b  | 2c   | 2d |         |
| 14- 2 850              | Regions 1<br>and 3     | Δ  |    | Δ    | Yes                         | No                                    |                                      | Δ  |     | Δ    |    |         |
|                        |                        |  | Δ  | Δ    | Yes                         | Yes                                   | Art. 9                               | (1)  | (1) | Δ    |    | (2)     |
|                        |                        | 03   |    |      | No                          |                                       |                                      |  |     |      |    |         |
|                        |                        | 04   |    |      | No                          |                                       |                                      |  |     |      |    |         |
|                        |                        |  |    | Δ**  | Yes                         | No                                    |                                      |  |     | Δ**  |    |         |
| 14- 2 000              | Region 2               | Δ  |    | Δ    | Yes                         | No                                    |                                      | Δ  |     | Δ    |    |         |
|                        |                        |  | Δ  | Δ    | Yes                         | Yes                                   | Art. 9                               | (1)  | (1) | Δ    |    | (2)     |
|                        |                        | 03   |    |      | No                          |                                       |                                      |  |     |      |    |         |
|                        |                        | 04   |    |      | No                          |                                       |                                      |  |     |      |    |         |
|                        |                        |  |    | Δ**  | Yes                         | No                                    |                                      |  |     | Δ**  |    |         |
|                        |                        |  |    | Δ*** | Yes                         | No                                    |                                      |  |     | Δ*** |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.

\*\* Ship-to-ship frequencies.

\*\*\* For the band 535-1 605 kc/s, in Region 2, see No. 9-91 of the Radio Regulations, Geneva 1959.



| Frequency band<br>kc/s                       | Regions or<br>Services | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording<br>in new Master International<br>Frequency Register * |     |    |    | Remarks |
|--|------------------------|---|----|----|--------------------------------|---------------------------------------|--------------------------------------|--|-----|----|----|---------|
|  |                        | Column  |    |    |                                |                                       |                                      | Column   |     |    |    |         |
|  |                        | 2a  | 2b | 2c |                                |                                       |                                      | 2a   | 2b  | 2c | 2d |         |
| 3 155- 3 400<br>3 500- 3 900                 | Region 1               |   | 03 | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    | (2)     |
|  |                        |   | 03 |    | No                             |                                       |                                      |  |     |    |    |         |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 9                               | (1)  | (1) | Δ  |    |         |
| 2 000- 2 850<br>3 155- 3 400<br>3 500- 4 000 | Region 2               | 03  |    | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    | (2)     |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 9                               | (1)  | (1) | Δ  |    |         |
|  |                        | 03  |    |    | No                             |                                       |                                      |  |     |    |    |         |
|  |                        |   | 04 |    | No                             |                                       |                                      |  |     |    |    |         |
| 3 155- 3 400<br>3 500- 3 950                 | Region 3               | 03  |    | Δ  | Yes                            | No                                    |                                      | 03   |     | Δ  |    | (2)     |
|  |                        |   | Δ  | Δ  | Yes                            | Yes                                   | Art. 9                               | (1)  | (1) | Δ  |    |         |
|  |                        | 03  |    |    | No                             |                                       |                                      |  |     |    |    |         |
|  |                        |   | 04 |    | No                             |                                       |                                      |  |     |    |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.



| Frequency band<br>kc/s                                  | Regions or<br>Services                 | Dates recording<br>in Master<br>Radio Frequency<br>Record *      |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording<br>in new Master International<br>Frequency Register * |      |     |      | Remarks |     |
|---|--|--|----|----|--------------------------------|---------------------------------------|--------------------------------------|--|------|-----|------|---------|-----|
|   |  | Column   |    |    |                                |                                       |                                      | Column   |      |     |      |         |     |
|   |  | 2a   | 2b | 2c |                                |                                       |                                      | 2a   | 2b   | 2c  | 2d   |         |     |
| 2 850-3 155<br>3 400-3 500<br>3 900-3 950<br>(Region 1) | Aeronautical<br>mobile<br>(R) and (OR) |  |    |    |                                |                                       |                                      |  |      |     |      |         |     |
| 4 650-4 750<br>5 450-5 480<br>(Region 2)                |  | 03   |    | Δ  | Yes                            | No                                    |                                      | 03   |      | Δ   |      |         |     |
| 5 480-5 730<br>6 525-6 765<br>8 815-9 040               |  |  | 03 | Δ  | Yes                            | No                                    |                                      |  | 03   |     | Δ    |         |     |
| 10 005-10 100<br>11 175-11 400                          |  |  | Δ  | Δ  | Yes                            | Yes                                   | (3)                                  |  | Δ(3) |     | Δ(4) |         |     |
| 13 200-13 360<br>15 010-15 100<br>17 900-18 030         |  |  |    |    |                                |                                       |                                      |  |      |     |      |         |     |
| 4 238-4 368<br>6 357-6 525<br>8 476-8 745               |  | Maritime<br>mobile<br>(Radio-<br>telegraph<br>coast<br>stations) | 03 |    | Δ                              | Yes                                   | No                                   |  | 03   |     | Δ    |         |     |
| 12 714-13 130<br>16 952-17 290<br>22 400-22 650         |  |  |    | Δ  | Δ                              | Yes                                   | Yes                                  | E.A.R.C.<br>Art. 33<br>234-235 (ii)                                    | (1)  | (1) |      | Δ (4)   | (2) |
|   |  |  | 03 |    |                                | No                                    |                                      |  |      |     |      |         |     |
|   |  |  | 04 |    | No                             |                                       |                                      |  |      |     |      |         |     |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.

| Frequency band<br>kc/s   | Regions or<br>Services  | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer<br>examination | Nature of<br>examination<br>(if any) | Dates recording<br>in new Master International<br>Frequency Register * |       |       |    | Remarks |
|--|---|---|----|----|--------------------------------|--------------------------------------|--------------------------------------|--|-------|-------|----|---------|
|  |   | Column  |    |    |                                |                                      |                                      | Column   |       |       |    |         |
|  |   | 2a  | 2b | 2c |                                |                                      |                                      | 2a   | 2b    | 2c    | 2d |         |
| 4 368- 4 438<br>8 745- 8 815<br>13 130-13 200<br>17 290-17 360<br>22 650-22 720  | Maritime<br>mobile (Radio-<br>telephone<br>coast<br>stations) | 03  |    | Δ  | Yes                            | No                                   |                                      | 03   |       | Δ     |    | (2)     |
|  |   |   | 04 | Δ  | Yes                            | No                                   |                                      |  | 04    | Δ     |    |         |
|  |   |   | Δ  | Δ  | Yes                            | Yes                                  | (5)                                  |  | Δ     | Δ (4) |    |         |
|  |   |   |    | Δ  |                                |                                      |                                      |  |       |       |    |         |
| 4 063- 4 133<br>8 195- 8 265<br>12 330-12 400<br>16 460-16 530<br>22 000-22 070  | Maritime<br>mobile (Radio-<br>telephone<br>ship<br>stations)  |   | Δ  | Δ  | Yes                            | Yes                                  | (6)                                  | (1)  | (1)   | Δ     |    |         |
|  |   |   |    |    |                                |                                      |                                      |  |       |       |    |         |
|  |   |   |    |    |                                |                                      |                                      |  |       |       |    |         |
|  |   |   |    |    |                                |                                      |                                      |  |       |       |    |         |
| 5 950- 6 200<br>7 100- 7 300<br>(Regions 1 & 3)<br>9 500- 9 775<br>11 700-11 975<br>15 100-15 450<br>17 700-17 900<br>21 450-21 750<br>25 600-26 100 | Broadcasting  |   |    |    |                                |                                      |                                      |  |       |       |    |         |
|  |   |   |    |    | Yes                            | No                                   |                                      |  |       | Δ (7) |    |         |
|  |   |   | Δ  |    |                                |                                      |                                      |  | Δ (7) |       |    |         |
|  |   |   |    |    |                                |                                      |                                      |  |       |       |    |         |

\* The symbol "03" means 3.12.51 and the symbol "04" means 4.12.51.

| Frequency band<br>kc/s                | Regions or<br>Services  | Dates recording<br>in Master<br>Radio Frequency<br>Record * |    |    | Transfer<br>to new<br>Register | Method of<br>transfer:<br>examination | Nature of<br>examination<br>(if any) | Dates recording in new<br>Master International<br>Frequency Register * |       |       |       | Remarks |
|---------------------------------------|---|---|----|----|--------------------------------|---------------------------------------|--------------------------------------|--|-------|-------|-------|---------|
|                                       |   | Column  |    |    |                                |                                       |                                      | Column   |       |       |       |         |
|                                       |   | 2a  | 2b | 2c |                                |                                       |                                      | 2a   | 2b    | 2c    | 2d    |         |
| 3 950 (4 000<br>Region 2) -<br>27 500 | Various,<br>excluding<br>the bands<br>allocated<br>exclusively<br>to aero-<br>nautical<br>mobile,<br>maritime<br>mobile,<br>broadcasting<br>and amateur |   |    |    |                                |                                       |                                      |  |       |       |       |         |
|                                       |   |   |    | Δ  | Yes                            | No                                    |                                      |  |       | Δ (7) |       |         |
|                                       |   |   |    |    |                                |                                       |                                      |  | Δ (7) |       |       |         |
| 27 500-28 000                         | Various   |   |    | Δ  | Yes                            | Yes                                   | Art. 9                               |  |       | Δ     | Δ (8) |         |
| Above 28 000                          | Various   |   |    | Δ  | Yes (8)                        | No (8)                                |                                      |  |       | Δ     | Δ (8) |         |

## FOOTNOTES TO ANNEX 1

- (1) According to the result of the examination  
 (2) Application of Section V of Article 9 of the Radio Regulations, Geneva, 1959, from 1st May, 1961  
 (3) See Annex 2 to this Resolution  
 (4) In case of assignments which bear symbols ZZ or ZZZ, see paragraph 2.2.2 of Annex 5 to this Resolution

- (5) See Annex 3 to this Resolution  
 (6) See Annex 4 to this Resolution  
 (7) See Annex 5 to this Resolution  
 (8) See Annex 6 to this Resolution

## ANNEX 2

**Bands Allocated Exclusively to the Aeronautical Mobile Service  
Between 2 850 and 18 030 kc/s**

Frequency assignments entered in the Master Radio Frequency Record with a date in Column 2b which is after 3rd December, 1951, shall be examined by the Board following the relevant parts of the procedure described in Nos. 9-67 to 9-82 inclusive of the Radio Regulations, Geneva, 1959.; they shall be recorded in the Master International Frequency Register following the procedure described in Nos. 9-104 to 9-114 inclusive of those Radio Regulations.

## ANNEX 3

**Bands Allocated Exclusively to the Maritime Mobile Service  
Between 4 000 and 23 000 kc/s for Radiotelephone Coast Stations**

1. All assignments not in conformity with the Plan adopted by the E.A.R.C. (Annex 5 to the E.A.R.C. Agreement, Geneva, 1951), notified to the Board between 3rd December, 1951, and the 1st May, 1961, shall be submitted to a complete technical examination by the Board in accordance with Nos. 233, 234, 235(ii) and 236 of Section III of Article 33 of the E.A.R.C. Agreement, Geneva, 1951, with respect to the allotments appearing in Sections I and II of the Plan in Annex 5 to that Agreement (that is to say, with respect to the frequency assignments brought into use or liable to be brought into use in the future in accordance with the allotments in the Plan), as well as with respect to frequency assignments in conformity with Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947, which were previously recorded in the Master Radio Frequency Record on frequencies specified in Annex 7 to the E.A.R.C. Agreement, Geneva, 1951, either as a consequence of a favourable finding or after an unfavourable finding, the assignment having not, in this latter case, caused harmful interference. The same shall be done for the changes of basic characteristics of assignments in conformity with the Plan.

2. Upon the entry into force of the Radio Regulations, Geneva, 1959, assignments in conformity with the Allotment Plan adopted by the E.A.R.C. shall be considered as transferred to the channel frequencies of the Plan in Appendix 25 to the Radio Regulations, Geneva, 1959. All assignments not in conformity with the Plan adopted by the E.A.R.C., Geneva, 1951, which were notified to the Board between 3rd December, 1951, and 1st May, 1961, shall be considered as transferred to the channel frequencies of the Plan in Appendix 25 to the Radio Regulations, Geneva, 1959, if they had been notified on the central channel frequencies of the Plan adopted by the E.A.R.C., Geneva, 1951. If they have not been so notified, the administrations concerned shall notify to the Board as soon as possible before 1st May, 1961, the adjustments considered necessary in order that these assignments retain the same relative positions in relation to the channels in the Plan in Appendix 25 as they had in relation to the channels in the Plan adopted by the E.A.R.C., Geneva, 1951.

3. Frequency assignments transferred on 1st May, 1961, according to paragraph 2 above shall retain in Columns 2a or 2b the dates which appear in these columns on 30th April, 1961.

#### ANNEX 4

##### **Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 and 23 000 kc/s for Radiotelephone Ship Stations**

1. Assignments of frequencies for reception by radiotelephone coast stations, notified to the Board between 3rd December, 1951, and 1st May, 1961, shall be examined by the Board following the procedure described in Nos. 9-62 to 9-66 inclusive of the Radio Regulations, Geneva, 1959 ; they shall be entered in the Master International Frequency Register following the procedure described in Nos. 9-97 to 9-103 of those Regulations.

2. Upon the entry into force of the Radio Regulations, Geneva, 1959, assignments shall be considered as transferred to the frequencies in Appendix 17 to the Radio Regulations, Geneva, 1959, if they had been notified on frequencies specified in Annex 7 to the E.A.R.C. Agreement,

Geneva, 1951. If they have not been so notified, the administrations concerned shall notify to the Board as soon as possible before 1st May, 1961, the adjustments considered necessary in order that these assignments retain the same relative positions in relation to the channels in Appendix 17 to the Radio Regulations, Geneva, 1959, as they had in relation to the channel in Annex 7 to the Final Acts of the E.A.R.C. Agreement, Geneva, 1951.

3. Frequency assignments transferred on 1st May, 1961, according to paragraph 2 above shall retain in Columns 2a or 2b the dates which appear in those columns on 30th April, 1961.

#### ANNEX 5

##### **Bands Between 3 950 kc/s (4 000 kc/s in Region 2) and 27 500 kc/s other than those Allocated Exclusively to the Aeronautical Mobile Service, Maritime Mobile Service or Amateur Service**

1. *Transfer of frequency assignments notified pursuant to the provisions of No. 272 of the E.A.R.C. Agreement, Geneva, 1951*

1.1 A symbol shall be inserted in Column 2d.

1.2 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.

2. *Transfer of frequency assignments notified from 1st April, 1952, other than those referred to in paragraph 1*

2.1 In the case where the finding reached by the Board under Article 33 of the E.A.R.C. Agreement, Geneva, 1951, was favourable :

2.1.1 the date of receipt by the Board of the first notice shall be entered in Column 2d ;

2.1.2 the date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register ;

- 2.1.3 if appropriate, the date following symbol XX in Column 13 shall be inserted in the Remarks Column of the Master International Frequency Register, as well as any other relevant date entered in Column 13 of the Master Radio Frequency Record.
- 2.2 In the case where the finding reached by the Board under Article 33 of the E.A.R.C. Agreement, Geneva, 1951, was unfavourable, i.e. in the case where the assignment concerned bears symbol ZZ or ZZZ in Column 13 of the Master Radio Frequency Record :
  - 2.2.1 the date of receipt by the Board of the first notice (i.e. the date which follows immediately symbol ZZ or ZZZ) shall be entered in Column 2d ;
  - 2.2.2 the date to be entered in Column 2c of the Master International Frequency Register shall be, either the date of putting into use notified by the administration concerned, or the date of the tenth day prior to the date following symbol ZZ or ZZZ, whichever is the later ;
  - 2.2.3 the date of receipt by the Board of the resubmitted notice (i.e. in general the date of the tenth day following the date entered in Column 2c of the Master Radio Frequency Record) shall be entered in the Remarks Column of the Master International Frequency Register.

## ANNEX 6

### Frequency Bands Above 27 500 kc/s

#### 1. Bands between 27 500 and 28 000 kc/s

- 1.1 *Transfer of frequency assignments, the notification of which was received by the Board before 1st April, 1952*
  - 1.1.1 A symbol shall be inserted in Column 2d of the Master International Frequency Register.

- 1.1.2 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.
  - 1.1.3 With a view to the application of the provisions of paragraph 1.2 below, administrations, if so requested in specific cases, should supply the Board with those basic characteristics listed in Appendix 1 to the Radio Regulations, Geneva, 1959, which might be missing in the assignments concerned.
  - 1.2 *Transfer of frequency assignments, the notification of which was received by the Board between 1st April, 1952, and the date of entry into force of the Radio Regulations, Geneva, 1959.*
    - 1.2.1 These assignments shall be examined by the Board following the procedure described in Article 9 of the Radio Regulations, Geneva, 1959. Administrations, if so requested, in specific cases, should supply the Board with those basic characteristics listed in Appendix 1 to the Radio Regulations, Geneva, 1959, which might be missing in the assignments concerned.
    - 1.2.2 The date of receipt of the first notice by the Board shall be entered in Column 2d of the Master International Frequency Register.
    - 1.2.3 The date entered in Column 2c of the Master Radio Frequency Record shall be transferred to Column 2c of the Master International Frequency Register.
2. *Transfer of frequency assignments in the bands above 28 000 kc/s*
- 2.1 From the end of this Conference, administrations shall review the frequency assignments entered on their behalf in the Master Radio Frequency Record above 28 000 kc/s, with a view to reducing substantially the number of such assignments to be transferred to the Master International Frequency Register as initial entries. For this purpose, administrations should be guided



by the principles contained in No. 9-05 of the Radio Regulations, Geneva, 1959, and in Appendix 1 to those Regulations (Section D, Column 5a, paragraph 2d). Only those entries should be retained where they relate to stations which fulfil one or more of the conditions listed in No. 9-01 of the Radio Regulations, Geneva, 1959.

- 2.2 As a result of such review, administrations shall notify to the Board prior to 1st October, 1960, in the form described in Appendix 1 to the Radio Regulations, Geneva, 1959, all entries in the Master Radio Frequency Record which they desire to be transferred to the Master International Frequency Register. Assignments so notified shall not be included in the weekly circulars of the Board referred to in No. 9-13 of the Radio Regulations, Geneva, 1959.
- 2.3 When notifying, after the end of this Conference, new frequency assignments, i.e. assignments which will not be subject to review under paragraph 2.1 above, administrations shall prepare their notices in the form described in Appendix 1 to the Radio Regulations, Geneva, 1959, and shall apply, in appropriate cases, the principles contained in No. 9-05 of the Radio Regulations, Geneva, 1959, and in Appendix 1 (Section D, Column 5a, paragraph 2d) to those Regulations.
- 2.4 Notices submitted under either paragraphs 2.2 or 2.3 above should bear a suitable reference to the appropriate paragraph.
- 2.5 From 1st October, 1960, the Board shall transfer to the Master International Frequency Register, as initial entries, complete assignments in the Master Radio Frequency Record, as notified by administrations in conformity with paragraphs 2.2 or 2.3 above.
- 2.6 Frequency assignments, the notification of which was received by the Board before 1st April, 1952, shall bear a symbol in Column 2d of the Master International Frequency Register.

- 2.7 Assignments, the notification of which was received by the Board between 1st April, 1952, and the date of entry into force of the Radio Regulations, Geneva, 1959, shall bear in Column 2d of the Master International Frequency Register the date of receipt of the notice by the Board.
- 2.8 All transferred assignments shall bear in Column 2c of the Master International Frequency Register the date entered in Column 2c of the Master Radio Frequency Record. Where, under the principles in No. 9-05 of the Radio Regulations, Geneva, 1959, and in Appendix 1 (Section D, Column 5a, paragraph 2d) to those Regulations, a single assignment is notified under paragraph 2.2 above in replacement of several assignments entered in the Master Radio Frequency Record, the date to be entered in Column 2c of the Master International Frequency Register shall be the earliest date entered in Column 2c of the Master Radio Frequency Record for the assignments concerned.

#### RESOLUTION No. 2

**Relating to the Application, from 1st March, 1960, to 31st December, 1960, of the Procedure specified in Article 10 of the Radio Regulations, Geneva, 1959, for the Bands allocated exclusively to the Broadcasting Service between 5 950 and 26 100 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*resolves*

1. that the procedure specified in Article 10 of the Radio Regulations, Geneva, 1959, shall be applied from 1st March, 1960 ;
2. that for this purpose, the first schedules, to become effective on 4th September, 1960, for the September/October period 1960, should

be received from administrations by the International Frequency Registration Board by 1st March, 1960. The closure dates for the receipt of the subsequent schedules will be set by the Board under No. 10-02 of Article 10 ;

3. that the schedules referred to in paragraph 2 shall be prepared and submitted to the Board in conformity with the provisions of Section I of Article 10 ;

4. that the procedure for notifying and recording frequency assignments, provided for in Articles 32 and 33 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951, shall cease to be applied from 1st March, 1960, to frequency assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 and 26 100 kc/s ;

5. that from 1st March 1960, the procedure specified in Nos. 9-83 to 9-85 of the Radio Regulations, Geneva, 1959, shall be applied. Frequency assignments recorded in the Master Radio Frequency Record according to these provisions shall bear in Column 2c a date determined according to the relevant provisions of No. 9-121 of the Radio Regulations, Geneva, 1959. No date shall be entered in Column 2a or Column 2b ;

6. that in applying the provisions of Article 10 in accordance with the terms of this Resolution, " Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947 ", should be read instead of " No. 9-16 of these Regulations ", and " Master Radio Frequency Record " should be read instead of " Master International Frequency Register " ;

7. that the first edition of the High Frequency Broadcasting Frequency List referred to in No. 10-16 of Article 10 shall be published as of September, 1961.

## RESOLUTION No. 3

**Relating to a Study by a Panel of Experts of Measures to Reduce  
Congestion in the Bands between 4 and 27.5 Mc/s**

The Administrative Conference, Geneva, 1959,

*considering*

the trend towards congestion and saturation in the bands between 4 and 27.5 Mc/s ;

*realising*

- a) that if this trend continues, this portion of the radio frequency spectrum will become progressively less useful to administrations for purposes for which it is indispensable ;
- b) that there are uses of the bands between 4 and 27.5 Mc/s that could, from a technical and operational point of view, be satisfied by other means ;
- c) that before administrations will be willing to undertake a programme to relieve congestion in the bands between 4 and 27.5 Mc/s they will need a clear statement of the issues involved and of the measures that need to be taken ;
- d) that the ability of administrations to undertake such a programme is intimately linked to the financial implications involved ;

*resolves*

1. that a Panel of Experts should be convened for the purpose of devising ways and means of relieving the pressure on the bands between 4 and 27.5 Mc/s ;
2. that the preparatory work as set out in Annex 1 of the present Resolution should be undertaken by the International Frequency

Registration Board in collaboration with the other permanent organs of the Union before this Panel of Experts is convened ;

*invites*

the Administrative Council

1. 1.1 in the light of the progress made in the above preparatory work, to convene the Panel of Experts to undertake the tasks covered in the terms of reference set out in Annex 2. The Panel would include the Heads of the permanent organs, or their representatives, and should not be more than eleven in number ;
- 1.2 to request administrations to nominate highly qualified technical experts to serve on the Panel and, when nominating, to submit a biographical sketch of the qualifications and professional experience of each nominee ;
- 1.3 to select, from those nominated, a maximum of seven experts, taking into consideration the need to obtain very highly qualified individuals drawn from the various parts of the world. The experts, as a group, should have a broad overall knowledge covering the following :
  - the world-wide aspects of telecommunication planning
  - the economic factors involved in the development of telecommunications
  - high frequency communications
  - land and submarine cables
  - broadcasting techniques
  - radio-relay systems
  - scatter propagation
  - space communications
- 1.4 to set the date on which the Panel should meet ;

- 1.5 to request the Chairman of the Board to convene the meeting in Geneva ;
2. to decide, after considering the final report and recommendations of the Panel of Experts, and after consulting administrations, whether any further action should be taken and whether or not an Administrative Conference should be called for the purpose of taking the necessary decisions.

#### ANNEX 1

##### **Preliminary Study to be Made before Convening the Panel of Experts**

1. The Board shall group the existing uses of the bands between 4 and 27.5 Mc/s into appropriate categories.
2. The Board shall study and analyse each such category of use with a view to determining those categories which might be satisfied by means other than the use of these bands. However, they shall not consider possible amendments to the Table of Frequency Allocations.
3. The Board shall invite administrations, at the appropriate time, to submit any general proposals they may have for relieving the pressure on the bands in question.
4. The Board shall also, through the Secretary General, obtain all pertinent facts relating to the provision of economic assistance to countries which would need such assistance to carry out a programme for relieving the pressure on the bands between 4 and 27.5 Mc/s.
5. The Board shall submit a report, to be prepared in collaboration with the Secretary General and the Directors of the C.C.I.R. and the C.C.I.T.T., to the Administrative Council at its 1961 Session on the results of their study. The report shall include the information and proposals called for in paragraphs 3 and 4 above, together with suitable recommendations to the Administrative Council, so that the meeting of the Panel of Experts can be convened to undertake its tasks. Copies of this report shall also be sent to all administrations.

## ANNEX 2

**Terms of Reference  
for a Panel of Experts to Study Measures to Reduce Congestion  
in the Bands between 4 and 27.5 Mc/s**

1. The Panel at each session shall elect its own chairman. The Chairman of the Board shall convene the first meeting of each session and act as co-ordinator between sessions.
2. The Panel shall first consider the report on the preparatory study forwarded to it by the Administrative Council and shall make any further investigations and studies deemed appropriate.
3. The Panel shall determine those categories of use of the bands between 4 and 27.5 Mc/s that could be satisfied by other means, and analyse the implications of utilizing such other means from the technical, practical and, in particular, economic aspects, in consultation with administrations when necessary. Due consideration shall be given to estimated traffic growth.
4. The Panel shall take account of the different degrees of technical development of countries as well as their differing needs in relation to the various telecommunication services concerned.
5. The Panel shall, through the Secretary General, obtain any necessary additional information about the facilities available for affording economic assistance to those countries that might need such aid in proceeding with any programme envisaged by the Panel, as well as any other specific information required from administrations or other sources.
6. The Panel shall study the best method of informing the administrations of the problems that exist.
7. The Panel shall then prepare a report to the Administrative Council together with recommendations as to the steps that should be taken for the purpose of relieving the pressure on the bands in question.

8. The recommendations of the Panel shall include a detailed and specific agenda which, when approved by the Administrative Council, would be the agenda of whatever body, Administrative Conference or otherwise, is to consider the policy decisions necessary to relieve the pressure on the bands concerned.

#### RESOLUTION No. 4

##### **Relating to Certain Entries in the Master Radio Frequency Record<sup>1</sup> in the Bands below 27 500 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*considering that*

- a) in various parts of the Table of Frequency Allocations, Atlantic City, 1947, certain services had priority and will be primary services according to the Table of Frequency Allocations, Geneva, 1959 ;
- b) the concepts of primary and secondary services have only now been introduced (see Article 5 of the Radio Regulations, Geneva, 1959) ;
- c) the Extraordinary Administrative Radio Conference, Geneva, 1951, adopted an International Frequency List which included entries not in conformity with the Table of Frequency Allocations, Atlantic City, 1947 ;
- d) provisions have to be made in connection with these entries on the establishment of the Master International Frequency Register ;

*and taking into account*

the Report by the International Frequency Registration Board to this Conference,

<sup>1</sup> Master Radio Frequency Record: The interim master register of frequency assignments established and maintained pursuant to the provisions of the Agreement adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951 (E.A.R.C. Agreement).



*resolves*

that those entries in the Master Radio Frequency Record referred to in the Annexes to this Resolution which will be transferred to the Master International Frequency Register shall receive the consideration and treatment specified in these Annexes ;

*and decides*

1. to urge administrations to take the required action ; and
2. to invite the next Administrative Radio Conference to reconsider the situation.

## ANNEX 1

**Bands below 3 950 kc/s (4 000 kc/s Region 2) Except the Bands  
Allocated Exclusively to the Aeronautical Mobile Service above 2 850 kc/s**

| Frequency bands                             | Entry in the Master Radio Frequency Record       | Description of entry   | Date in Column 2a or 2b | To be considered as a permitted service, as defined in Article 5 of the Radio Regulations, Geneva, 1959, until:<br>(6) | Treatment thereafter:<br>(6)  |
|---|--|--|-------------------------|--|---|
| 14 - 2 850 kc/s<br>(2 000 kc/s in Region 2) | Initial and Subsequent (until 31 December, 1959) | Non-priority, Atlantic City, 1947  | 2a                      | Next Administrative Radio Conference<br>(1)  | According to the decisions of the next Administrative Radio Conference<br>(1) |
|   | Initial  | Non-conformity with Table of Frequency Allocations, Atlantic City, 1947  | 2a                      | 31 December, 1961<br>(2)   | As not conforming with Table of Frequency Allocations, Geneva, 1959 (3)       |
|   | Initial  | Classes of emission not in conformity with Table of Frequency Allocations, Atlantic City, 1947   | 2a                      | 31 December, 1961<br>(2)   | As not conforming with Table of Frequency Allocations, Geneva, 1959<br>(3)    |
|   | Initial and Subsequent                           | Conformity with Table of Frequency Allocations, Atlantic City 1947, but Non-conformity with Table of Frequency Allocations, Geneva, 1959 | 2a                      | Next Administrative Radio Conference<br>(4)  | According to the decisions of the next Administrative Radio Conference<br>(4) |

| Frequency bands   | Entry in the Master Radio Frequency Record | Description of entry   | Date in Column 2a or 2b                        | To be considered as a permitted service, as defined in Article 5 of the Radio Regulations, Geneva, 1959, until:<br>(6) | Treatment thereafter :<br>(6)  |
|---|--|--|--|--|--|
| 2 850 kc/s<br>(2 000 kc/s<br>Region 2) -<br>3 950 kc/s<br>(4 000 kc/s<br>Region 2),<br>except for the<br>bands allocated<br>exclusively to<br>the aeronauti-<br>cal mobile<br>service | Initial<br>and<br>Subsequent               | Non-priority;<br>Atlantic City, 1947<br>(5)  | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | Next Administrative<br>Radio Conference<br>(1)   | According to the deci-<br>sions of the next<br>Administrative Radio<br>Conference<br>(1) |
|   | Initial                                    | Non-conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947   | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | 31 December, 1961<br>(2)   | As not conforming<br>with Table of Frequen-<br>cy Allocations, Geneva,<br>1959<br>(3)    |
|   | Initial                                    | Class of emission not<br>in conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947   | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | 31 December, 1961<br>(2)   | As not conforming<br>with Table of Fre-<br>quency Allocations,<br>Geneva, 1959<br>(3)    |
|   | Initial<br>and<br>Subsequent               | Conformity with<br>Table of Frequency<br>Allocations, Atlantic<br>City, 1947, but Non-<br>conformity with Table<br>of Frequency Alloca-<br>tions, Geneva, 1959 | 2a<br>(Regions<br>2 and 3)<br>2b<br>(Region 1) | Next Administrative<br>Radio Conference<br>(4)   | According to the deci-<br>sions of the next<br>Administrative Radio<br>Conference<br>(4) |

## Footnotes to Annex 1

- (1) *a)* Until the situation has been reconsidered by the next Administrative Radio Conference, the class of service of these assignments shall be considered as being a permitted service, as defined in Article 5 of the Radio Regulations, Geneva, 1959, and existing or future assignments for the primary or priority service in the same frequency band according to the Table of Frequency Allocations and other relevant provisions of the Radio Regulations of either Atlantic City, 1947, or Geneva, 1959, shall be considered, as far as their relationship with the former assignments is concerned, as being for a primary service as referred to in Article 5 of the Radio Regulations, Geneva, 1959.  
*b)* In respect of the relationship with each other of the assignments referred to in *a)* above, these provisions replace the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959, whereby certain services in the particular bands are primary or priority services and other services are secondary or non-priority services in the same bands.
- (2) These assignments should be brought into conformity with the provisions of the Radio Regulations, Geneva, 1959, as soon as possible, either by their transfer to appropriate bands or by discontinuance of the operations of the services concerned. Until the date this has been done or until 31st December, 1961, whichever date is the earlier, the assignments or classes of emission concerned shall be considered as being for a permitted service as defined in Article 5 of the Radio Regulations, Geneva, 1959, in derogation of the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959. The International Frequency Registration Board should draw the attention of the administrations concerned to these entries as soon as possible.
- (3) On 1st January, 1962, provided that the entries are not in conformity with the Table of Frequency Allocations, Geneva, 1959, the dates appearing in Column 2a of the Master International Frequency Register shall be transferred to Column 2b and a symbol shall be entered in Column 13 to indicate non-conformity with that Table.
- (4) These assignments should be brought into conformity with the provisions of the Radio Regulations, Geneva, 1959, as soon as possible after the entry into force of these Regulations, either by their transfer to appropriate bands or by discontinuance of the operations of the services concerned. Until this has been done, these assignments shall be considered as being for a permitted service as defined in Article 5 of the Radio Regulations, Geneva, 1959, in derogation of the relevant provisions of these Regulations until the next Administrative Radio Conference has reconsidered the situation. The International Frequency Registration Board should draw the attention of the administrations concerned to these entries as soon as possible.
- (5) The subsequent entries for Region 1 are those which are in conformity with Nos. 327 and 328 of the Radio Regulations, Atlantic City, 1947.
- (6) The foregoing provisions shall be taken into account by the International Frequency Registration Board when conducting the examinations prescribed in the Resolution relating to the establishment of the Master International Frequency Register and in Article 9 of the Radio Regulations, Geneva, 1959.

## ANNEX 2

## Shared Bands Between 3 950 kc/s (4 000 kc/s Region 2) and 27 500 kc/s

| Entry<br>in the Master Radio<br>Frequency Record | Description of Entry   | To be considered as a permitted service, as defined in Article 5 of the Radio Regulations, Geneva, 1959, until: | Treatment thereafter:   |
|--|--|---|---|
| Initial<br>and<br>Subsequent                     | Non-priority Atlantic City, 1947, but in conformity with the Table of Frequency Allocations, Atlantic City, 1947 | Next Administrative Radio Conference<br>(1)   | According to the decisions of the next Administrative Radio Conference<br>(1) |

## Footnote to Annex 2

- (1) *a)* Until the situation has been reconsidered by the next Administrative Radio Conference, the class of service of these assignments shall be considered as being a permitted service as defined in Article 5 of the Radio Regulations, Geneva, 1959, and existing or future assignments for the primary or priority service in the same frequency band according to the Table of Frequency Allocations and other relevant provisions of the Radio Regulations of either Atlantic City, 1947, or Geneva, 1959, shall be considered, as far as their relationship with the former assignments is concerned, as being for a primary service as referred to in Article 5 of the Radio Regulations, Geneva, 1959.
- b)* In respect of the relationship with each other of the assignments referred to in *a)* above, these provisions replace the relevant provisions of the Radio Regulations of Atlantic City, 1947, and of Geneva, 1959, whereby certain services in the particular bands are primary or priority services and other services are secondary or non-priority services in the same bands.
- c)* The foregoing provisions shall be taken into account by the International Frequency Registration Board when conducting the examinations prescribed in Article 9 of the Radio Regulations, Geneva, 1959.

## RESOLUTION No. 5

**Relating to Notification of Frequency Assignments**

The Administrative Radio Conference, Geneva, 1959,

*referring to*

- the Preamble of the Convention,
- Article 43 of the Convention (Special Arrangements),
- Article 4 of the Radio Regulations (Special Arrangements),
- Article 9 of the Radio Regulations (Notification and Recording of Frequencies in the Master International Frequency Register).

*resolves*

that, unless specifically stipulated otherwise by special arrangements communicated to the Union by the administrations, any notification of a frequency assignment to a station shall be made by the administration of the country on whose territory the station is located.

## RESOLUTION No. 6

**Relating to Frequency Terminology**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that it is necessary that, in the documents of the Union, frequency terminology be used accurately ;

*b)* that in the past, some of these terms have been used ambiguously;  
*decides*

that wherever used in the documents of the Union the terms listed below shall be expressed in the appropriate working language of the Union as indicated in the following table :

| Frequency<br>distribution to: | French                     | English                     | Spanish                     |
|-------------------------------|----------------------------|-----------------------------|-----------------------------|
| Services                      | Attribution<br>(attribuer) | Allocation<br>(to allocate) | Atribución<br>(atribuir)    |
| Areas or<br>countries         | Allotissement<br>(allotir) | Allotment<br>(to allot)     | Adjudicación<br>(adjudicar) |
| Stations                      | Assignment<br>(assigner)   | Assignment<br>(to assign)   | Asignación<br>(asignar)     |

#### RESOLUTION No. 7

##### **Relating to Radio Emissions from Artificial Satellites and Other Space Vehicles**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a)* that it is desirable to study the question of identification for radio emissions from satellites and other space vehicles ;
- b)* that it is desirable to study the question of providing for the cessation, at appropriate times, of radio emissions from satellites and other space vehicles ;

*invites*

1. the C.C.I.R. to study the above-mentioned questions ;
2. Members and Associate Members of the Union launching satellites and other space vehicles to give consideration to the above-mentioned problems and to present the results of their study to the C.C.I.R.

#### RESOLUTION No. 8

##### **Relating to the Formation of Call Signs and the Allocation of New Series**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) the Recommendation of the International Radio Conference, Atlantic City, 1947, relating to a new method of generating call signs ;
- b) the fact that no new proposal has been placed before the Administrative Radio Conference, Geneva, 1959 ;
- c) Document No. 456 submitted by the Republic of the Philippines ;
- d) the increasing demand for call signs justified by the increased number of Members and Associate Members of the Union and by the increased requirements of countries which are already Members or Associate Members ;
- e) the information supplied by the Secretary General regarding allocations of call signs since 1947 and the possibilities of the current system of forming call signs ;



*believing*

- a) that call signs already in use should, as far as possible, not be changed ;
- b) that, however, the current system of forming call signs may not be adequate to meet all the requirements submitted between the present time and the next Administrative Radio Conference ;

*resolves*

1. that, should the existing call sign series formed of three letters, or a figure and two letters, be exhausted, a new series should be introduced formed of a letter, a figure and a letter ; but in no case may the figure be 0 or 1 ;
2. that the method advocated in 1 above shall not be applicable to series beginning with one of the following letters : B F G I K M N O R U W ;
3. that the Secretary General shall, as soon as possible, issue a circular letter urging administrations :
  - 3.1. to make the maximum use of the possibilities of the series at present allocated, to avoid, as far as possible, further requests ;
  - 3.2. to review the call-sign assignments they have already made from their present allocations, with a view to releasing any series possible and place them at the disposal of the Union.
4. that the Secretary General shall, upon request, furnish advice to administrations on the means of effecting the greatest economy, which should be the rule, in the use of a series of call signs ;
5. that if, nevertheless, before the next Administrative Radio Conference, it appears that all the possibilities of the present system of forming call signs as amended by 1 and 2 above will be exhausted, the Secretary General shall issue a circular letter :

- 5.1. explaining the position ;
- 5.2. urging the administrations to send in their proposals for possible solutions ;
- 6. that, from the information thus submitted, the Secretary General shall prepare a report, together with his comments and suggestions, for submission to the next Administrative Radio Conference.

#### RESOLUTION No. 9

##### **Relating to the Publication of Service Documents**

The Administrative Radio Conference, Geneva, 1959,

*considering*

that the early implementation of the provisions of Article 20 of the Radio Regulations and Appendix 9 would be of general advantage ;

*resolves*

that the Secretary General may, at his discretion, implement these provisions in part or in whole, in advance of the effective date of the Radio Regulations.

#### RESOLUTION No. 10

##### **Use of the Bands**

**7 000 to 7 100 kc/s and 7 100 to 7 300 kc/s  
by the Amateur Service and the Broadcasting Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the sharing of frequency bands by amateur, fixed and broadcasting services is undesirable and should be avoided ;

- b) that it is desirable to have world-wide exclusive allocations for these services in Band 7 ;
- c) that the band 7 000 to 7 100 kc/s is allocated on a world-wide basis exclusively to the amateur service ;
- d) that the band 7 100 to 7 300 kc/s is allocated in Regions 1 and 3 to the broadcasting service and in Region 2 to the amateur service ;

*resolves*

that the broadcasting service should be prohibited from the band 7 000 to 7 100 kc/s and that broadcasting stations operating on frequencies in this band should cease such operation ;

*and noting*

the provisions of No. 3-05 of the Radio Regulations ;

*further resolves*

that inter-Regional amateur contacts should be only in the band 7 000 to 7 100 kc/s and that the administrations should make every effort to ensure that the broadcasting service in the band 7 100 to 7 300 kc/s, in Regions 1 and 3, does not cause interference to the amateur service in Region 2 ; such being consistent with the provisions of No. 3-05 of the Radio Regulations.

#### RESOLUTION No. 11

##### **Relative to the Convening of a Special Regional Conference**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that, according to No 180b of the Radio Regulations, a special regional conference is to be held not later than 1 May, 1960, to draw up agreements and associated plans for the bands 68-73 Mc/s and 76-87.5 Mc/s ;

- b) the desirability to hold this conference at Geneva with regard to the availability of relevant data of the International Frequency Registration Board and C.C.I.R., and the experienced staff of the Secretariat of the Union ;
- c) that this conference should be convened by the Secretary General under Article 44 of the Convention ;

*requests the Secretary General*

to take the necessary steps for convening the special regional conference, referred to in No. 180b of the Radio Regulations, at Geneva, under Article 44 of the Convention.

#### RESOLUTION No. 12

#### **Relating to the Establishment of a Manual for Use by the Mobile Services**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the provisions of the Radio Regulations Atlantic City, 1947, applicable to the mobile services include, in particular :
  - provisions directly related to the operation of the mobile services,
  - other provisions not directly related to these services ;
- b) that certain administrations have submitted to the Administrative Radio Conference, Geneva, 1959, proposals to revise and re-classify those provisions directly related to the operation of the mobile services ;
- c) that those administrations have found a new layout for the provisions necessary to facilitate the understanding of the technical stipulations and service procedure regulations concerning radio-

- telegraphy and radiotelephony, as well as the rules regarding radiotelegrams, radiotelephone calls, and distress traffic ;
- d) that this new layout would be of great value to the mobile services and would enable administrations to issue, if they wish to do so, national regulations based upon internationally self-contained sets of rules for the different services ;
  - e) that a complete rearrangement of certain parts of the Radio Regulations and the Additional Radio Regulations cannot, for practical reasons, be achieved during the Conference ;
  - f) that those provisions directly related to the mobile services will not be presented in the new Radio Regulations in the form recommended and that in consequence the final reclassification of those provisions should be carried out after the close of the Conference ;
  - g) that it would, however, be very useful to rearrange and to publish in a manual those provisions relating directly to the operation of the mobile services ;
  - h) that the Secretary General should be requested to undertake these tasks ;
  - i) that, in the future, those provisions not related directly to the mobile services should be reclassified by the next Administrative Radio Conference if this is considered useful ;
  - j) that this reclassification would require a preliminary study which should be undertaken by the Secretary General and the results communicated to administrations ;
  - k) that, finally, the Secretary General in carrying out these tasks mentioned in h) above should consult a small group of administrations.

*resolves :*

1. that the provisions of the Radio Regulations and its Appendices, together with those of the Additional Radio Regulations,

Geneva, 1959, which deal with the operation of the mobile services, shall be assembled in the order indicated in Document No. 775 of the Conference and published in a manual, drawn up in accordance with Article 16, paragraphs 2 and 4, of the Convention ;

2. that the Secretary General shall, as soon as possible after the publication of the Radio Regulations, Geneva, 1959, proceed to the rearrangement and the issue of the Manual as mentioned in paragraph 1 above, after approval by the administrations named in paragraph 4, below ;

3. that the Secretary General shall also undertake a study with a view to the insertion, in the appropriate places, in the next Radio Regulations, of those regulations contained in the Manual and also those other regulations mentioned in paragraph *i*) above. The results of this study shall be communicated to administrations well in advance of the next Administrative Radio Conference ;

4. that the following Administrations, United States of America, France, Italy, the Netherlands, the United Kingdom of Great Britain and Northern Ireland, and Sweden may be consulted by the Secretary General on questions relating to the tasks entrusted to him in accordance with paragraph 2 above ;

5. that these Administrations approve the Manual before publication ;

6. that the Manual should be available to Administrations before 1st August 1960.

## RESOLUTION No. 13

**Relating to the Preparation of Revised Allotment Plans  
for the Aeronautical Mobile Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the Frequency Allotment Plans for the Aeronautical Mobile Service produced by the International Administrative Aeronautical Radio Conference (I.A.A.R.C.), Geneva, 1949, and adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, have been substantially adopted by the present Conference and included in the Radio Regulations ;
- b) that since the time of the I.A.A.R.C. there have been changes in the route patterns flown by international civil airlines ;
- c) that the rates of increase of international civil air traffic have differed amongst the various Major World Air Route Areas (MWARA's) ;
- d) that there are now new requirements for frequency allotments to serve the needs of international civil aviation outside the existing MWARA's ; for example, in the area of the North Pole and in the territories of the U.S.S.R. adjacent to the existing MWARA's ;
- e) that because of the higher speeds of aircraft there are now new requirements for frequencies to meet the needs of international civil aviation for particular purposes, for example, frequencies allotted in the Plans for the purpose of providing meteorological information to aircraft in flight ;
- f) that, on the other hand, certain provisions of the I.A.A.R.C. Plans are no longer required, for example, the provision for extending the MWARA frequency families, NSA-1 and NSA-2, into the whole of the European area ;

- g) that a limited number of new provisions to meet urgent requirements have been incorporated into the Plans at this Conference ;
- h) that the Plans contain a measure of flexibility which will permit some but not all new requirements to be satisfied ;
- i) that there are new aeronautical communication techniques under study and development which have a direct bearing on channel widths and on the number of channels required to meet essential communications needs of national and international aircraft operations. These include :
  - 1. extensions of the useful communication range and increased application of very high frequencies,
  - 2. new high frequency techniques to increase the speed and quantity of communications,
  - 3. new methods for more expeditious dissemination of meteorological information,
  - 4. improved selective calling systems ;
- j) that the new frequency allotment plans should adequately reflect the communication techniques above, together with anticipated improvements in aeronautical radionavigation techniques, having a direct influence upon the nature and quantity of communications handled and having an impact on spectrum space required ;
- k) that whereas the present Plans were produced on the basis of a large amount of material relating to the operational requirements, usages and procedures of the aeronautical mobile service, it has been impracticable for this Conference to obtain and study the corresponding material essential at this time to effect a complete review of the Aeronautical Mobile Service Plans ;
- l) that many countries did not have available at this Conference the information necessary to determine the extent to which the Fre-



quency Allotment Plans meet current requirements for national and regional air operations ;

- m) that the International Telecommunication Convention, Geneva, 1959, in Article 7, paragraphs 4 and 5, provides that, an Extraordinary Administrative Radio Conference may revise the provisions of the Radio Regulations ;

*is of the opinion*

that the Aeronautical Mobile Service Plans contained in Appendix 26 of the Radio Regulations will have to be reviewed and administrations should urgently study the communications requirements of their national and international air operations in order to establish when, in the best interests of aviation, such a review shall be undertaken ;

*resolves*

that, when the Administrative Council deems it appropriate and timely, an Extraordinary Administrative Radio Conference be convened under the provisions of Article 7 of the International Telecommunication Convention to review Appendix 26 and the provisions of the Radio Regulations associated therewith and to complete its work before the next Ordinary Administrative Radio Conference.

#### RESOLUTION No. 14

##### **Relating to the Use of Aeronautical Mobile (R) Frequencies**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the Plan developed for the use of high frequency channels for the Aeronautical Mobile (R) Service (Appendix 26 to the Radio Regulations, Geneva, 1959) has been substantially implemented ;

- b) that air operations are subject to continuous changes ;
- c) that these changes require attention by the administrations concerned, but
- d) that, in seeking to satisfy new communication requirements, no decision should be taken that will prevent or handicap the co-ordinated utilization of those high frequency (R) band allotments as prescribed in the Plan ;
- e) that the families of high frequencies allotted to the Major World Air Route Areas (MWARA), Regional and Domestic Air Route Areas (RDARA) and Sub-Areas have been chosen considering propagation conditions which allow for the selection of the most suitable frequencies for the distance involved ;
- f) that it is essential to distribute the communication traffic load as uniformly as possible over frequencies of the same order ;
- g) that specific steps should be taken to ensure that the correct order of frequency is used ;

*resolves*

that administrations, individually or in collaboration, take the necessary steps :

1. to make as great a use as possible of very high frequencies in order to lessen the load on the high frequency (R) bands ;
2. to make as great a use as possible of antennae of appropriate directivity and efficiency in order to minimise possibilities of mutual interference within an area or between areas ;
3. to co-ordinate the use of families of frequencies necessary for a given route segment in accordance with the technical principles in Appendix 26 and, in the light of the propagation data available,

in order that the most appropriate frequencies be used with an aircraft at a given distance from the aeronautical station providing service over the route segment concerned ;

4. to improve operating techniques and procedures and to use equipment which will make it possible to attain the highest possible efficiency in handling air-ground high frequency communications ;

5. to collect precise data on the operation of their high frequency communication systems, particularly that having a bearing on technical and operating standards, so as to facilitate re-examination of this Plan ;

6. to establish, through regional agreements, the best method to provide the required communications for any new long-distance international or regional air operation which is not or cannot be accommodated within the system of MWARA and RDARA, in such a manner as not to cause harmful interference to the utilisation of frequencies as prescribed in the Aeronautical Mobile (R) Frequency Plan.

#### RESOLUTION No. 15

##### **Relating to Inter-ship Frequencies in the Bands between 1 605 kc/s and 3 600 kc/s in Region 1**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the Master International Frequency Register will contain among the initial entries the frequency assignments adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, made to specific countries for inter-ship communications in the bands between 1 605 kc/s and 3 600 kc/s in Region 1 ;
- b) that provisions should be made for the notification and recording of the use of these frequencies for inter-ship communications by administrations of other countries in Region 1 ;

*resolves*

1. that the use of the frequencies referred to in *a)* above by other administrations should be co-ordinated with the administrations concerned, and subsequently notified to the International Frequency Registration Board ;

2. that upon such notification the Board shall record these new assignments in the Master International Frequency Register, without any date in Columns 2a or 2b, but with an appropriate note in the Remarks Column followed by the date of receipt of the notice by the Board ;

*invites administrations*

to review the recorded areas of operation of the frequency assignments concerned, with a view to improving sharing possibilities ; and

*requests the International Frequency Registration Board*

to make, where necessary, such suggestions to the administrations concerned as it may be able to offer with a view to achieving the purpose referred to in the immediately preceding paragraph.

#### RECOMMENDATION No. 1

#### **to the C.C.I.R. Relating to the Frequency Tolerances of Transmitters**

The Administrative Radio Conference, Geneva, 1959,

*considering*

*a)* that Appendix 3 of the Radio Regulations specifies the permissible frequency tolerances for transmitters ;

- b) that the principal objective of this Appendix has been the reduction of frequency space required per channel by means of the tightening of frequency tolerances, and that in many cases considerable improvement in spectrum utilization can continue to be obtained by further tightening of frequency tolerances ;
- c) that for some services, a reduction in frequency tolerance to the lowest value possible in the state of the technique would be useful in order to increase the signal to noise ratio, improve intelligibility and reduce errors ;
- d) that in certain cases, a further reduction of frequency tolerance would not in practice increase the number of available channels ;
- e) that in particular frequency bands, the frequency tolerances specified in Appendix 3 of these Radio Regulations may already approach the minimum useful value for certain categories of station when using existing techniques and methods of operation ;
- f) that it will be of considerable assistance to administrations, in the future planning of services and provision of equipment, to know those frequency tolerances which can be considered to be the ultimate useful minimum value for stations when using existing techniques and methods of operation ;
- g) that in certain cases, reduction of frequency tolerances is subject to economic limitations, which should be known and taken into account ;

*invites the C.C.I.R.*

1. to continue its study of frequency tolerances with a view to the reduction of the frequency space required for a given channel ;
2. to consider whether or not in certain cases it is possible to predict ultimate values of tolerances, which it would not be necessary to make more stringent under currently known conditions of operation, and to state what these tolerance values might be ;

3. to report upon the possibility of achieving such ultimate values of tolerances consistent with economic and design requirements and other practical considerations ;
4. to indicate which, if any, of the tolerances specified in Appendix 3 of the Radio Regulations have already attained these ultimate values.

#### RECOMMENDATION No. 2

##### **Relating to the Technical Standards of the I.F.R.B.**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

that the Technical Standards of the International Frequency Registration Board (I.F.R.B.) are in daily use in the technical examination of frequency assignment notices, '

*urges the C.C.I.R.*

to expedite all phases of the programme of studies which will assist the I.F.R.B. in the further refinement of its Technical Standards,

*and invites the administrations*

in their participation in the work of the C.C.I.R. and its study groups, to give special priority to those studies.

#### RECOMMENDATION No. 3

##### **to the C.C.I.R. Relating to Signal to Interference Protection Ratios and Minimum Field Strength Requirements**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

that the available information on signal to interference protection ratios and minimum field strengths required for each one of the services needs further refinement in order to permit the most efficient planning of the use of the radio frequency spectrum ;

*invites the C.C.I.R.*

1. to continue to study signal to interference protection ratios which define the threshold of harmful interference for the several services ;
2. to continue to study the signal to noise ratios and the minimum field strengths required for satisfactory reception of the different classes of emission in the several services ;
3. to continue the study of fading allowances for the several services ;
4. to give particular attention to those studies which will assist in the further refinement of the technical standards used by the International Frequency Registration Board.

#### RECOMMENDATION No. 4

**to the C.C.I.R.**

**Relating to Studies of Radio Propagation and Radio Noise**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the efficient utilization of radio frequencies depends upon the use of the most reliable technical data and standards, especially in those parts of the radio frequency spectrum which are most congested ;
- b) that the satisfaction of new frequency requirements and the development of radio services can be facilitated by improvements,

where these are necessary, in the technical standards at present used by the I.F.R.B. ;

- c) that, in accordance with Appendix A, administrations will endeavour to promote further studies on radio propagation and radio noise through the medium of the C.C.I.R. ;
- d) that the C.C.I.R. has adopted a programme of studies covering many of these problems ;

*invites the C.C.I.R.*

- 1. to continue the studies of radio propagation and radio noise and to take measures for the co-ordination of the results of these studies carried out in different countries ;
- 2. to give particular attention to those studies which will assist in the further refinement of the technical standards used by the I.F.R.B. ;
- 3. to report regularly on these matters, even if the studies have not been completed ;
- 4. to continue regular consultation with other organizations undertaking studies of propagation such as the International Scientific Radio Union, in order to attain the maximum possible degree of co-ordination.

#### RECOMMENDATION No. 5

**to the C.C.I.R.  
and to Administrations Relating to International Monitoring  
in the Bands Below 28 000 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) the desirability of achieving a more effective use of the radio spectrum in order to assist administrations to satisfy their fre-



quency requirements, and, to that end, the desirability of taking steps to make the International Frequency List reflect more accurately the actual use being made of the radio spectrum ;

- b) the provisions of the Radio Regulations, Geneva, 1959, under which the International Frequency Registration Board shall review the entries in the Master International Frequency Register with a view to bringing them into conformity, to the maximum extent practicable, with the actual use being made of the radio spectrum ;
- c) that monitoring information should assist the Board in discharging that function ;

*recognizing*

- a) that an international monitoring system cannot be fully effective unless it covers all areas of the world ;
- b) that, at present, in certain areas of the world, monitoring facilities are either non-existent or insufficient to provide effective coverage ;

*invites the C.C.I.R.*

in collaboration with the Board, to study and make technical recommendations concerning the additional facilities required to provide adequate coverage in all areas of the world for the purposes of Articles 8, 9 and 13 of the Radio Regulations, and

*invites Administrations*

1. to make every effort to develop monitoring facilities as envisaged in Article 13 of the Radio Regulations bearing in mind the means which may be made available through the appropriate technical assistance organs of the United Nations ;
2. to inform the Board of the extent to which they are prepared to co-operate in such monitoring programmes as may be requested by the Board.

## RECOMMENDATION No. 6

**to the C.C.I.R. Relating to Studies of the Technical Provisions  
Concerning Equipment**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

that the available technical information concerning the various types of apparatus used for the reception of the different classes of emission in the several services needs to be more complete and more precise in order to permit the most efficient planning of the use of the radio frequency spectrum ;

*invites the C.C.I.R.*

1. to continue to study, and to make recommendations for the bandwidth, selectivity, sensitivity and stability characteristics of various types of apparatus used for the reception of the different classes of emission in the several services ;
2. to continue to study practical methods of achieving the recommended characteristics ;
3. to study the minimum practicable spacing between adjacent channels for the different classes of emission for the several services in the various bands ;
4. to study other desirable conditions to be fulfilled by the complete systems employed by the different services in order to determine the required technical performance of the equipment, including the station terminal apparatus and the antennae ;
5. to study methods for determining whether the equipment satisfies the recommended requirements ;

6. to give particular attention to those studies which will assist in the further refinement of the technical standards used by the International Frequency Registration Board.

#### RECOMMENDATION No. 7

##### Relating to the Classification of Emissions

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that Article 2, Section I, of the Radio Regulations classifies emissions for the purpose of designation ;
- b) that certain symbols are used for classes of emission which are not precisely specified ;
- c) that it may be necessary to specify new classes of emissions in the future ;
- d) that in the recording processes used by the International Frequency Registration Board and by certain administrations, particularly in mechanical recording processes, a simple and precise method of designation is required, using the smallest practicable number of symbols for each designation to provide all the essential information ;
- e) that it may be useful to combine in a single series of symbols the information now classified as supplementary characteristics with that giving the type of modulation of the main carrier ;
- f) that the present method of classifying emissions does not adequately provide for systems employing multiple modulation processes ;
- g) that the increasing use of multichannel telephone and telegraph systems makes it desirable to classify them in categories and to adopt a uniform designation for the channels of such systems ;

- h) that pulse modulation is not intrinsically a basic modulation process but is a form of signal stimulus which gives rise to amplitude frequency or phase modulation or a combination of these modulations ;
- i) that the Board sometimes receives or requires from administrations additional significant information of a supplementary nature—e.g., carrier level and telegraph signal code information, which is not always provided for in the present system of designation ;
- j) that the present system of designation does not enable all emissions to be specified precisely or completely ;
- k) that the terms emission, radiation and transmission are not defined in the Radio Regulations and that they are liable to confusion not only when they are translated from one language to another but also when they are used in the same language ;

*recommends that the C.C.I.R.*

1. consider, in conjunction with the Board, all emissions and characteristics requiring classification ;
2. study, in conjunction with the Board, various methods of designating and classifying emissions, and develop a method which could be used over a long period and which would enable all the essential information to be provided ;
3. report their conclusions on these matters, and make a Recommendation in time for a decision to be taken at the next Administrative Radio Conference ;
4. define the terms emission, radiation and transmission so that they may be used consistently and without confusion and be readily translated from one working language to another.

## RECOMMENDATION No. 8

**Relating to the Use of the Rationalized M.K.S. System of Units**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

the wide use of the Rationalized M.K.S. system of units (also known as the rationalized Giorgi system) by radio engineers and authors of radio publications, and its wide use in the C.C.I.R. and other permanent organs of the Union ;

*recommends*

that administrations shall endeavour to adopt that system gradually in their relations with the Union and its permanent organs.

## RECOMMENDATION No. 9

**Relating to the Means of Reducing the Congestion in Band 7**

The Administrative Radio Conference, Geneva, 1959,

*recognizing*

- a) that there is an urgent need to reduce the pressure on Band 7 of the radio frequency spectrum ;
- b) that the utilisation of modern development in telecommunication techniques, particularly those involving the use of Band 8 and higher Bands, coaxial cables, etc., can contribute to this reduction ;
- c) that the utilisation of these improved and alternative techniques would entail considerable expenditure whereas the continued use of Band 7 techniques would be less expensive and therefore some

administrations would find it more difficult to introduce these new techniques than other administrations more favourably placed ;

*recommends*

1. that all administrations take necessary steps to reduce the pressure on Band 7 by adopting the new techniques to the maximum extent possible ;
2. that the international organizations giving aid be requested to give special consideration to the supply of equipment to administrations which are not in a position to procure it themselves due to economic difficulties, for the purpose of enabling these administrations to change over to the alternative means of telecommunication, thus contributing towards greater economy in the use of Band 7.

RECOMMENDATION No. 10

**Relating to the More Efficient Consolidation of National and International Radiocommunication Circuits operating in the Bands between 4 000-27 500 kc/s**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) the ever-increasing need for frequencies particularly in the bands between 4 000 and 27 500 kc/s ;
- b) the present structure of national and international radiocommunication networks in these bands ;
- c) the relatively light traffic load on some of the circuits of these networks ;
- d) the provisions of the Convention concerning the rational use of frequencies and spectrum space (Article 42) ;

*and taking into account*

- a) the fact that the efficiency of a group of circuits is higher than that of the total number of single circuits ;

- b) that as a consequence the total number of frequencies needed may be reduced ;
- c) that in certain parts of the world there are areas and countries interconnected by several circuits, both radio and cable ;

*recommends*

1. that, wherever possible, administrations should contribute to reducing the pressure on bands between 4 000 and 27 500 kc/s by a more efficient consolidation of lightly-loaded radio circuits ;
2. that countries, interconnected by telecommunication circuits, should, whenever practicable, conclude special arrangements on the common use of existing international radio circuits, operating in the bands between 4 000 and 27 500 kc/s ;
3. that, as a general rule, these arrangements should give to each participating country equal benefit with regard to operational and financial conditions ;
4. that in planning new radio circuits or the extension of existing radio circuits administrations should as far as possible take into account the principles stated in 1 to 3 above.

RECOMMENDATION No. 11

**Relating to the Use of the Band 9 300-9 500 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) that there are in existence two main classes of airborne weather radar, using the bands 5 350-5 460 Mc/s and 9 300-9 500 Mc/s respectively ;

- b) that there is in existence a very considerable number of shipborne radars, the majority in the band 9 300-9 500 Mc/s ;
- c) that there are also ground-based radars of the maritime and aeronautical radionavigation services and of the meteorological service in the band 9 300-9 500 Mc/s ;
- d) that in the band 5 350-5 460 Mc/s airborne radars have the exclusive use of the sole primary allocation which is to the aeronautical radionavigation service ;
- e) that in the bands 2 900-3 100 Mc/s and 5 470-5 650 Mc/s shipborne radars have the use of the sole primary allocation to the radionavigation service and the maritime radionavigation service respectively, which they share only with land-based radars ;
- f) that it has proved necessary to allocate the band 9 300-9 500 Mc/s on an equality basis to both the aeronautical and the maritime radionavigation services ;

*considering*

- a) that it is of the utmost importance to ensure that harmful interference is not caused to radionavigation services providing a safety of life function ;
- b) that the operating conditions of a safety of life service should be uniform throughout the world ;
- c) that an uncoordinated increase in the use of the band 9 300-9 500 Mc/s can only lead to an increase in the probability of harmful interference between the aeronautical and maritime radionavigation services ;

*recommends*

1. that administrations, the International Civil Aviation Organization and the Inter-Governmental Maritime Consultative Organization study this matter at the earliest opportunity ; and especially
2. that they determine whether, and to what extent, interference which is recognized to be technically possible between the two services becomes harmful in operational circumstances ;



3. that they investigate, in the event that it is established that there may be harmful interference between the two services, the possibility of reducing such interference by technical, operational and procedural means, including the principle that new equipments should always be of the highest technical standard ;

*invites*

administrations, the International Civil Aviation Organization and the Inter-Governmental Maritime Consultative Organization to communicate to the Union the results of their studies together with their views and proposals resulting therefrom.

#### RECOMMENDATION No. 12

##### **Relating to the Technical Standards to be Applied when Preparing Plans for the Broadcasting Services in the Bands 68-73 Mc/s and 76-87.5 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*recommends*

that in the preparation of plans for broadcasting stations in the bands 68-73 Mc/s and 76-87.5 Mc/s at the Special Regional Conference referred to in No 180b of the Radio Regulations, Geneva, 1959, the following factors shall be taken into consideration :

- a) the minimum median field strengths to be protected for the broadcasting and for the fixed and mobile services should be the field strengths required for satisfactory service at the limit of service area in rural areas. For frequency modulated sound broadcasting, the figures given in C.C.I.R. (Los Angeles, 1959) Recommendation No. 263 should be taken as a guide. For television, the same values of minimum field strength as for frequency modulated sound broadcasting should be used. For the

fixed and mobile services a tentative figure of 5 microvolts per metre should be taken ;

- b) the protection ratios required for frequency modulated sound broadcasting are given in C.C.I.R. (Los Angeles, 1959) Recommendation No. 263, and for television in C.C.I.R. (Los Angeles, 1959) Report No. 125. For the fixed and mobile services the protection ratio should be at least 6 db ;
- c) when determining the required protection ratios, due account shall be taken of the occupied bandwidth and the receiver selectivity when there is a difference between the frequencies of the desired and interfering signals, and of the additional protection resulting from the use of cross-polarization ;
- d) all services should be protected for not less than 90 % of the time ;
- e) in evaluating the possible degree of interference due regard should be given to the conditions of propagation. The tropospheric wave propagation curves of C.C.I.R. (Los Angeles, 1959) Recommendation No. 312 should be used where they apply.

#### RECOMMENDATION No. 13

##### **to Administrations in Region 1 Relating to the Broadcasting Service in the Band 100-108 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that, so far as possible, there should be a common allocation of frequency bands to the broadcasting service in the three Regions, so that administrations may more readily coordinate their use of frequencies and thereby achieve maximum frequency economy ;
- b) that a growing demand is foreseen in Region 1 for assignable frequencies in Band 8 for sound broadcasting ;

- c) that, for technical reasons, and in particular, in order to avoid complication in the manufacture of receivers, any future extension of the broadcasting band 87.5-100 Mc/s, should take place in an adjacent band ;
- d) that the band 100-108 Mc/s is now allocated to the broadcasting service in Regions 2 and 3, and in some countries in Region 1 ;
- e) that a number of administrations in Region 1 have expressed their desire to use the band 100-104 Mc/s for the broadcasting service ;

*recommends*

that, at the next Administrative Radio Conference, administrations of Region 1 consider the possibility of proposing a new allocation to services in the band 100-108 Mc/s, with especial reference to the needs of the broadcasting service.

#### RECOMMENDATION No. 14

##### **Relating to Frequency Modulation Transmissions**

The Administrative Radio Conference, Geneva, 1959,  
*considering :*

- a) that listeners should be enabled to hear national broadcasting transmissions free of interference from other stations ;
- b) that in many regions, the overloading of bands Nos. 5 and 6 is such that listening is becoming increasingly difficult ;
- c) that experience has shown that where frequency modulated transmissions are broadcast in band No. 8, listeners in those countries are assured of improved reception ;

*recommends :*

that the Members and Associate Members of the Union should consider the possibility of using frequency modulated transmissions in the band 8 for their national broadcasting services.

## RECOMMENDATION No. 15

**Relating to the Measures to be Taken to Prevent  
the Operation of Broadcasting Stations on Board Ships  
or Aircraft Outside National Territories**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the operation of broadcasting stations on board ships or aircraft outside national territories is in conflict with the provisions of Radio Regulation Nos. 7-01 and 28-08 ;
- b) that such operation is contrary to the orderly use of the radio frequency spectrum and may result in chaotic conditions ;
- c) that the operation of such broadcasting stations may take place outside the jurisdiction of Member countries, thereby making the direct application of national laws difficult ;
- d) that a particularly difficult legal situation arises when such broadcasting stations are operated on board ships or aircraft not duly registered in any country ;

*recommends*

1. that administrations ask their Governments to study possible means, direct or indirect, to prevent or suspend such operations, and where appropriate, take the necessary action,
2. that administrations inform the Secretary General of the results of these studies and submit any other information which may be of general interest, so that the Secretary General can inform the Members of the Union accordingly.

## RECOMMENDATION No. 16

**Relating to the Adoption of Standard Forms  
for Ship Station Licences and Aircraft Station Licences**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the standardization of the licence forms issued to stations installed on board ships and aircraft making international voyages and flights would greatly facilitate the task of inspection of such stations ;
- b) that standard licence forms for ship stations and for aircraft stations would serve as a useful guide to those administrations desiring to improve their existing national licences ;
- c) that standard licence forms could be advantageously used by these administrations as the Form of Certification specified in No. 18-07 of the Radio Regulations ;

*has formulated*

- d) a set of principles for the draft of a standard licence form (see Annex 1) and ;
- e) specimens of a ship station licence and of an aircraft station licence (see Annexes 2 and 3) ;

*recommends*

1. that administrations which find these forms practicable and acceptable should adopt them for international use ;
2. that administrations should, as far as possible, endeavour to bring their national licence forms into line with these standard forms.

## ANNEX 1

**Principles for the Formulation of Standard Ship  
and Aircraft Station Licences**

The Administrative Radio Conference, Geneva, 1959, considers that in formulating standard ship and aircraft station licences, the following set of principles should be applied :

1. The licence should, as far as possible, be prepared in tabular form, and each line and column of the table clearly numbered or lettered.
2. The licence for ship stations and the licences for aircraft stations should be as similar as possible.
3. The size of the licence should be International Standard A4.
4. The licences should be designed in a form which facilitates its exhibition on board a ship or an aircraft.
5. The licence should be printed in Latin characters in the national language of the country which issues it. Those countries whose national language cannot be written in Latin characters should use their national language and, in addition, one working language of the Union.
6. The title "Ship Station Licence" or "Aircraft Station Licence" should appear at the top of the licence in the national language as well as in the three working languages of the Union.

These principles were used in formulating the two standard forms which are given in Annexes 2 and 3.

(Full Name of the Authority issuing the Licence,  
in the national language)

\*  
**SHIP STATION LICENCE**  
**LICENCE DE STATION DE NAVIRE**  
**LICENCIA DE LA ESTACIÓN DE BARCO**

No. ...

Period of validity .....

In accordance with ..... (*Title of the National Regulation*)  
and with the Radio Regulations annexed to the International Tele-  
communication Convention now in force, this authorization is here-  
with issued for the installation and for the use of the radio equipment  
described below :

| 1            | 2         | 3             | 4                                    |
|--------------|-----------|---------------|--------------------------------------|
| Name of Ship | Call Sign | Owner of Ship | Public<br>Correspondence<br>Category |
|              |           |               |                                      |

|   |                               | a          | b                | c                       | d  |
|---|-------------------------------|------------|------------------|-------------------------|--|
|   | Equipment                     | Type       | Power<br>(watts) | Class<br>of<br>Emission | Frequency Bands or Assigned<br>Frequencies |
| 5 | Transmitters                  |            |                  |                         | **   |
| 6 | Ships' Emergency Transmitters |            |                  |                         | **   |
| 7 | Survival Craft Transmitters   |            |                  |                         | **   |
| 8 | Other Equipment               | (Optional) |                  |                         |  |

For the Issuing Authority :

.....  
Place Date Authentication

\* The words "Ship Station Licence" written in the national language, if this is not one of the three working languages of the Union.

\*\* Specifically or by reference.

## ANNEX 3

(Full Name of the Authority Issuing the Licence,  
in the national language)

.....\*

**AIRCRAFT STATION LICENCE**  
**LICENCE DE STATION D'AÉRONEF**  
**LICENCIA DE LA ESTACIÓN DE AERONAVE**

No. ...

Period of validity .....

In accordance with ..... (*Title of the National Regulation*)  
and with the Radio Regulations annexed to the International Tele-  
communication Convention now in force, this authorization is here-  
with issued for the installation and for the use of the radio equip-  
ment described below :

| 1   | 2                                    | 3                   | 4                    |
|---|--------------------------------------|---------------------|----------------------|
| Nationality and<br>Registration Mark<br>of the Aircraft | Call Sign or other<br>Identification | Type of<br>Aircraft | Owner of<br>Aircraft |
|   |                                      |                     |                      |

|   |   | a          | b                | c                       | d  |
|---|---|------------|------------------|-------------------------|--|
|   | Equipment   | Type       | Power<br>(watts) | Class<br>of<br>Emission | Frequency Bands or Assigned<br>Frequencies |
| 5 | Transmitters  |            |                  |                         | **   |
| 6 | Survival<br>Craft<br>Transmitters<br>(when<br>applicable) |            |                  |                         | **   |
| 7 | Other<br>Equipment  | (Optional) |                  |                         |  |

For the Issuing Authority :

.....  
Place Date Authentication

\* The words " Aircraft Station Licence " written in the national language, if this is not  
one of the three working languages of the Union.

\*\* Specifically or by reference.



## RECOMMENDATION No. 17

**Relating to Operator Certificates**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that Article 23 of the Radio Regulations provides that Operator Certificates for ship and aircraft stations are classified as radiotelegraph, and radiotelephone ;
- b) that with the introduction of new modes of telecommunication, including the use of automatic communication devices, it becomes increasingly difficult to categorise such modes as either radiotelegraph or radiotelephone ;
- c) that all such devices, as well as radiotelephone stations, may be operated by holders of radiotelegraph operator certificates ; and many automatic communication devices may be operated by holders of radiotelephone certificates ;
- d) that, in particular, it may be desirable to modify the present categories of operator certificates ;

*recommends*

that administrations consider this problem and submit to the next Administrative Radio Conference proposals for the amendment of Article 23 taking into account the use of such new communication techniques.



**Documents of the Administrative Radio Conference (Geneva, 1959)**

**Documents No. 883 - 884**

**Not available**

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**Pas disponible**

\*\*\*\*\*

**No disponible**

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 885-E  
17 December 1959

PLENARY MEETING

MEMORANDUM BY THE CHAIRMAN

Final Protocol

By midnight on Wednesday, 16 December 1959, I had received requests to include the following texts in the Final Protocol.

Charles J. Acton  
Chairman

Annex: 1



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A N N E X

I. FOR THE ARGENTINE REPUBLIC :

Mr. Charles J. Acton, Chairman, Administrative Radio Conference

"In view of the decisions taken by the Administrative Radio Conference about the frequency assignments to appear in the Master International Frequency Register, I have to inform the Chairman of the Conference, in my capacity as Head of the Argentine Delegation, that my country does not recognize any frequency assignments that may be made either directly or indirectly, for any kind of service, in any part of the radio frequency spectrum, for the Malvinas Islands, the South Georgia Islands, the South Sandwich Islands, and the Argentine Antarctic between 25° and 74° west of Greenwich and south of 60° of latitude south as far as the South Pole, over which territories the Argentine Republic exercises sovereign rights, should such assignments be made on behalf of any other Power or Powers. In any event, the Argentine Republic reserves the right to use any frequencies so assigned as if they were its own. "

Mario Raúl Pico

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II. FOR AUSTRIA:

Austria could not sign the European Broadcasting Convention of Copenhagen, 1948, and the plan annexed to it.

In signing the Radio Regulations (Geneva, 1959) the Austrian Delegation formally states that its signature does not involve the recognition of the said Copenhagen Convention and Plan.

---

III. FOR CANADA

The signature of Canada to the Additional Radio Regulations is subject to the reservation that Canada does not accept and does not agree to be bound by Article 1, paragraph 1 of the said Additional Radio Regulations, insofar as it relates to the application of the Telephone Regulations to radiocommunications.

---

IV. FOR CEYLON

-- I --

The Delegation of Ceylon considers that the only real solution to the problem of High Frequency Broadcasting is by means of an Internationally agreed frequency assignment plan, and notes that the frequency management procedure outlined in Article 11 (a) of the Regulations of Geneva (1959) has not been accepted by all the frequency users. The Delegation of Ceylon accepts this procedure only on an experimental basis, as it fears that, having insufficient listings in the Master Frequency Record, the procedure may affect it adversely. In case this procedure fails to provide for the essential Broadcasting needs of Ceylon, this Delegation reserves to itself the right to take all necessary measures to ensure the fulfilment of these needs.

-- II --

With reference to Resolution No. ... (ref. Blue Document No. 573, page 33), the frequency band 7 100 - 7 300 has world wide implications. It is therefore not possible for the Delegation of Ceylon to ensure that Broadcasting in this band in Region 3 will not cause harmful interference to Amateurs in Region 2 using the same band.

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V. FOR CHINA

At the time of signing the Radio Regulations, the Delegation of the Republic of China declares that the reference to the so-called People's Republic of Mongolia appearing in the Regulations represents a purely geographical denomination and cannot in any case be interpreted as having a significance other than a geographical one.

The Delegation of the Republic of China to the Administrative Radio Conference of the International Telecommunication Union at Geneva, 1959, as at Atlantic City, is the only legitimate representation of China therein, and is recognized as such by the Conference. Any Declarations or Reservations made in connection with or attached to the present Regulations by any Members of the Union incompatible with the position of the Republic of China as set forth above, are illegal and therefore null and void. To those Members of the Union, the Republic of China does not, by signature of these Regulations, accept any obligation arising out of the Geneva Regulations or any of the Protocols annexed thereto.

VI. FOR THE BELGIAN CONGO AND TERRITORY OF RUANDA-URUNDI :

I

In signing the Radio Regulations (Geneva, 1959), the Delegation of the Belgian Congo and Territory of Ruanda-Urundi regrets:

- that a strict application of Article 3 of the Radio Regulations annexed to the International Telecommunication Convention of Atlantic City (1947) proved in practice impossible, since domestic broadcasting in the Belgian Congo and Territory of Ruanda-Urundi could not be ensured in acceptable, interference-free conditions, by the assignment of frequencies chosen exclusively from the broadcasting bands;
- that the Geneva Radio Conference (1959) was unable to find a satisfactory solution to this problem, and felt unable to adopt the proposals made by the Delegation of the Belgian Congo and Territory of Ruanda-Urundi in that connection.

This being so, this Delegation hereby declares that it reserves, on behalf of its Administration, the right not to abide by Article 3 of the Geneva Regulations except in so far as the application of this Article will enable it to meet its essential domestic broadcasting requirements.

## II

In signing the Radio Regulations (Geneva, 1959) the Belgian Congo and Territory of Ruanda-Urundi consider that the powers allotted in accordance with Annex ... to those Regulations will not enable their coast stations to provide a proper radiotelephone service because of their geographical position and of the shipping routes they have to serve.

Hence the Belgian Congo and Territory of Ruanda-Urundi hereby formally reserve the right to use powers appropriate to their needs, without prejudice to any agreements that may be reached with other Administrations concerned.

VII; FOR THE REPUBLIC OF KOREA

In signing the final act of the Radio Regulations annexed to the International Telecommunication Convention, Geneva, 1959:

The Delegation of the Republic of Korea, noting that the present Conference has accepted the Plans and Lists which were adopted by the E.A.R.C., Geneva, 1951, and which failed to take into account the needs of the Republic of Korea, reserves the right for its Government:

- 1) to claim, either at future conference or before, the frequencies in the Planned Bands necessary for its needs;
- 2) to use any frequency in the Planned Bands, within the framework of the Frequency Allocation Table, which may be essential to meet its requirements at any time;
- 3) to take whatever action may be necessary to eliminate any interference with the view to providing satisfactory national broadcasting services to the nation.

VIII. FOR CUBA

On signing the Final Acts of the Administrative Radio Conference (Geneva, 1959) on behalf of the Government of the Republic of Cuba, the Delegation of Cuba makes the following declaration :

Considering :

- a) that no world-wide high frequency broadcasting plan meeting Cuba's requirements has been produced;
- b) that the radiotelephone coast station assignment plan has not solved the problems which already exist;
- c) that the frequency registration procedure does not meet the needs of the developing countries, such as Cuba;
- d) that changes have been made in the allotments to services in the Frequency Allocation Table of the Atlantic City Radio Regulations between 27.5 Mc/s and 10 500 Mc/s, without taking into consideration the services already using these bands in Cuba, and overlooking the prior rights these services should enjoy;

Cuba makes the following formal reservations :

1. With respect to Article 3 of the Radio Regulations : Cuba will use such frequencies as may be required by its high frequency broadcasting and coast radiotelephone station services between 4 000 and 27 500 kc/s whenever such services cannot be operated under the appropriate plans.
  2. With respect to the changes made by this Conference in the Frequency Allocation Table between 27.5 Mc/s and 10 500 Mc/s and the relevant footnotes : only by prior agreement with the Administrations concerned will Cuba be able to consider their implementation.
-

**IX**    FOR SPAIN:

In signing the Radio Regulations (Geneva, 1959), the Delegation of Spain makes the following reservations:

1.        The Delegation of Spain serves its Administration's right not to accept any obligation entailed by the Radio Regulations with regard to Spanish stations which are working, or may work, in the bands 150-255 kc/s and 415-1 605 kc/s, in so far as the regulations for these bands are based on the plans adopted by the European Regional Conferences (Copenhagen, 1948).
2.        The Delegation of Spain also reserves its Administration's right to continue using the frequencies at present assigned to Spanish ship stations which are working, or may work, in the band 1 605-2 850 kc/s, in so far as satisfactory agreements can be reached with all countries concerned.

X. FOR GHANA

The Ghana Delegation declares that it reserves the right of the Ghana Government to take any action it deems necessary to safeguard its interest should Members or Associate Members in any way fail to comply with the requirements of the Radio Regulations of the Administrative Radio Conference (Geneva, 1959) or should reservations by other countries jeopardize its telecommunication services.

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XI. FOR THE REPUBLIC OF INDIA:

The Delegation of the Republic of India sees with satisfaction that, by and large, the decisions of this Conference will further the aims and objects of the I.T.U. However, it notes with concern the complexity of the problems of Radio Spectrum utilization in general and utilization of the High Frequency portion in particular. The India Delegation continues to believe that a planned approach to a rational use of the spectrum is the only logical means to realise an enduring solution for the existing problems of frequency availability. The Indian Administration will do its best to implement and follow the decisions of this Conference to the furthest possible extent consistent with the necessity to maintain and promote the Telecommunication services in the interest of national development and progress as well as of international relations.

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XII. FOR THE REPUBLIC OF INDONESIA:

Due to the fact that Irian Barat (Western New Guinea) constitutionally is an integrated part of the Republic of Indonesia, the Indonesian Delegation to the Plenipotentiary Conference and the Administrative Radio Conference - Geneva 1959 - formally declares that its signature to this Convention and to the Radio Regulations in no way implies the acceptance of the mentioning of Irian Barat (New Guinea) preceded by the word "Netherlands" in documents of the Union and the Radio Regulations (annexes and/or appendices).

XIII. FOR IRAN

In signing the Radio Regulations (Geneva, 1959), the Delegation of Iran makes the following reservations:

1. The Delegation of Iran reserves its Administration's right to accept no obligation entailed by the future Regulations in connection with the procedure for notification and registration of the frequencies assigned to Iranian broadcasting stations which are operating, or may operate, in the band 535 - 1 605 kc/s.
2. The Delegation of Iran reserves its Administration's right not to accept the new procedure for notification and registration of frequencies from the high-frequency broadcasting exclusive bands, should such a procedure prove inadequate to meet Iran's essential needs.

XIV. FOR THE HASHEMITE KINGDOM OF JORDAN AND THE UNITED ARAB REPUBLIC:

recognising

that the only real solution of the problem of high frequency broadcasting is by means of an internationally agreed broadcasting plan

and considering

- 1) that the frequency management procedure outlined in the Article 11a of this regulation has not been accepted by all the administrations,
- 2) that this procedure does not solve the problem of a large number of broadcasting stations operating out of band;
- 3) that this procedure does not adequately cover the needs of the new and developing countries, especially those countries having insufficient listings in the radio frequency register;
- 4) that article 11 of this regulation gives priority to the assignments of medium wave broadcasting frequencies of the Copenhagen Plan and we did reserve our position to that plan in due time.

In case this procedure (regulation) fails to satisfy the essential requirements of high frequency and medium frequency broadcastings, these countries reserves the right to take all the necessary measures to ensure the fulfilment of these requirements. However, in so doing, Hashemite Kingdom of Jordan and the United Arab Republic will endeavour to avoid causing harmful interference to the authorised services of other countries. Furthermore, Hashemite Kingdom of Jordan and United Arab Republic reserves its position on the resolution No. for the band 7 000 Kc/s to 7 100 Kc/s regarding the out of band broadcasting.

16 December 1959.

XV. FOR MEXICO :

The Chairman,  
International Administrative  
Radio Conference.

Item : "1"

Sir,

I would ask you to have the following reservation, which I make on behalf of the Government of my country, included in the Final Acts of this Conference; it is based on a statement made at the Fourteenth Plenary Meeting on 6 December last (see the Minutes, Document No. 821, page 6) :

"The Government of Mexico reserves the right to assign to its broadcasting stations in the band 525-535 kc/s power to be determined by purely technical and practical considerations with a view to protecting the services of stations sharing this band."

(signed) :  
Lazaro Barajas Gutiérrez.

16 December 1959.

XVI. FOR MEXICO :

The Chairman  
International Administrative  
Radio Conference.

Item : "1a"

Sir,

Should any decisions taken by the Conference after the time-limit set for handing-in of statements and reservations render nugatory or inadequate the reservation made by my Government in my letter of today marked "1", I would ask you to arrange for the following reservation to be included in the Final Acts, instead of the reservation marked "1". This reservation was the one it was originally planned to include if my Delegation's campaign to include a note in the corresponding part of the Frequency Allocation Table, which would ensure the operation of Mexican broadcasting stations in the band 525-535 kc/s proved successful :

"The Mexican Government reserves the right to operate broadcasting stations in the band 525-535 kc/s with such powers as may be derived from purely technical and practical considerations, with a view to ensuring proper protection for the services of the stations operating in these bands".

(Signed) :

Lazaro Barajas Gutiérrez.

16 December, 1959

XVII FOR MEXICO:

Mr. Charles J. Acton,  
Chairman,  
International Administrative  
Radio Conference

Item: 2

Sir,

In accordance with the statement I made on Friday, 11 December, at the twenty-second Plenary Meeting, when the seventeenth series of blue texts was being considered (draft Article 11A for inclusion in the new Radio Regulations), I should be glad if you would arrange for inclusion of the following reservation in the Final Acts of the Conference:

"Should the procedure adopted by this Conference for the long-term integration of a high-frequency broadcasting plan not give the results desired by the Government of Mexico, i.e., in the sense of not giving it adequate frequencies for the development of its national broadcasting services and the creation of its international broadcasting services, in such a manner as to ensure reasonably satisfactory reception throughout their hours of operation, the Mexican Government reserves the right to proceed as it may see fit until such time as a broadcasting plan meeting these desiderata, and duly observed by the countries concerned is put into effect, as far as assignments for Mexico are concerned."

(Signed) :

Lazaro Barajas Gutiérrez

XVIII. FOR PAKISTAN

Recognising,

that the only real solution of the problem of the High Frequency Broadcasting is by means of an internationally agreed Broadcasting Plan;

and considering,

1. that the frequency management procedure outlined in Article 11a of these regulations has not been accepted by all the frequency users,
2. that this procedure does not solve the problem of a large number of out of band stations which are already in operation,
3. that this procedure does not adequately cover the needs of the countries not having sufficient listings in the Radio Frequency Register;

the Delegation of Pakistan has accepted this procedure only on a trial basis. In case this procedure fails to provide for the essential Broadcasting needs of Pakistan, this Delegation reserves the right to take all necessary measures to ensure the fulfilment of these needs. In so doing Pakistan will however endeavour to avoid harmful interference to the radio services of other administrations.

The Delegation of Pakistan is not satisfied with the position of allocations in band 7 - 7.3 Mc/s particularly and therefore further reserves its position on the resolution No. in these regulations regarding the out of band broadcasting. (Page 33 of 2nd series - Blue Documents).

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XIX FROM PORTUGAL

The Portugues Delegation,

Considering:

- a) That Portugal, although a signatory to the European Broadcasting Convention (Copenhagen, 1948) has not so far ratified it and is therefore not bound by the provisions either of that Convention or the Plan annexed thereto, and does not recognize it from the legal standpoint;
- b) The reservation made by Porgual with respect to that Convention set out in the Protocol annexed to the Convention;
- c) That the reasons underlying that reservation still hold good or have increased as a result of the discrepancy between the present utilization of the 525 - 1 605 kc/s band and that provided for in the Plan;
- d) The situation deriving from the application of Article 9 of the Radio Regulations (Geneva, 1959) with respect to the broadcasting stations in the above band and the reservations made in that connection by other countries,
  - Reserves for its country the right to adopt any measures it may deem necessary, including any relevant restrictions in accepting the Regulations, so as to ensure a satisfactory quality for its domestic broadcasting service in the 525 - 1 605 kc/s band, binding itself only to the extent of affording the stations operating in the same or in adjacent channels a degree of protection not lower than the minimum protection given at the present time to other stations, when a new assignment is made or an existing assignment is modified.



XX. FOR THE FEDERAL REPUBLIC OF GERMANY

The Administration of the Federal Republic of Germany, in signing the Final Acts of this Conference, declares that, with regard to the entries in the Master Radio Frequency Record in column 2a of assignments in accordance with the European Broadcasting Agreement Copenhagen, 1948, it maintains the position as expressed in the letter of the President of the Federal Republic of Germany dated 31 March, 1952 and published by the Secretary-General in Circular-Letter D 1564/TT dated 29 April, 1952.

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XXI. FOR THE KINGDOM OF MOROCCO AND THE TUNISIAN REPUBLIC:

In view of the refusal by the majority of the countries in the European Area to consider an early review of the plan annexed to the Copenhagen Convention for the European Broadcasting Area, the Delegations of Tunisia and the Kingdom of Morocco repeat the reservations mentioned in the Protocol annexed to the Copenhagen Convention and reserve the right to use the bands 150 - 285 kc/s and 525 - 1 605 kc/s for their national services, in derogation from the provisions of these Regulations.

The Delegation of the Kingdom of Morocco makes especial reference to the fact that a large part of Morocco was not included in the Copenhagen Plan.

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XXII. FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND:

Sir,

In my capacity as delegate of the United Kingdom I have the honour to inform you that I do not accept the statement of the leader of the Argentine Delegation contained in his letter to you of 9 December, 1959, in so far as this statement disputes the sovereignty of Her Majesty's Government in the United Kingdom over the Falkland Islands and the Falkland Islands Dependencies. Her Majesty's Government have no doubt as to their sovereignty over the territory of the Falkland Islands and the Falkland Islands Dependencies and I wish formally to reserve the rights of Her Majesty's Government on this question. The Falkland Islands and the Falkland Islands Dependencies are and remain an integral part of the territories together making up the Member known as: Colonies, Protectorates, Overseas Territories and Territories under Mandate or Trusteeship of the United Kingdom of Great Britain and Northern Ireland, on behalf of which the United Kingdom of Great Britain and Northern Ireland acceded to the Convention on 16 November 1953.

I have the honour to be, Sir, your obedient Servant,

C. F. Booth.

XXIII. FOR TURKEY

In signing the Final Acts, the Delegation of Turkey declares that its Government :

a) Considering that the new Radio Regulations offer no equitable re-apportionment of broadcasting frequency assignments in the European Area, for the bands 150 - 285 kc/s and 525 - 1 605 kc/s, that the provisions of these Regulations tend to assume that the entries in the 1948 Copenhagen Plan are registered, which Plan was especially unfavourable to Turkey, and that no satisfactory decision has been taken about the convening of a European Area Conference to draw up more equitable plans;

Reserves its right to take such action as may be required to ensure proper broadcasting coverage of Turkish territory in the above-mentioned bands; and

b) In view of the fact that in certain countries the bands 68 - 73 Mc/s and 76 - 87.5 Mc/s have been additionally allocated to broadcasting;

Provisionally reserves its right to take such action as may be required to establish and develop fixed and mobile (except aeronautical mobile) services in these bands, while abiding by the provisions of the Convention and Radio Regulations.

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XXIV. FOR THE REPUBLIC OF VENEZUELA:

In signing the Additional Radio Regulations, the Delegation of Venezuela, on behalf of its Administration, declares that it cannot accept the minimum of fourteen words laid down in paragraph 2058, relative to press telegrams.

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XXV. FOR AUSTRIA, THE FEDERAL REPUBLIC OF GERMANY AND SWEDEN

The Administrations of Austria, of the Federal Republic of Germany and of Sweden, in signing the Final Acts of this Conference declare that, with regard to the additional allocation to the broadcasting service of the frequency bands 68 - 73 Mc/s and 76 - 87.5 Mc/s in which extensive and essential mobile services are being operated in their countries in conformity with the Table of Frequency Allocations, and to the probability of harmful interferences, they provisionally reserve the right to take all measures deemed necessary to maintain and develop their radio services now operating in these frequency bands observing the provisions of the Convention and of the Radio Regulations.

XXVI FOR THE UNION OF SOVIET SOCIALIST REPUBLICS: THE UKRAINIAN SOVIET  
SOCIALIST REPUBLIC: THE BIELORUSSIAN SOVIET SOCIALIST REPUBLIC:

In signing the Radio Regulations (Geneva, 1959), the Delegations of the Ministries of Communications of the Union of Soviet Socialist Republics, the Ukrainian Soviet Socialist Republic, and the Bielorussian Soviet Socialist Republic are authorized to declare:

1. The Table of Frequency Allocations prepared by the Administrative Radio Conference presents a series of grave shortcomings, as a result of which these three Administrations will have difficulty in applying it for the correct organization and operation of their radio media.
2. More than 25% of the frequency spectrum allocated has been, without good reason, allotted to the radiolocation service, of which a vague definition is given in the Radio Regulations, and the sharing of bands so entailed between the aeronautical radionavigation and radiolocation services will not be conducive to the safety of aircraft on international air routes.
3. The quantity of bands set aside for ionospheric-scatter communications is out of proportion to the possibilities opened up by this new type of communication.
4. The procedure for compilation of a world-wide list for broadcasting in the exclusive bands between 5 950 and 26 100 kc/s (Article 11a of the Radio Regulations) will not lead to an improvement in the state of affairs now obtaining in the field of high-frequency broadcasting, and postpones a solution of the problem of producing a plan for a considerable time to come.

5. These three Administrations do not consider that those provisions in the Radio Regulations extending the prerogatives of the I.F.R.B. in the regulation of the use made of frequencies by Members of the I.T.U. (Article 11 of the Radio Regulations, and elsewhere) are right.
6. They do not acknowledge any right on the part of the I.F.R.B. to give instructions about frequency usage on its own initiative, these being matters which come within the exclusive competence of the Administrations which have registered frequencies with the I.T.U.
7. The Administrations of the Union of Soviet Socialist Republics, the Ukrainian Soviet Socialist Republic, and the Bielorussian Soviet Socialist Republic reserve the right:
  - to use the band 315-405 kc/s in the areas east of 40° East for broadcasting as well;
  - to use the bands 415-490 kc/s and 525-850 kc/s, within the Union of Soviet Socialist Republics, for aeronautical radionavigation as well;
  - to use the bands 29.7-33 Mc/s, 38-44 Mc/s, 46-48 Mc/s, and 56.75-57.75 Mc/s within the Union of Soviet Socialist Republics, subject to no interference being caused to broadcasting;



- to take such action as may be required to ensure normal working conditions for its radio services in those bands in which the radiolocation service is accommodated;
- to use the broadcasting assignments at present existing in the Union of Soviet Socialist Republics within the bands 3 950-27 500 kc/s in accordance with the needs of the country.

XXVII PEOPLE'S REPUBLIC OF ALBANIA, PEOPLE'S REPUBLIC OF BURGARIA, HUNGARIAN  
PEOPLE'S REPUBLIC, PEOPLE'S REPUBLIC OF POLAND, ROUMANIAN PEOPLE'S  
REPUBLIC AND CZECHOSLOVAKIA

At the time of signing the Radio Regulations, Geneva, 1959, the Delegations of the above countries declare that:

1. In the Table of Frequency Allocations, a considerable portion of the bands has been allocated for no valid reason to the service known as "radiolocation". Moreover, even the definition of that "radiolocation" service is not endowed with the desirable degree of clarity

The above-mentioned Delegations cannot accept the inclusion of such a service in the Table of Frequency Allocations and reserve for their Administrations the right to use the frequency bands attributed to the "radiolocation" service in conformity with the requirements of their radio services.

2. Since in the Table of Frequency Allocations, the medium frequency bands attributed to the aeronautical navigation service are insufficient, the above-mentioned Delegations reserve for their Administrations the right to use additionally in the territories of their countries, the 415 - 490 kc/s for that service.

3. The clauses of the Radio Regulations designed to extend the authority of the I.F.R.B. in managing the utilization of the frequency spectrum, and in particular, the examination of the utilization of the radio spectrum on the initiative of the I.F.R.B. (Article 11 and many others) are in contradiction with the sovereign rights of Administrations. The above Delegations reserve the right for their Administrations to accept

or not to accept these clauses.

4. In the opinion of the above-mentioned Delegations, the procedure for establishing a time schedule for HF broadcasting service transmissions in the bands between 5,950 and 26 100 kc/s exclusively allocated thereto (Article 11 a of the Radio Regulations) is experimental in character and has the effect of merely putting off indefinitely the question of establishing a Plan for these bands. The procedure has many drawbacks which cast doubt on the results of its application in practice. Therefore, the above-mentioned Delegations reserve for their Administrations the right not to apply that procedure.

5. Since important amendments have been incorporated in the Radio Regulations without reference to the interest of all countries, the above-mentioned Delegations reserve for their Governments the right to present, at a later date, any additional reservations they may deem necessary with regard to the Radio Regulations and all its Annexes, before final ratification by their countries.

XXVIII. FOR AUSTRIA, BELGIUM, DENMARK, FRANCE, GREECE, NORWAY, KINGDOM OF THE  
NETHERLANDS, THE FEDERAL REPUBLIC OF GERMANY, SWEDEN, SWITZERLAND and TURKEY

In signing the Final Acts of this Conference, the above-mentioned Delegations declare that, with regard to the additional allocation to the aeronautical radionavigation service of the frequency band 645 - 960 Mc/s in which broadcasting stations are going to be established in their countries in conformity with the Table of Frequency Allocations and future broadcasting agreements and associated assignment plans, they are unable to ensure protection of the aeronautical radionavigation service.

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**ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959**

**Document No. 886-E  
16 December, 1959**

**SERIES G**

**PLENARY MEETING**

The Editorial Committee, after having examined the documents mentioned hereunder, submits the attached texts for the approval of the Plenary Meeting.

**SUMMARY**

| Blue Document No.  | Series No.  | Pages   | Former Article             | New Article                | Pages  | Remarks   |
|--|---|---|----------------------------|----------------------------|--|---|
| 573<br>573<br>856<br>747<br>747<br>861   | 2<br>2<br>22<br>13<br>13<br>23  | 2-08<br>2-09<br>22-01<br>13-02<br>13-04<br>23-01  | 3<br>4<br>5<br>7<br>8<br>9 | 3<br>4<br>5<br>6<br>6<br>7 | G-01<br>G-02<br>G-03<br>G-10<br>G-10<br>G-11   | Chap. II  |
| 573<br>843<br>843<br>803<br>573  | 2<br>21<br>21<br>18<br>2  | 2-13<br>21-17<br>21-04<br>18-13<br>2-14   | 21<br>22<br>19<br>20<br>23 | 17<br>18<br>19<br>20<br>21 | G-22<br>G-22<br>G-24<br>G-36<br>G-42   | Chap. V<br><br>Pages 21-11 to 21-13<br>replaced by 21bis-02 to 21bis-04 |
| 861  | 23  | 23-12   | 47                         | 45                         | G-44   | Chap. XI  |
| Recommendations  |   |   |                            |                            |  |   |
| 747<br>822<br>861<br>792<br>663<br>871<br>747<br>861<br>822<br>822<br>822<br>861<br>822<br>747<br>822<br>861<br>747<br>803<br>573<br>774 | 13<br>20<br>23<br>16<br>6<br>21bis<br>13<br>23<br>20<br>20<br>20<br>23<br>20<br>13<br>20<br>23<br>13<br>18<br>2<br>23 | 13-31<br>20-07<br>23-28<br>16-01<br>6-01<br>21bis-01<br>13-24<br>23-15<br>20-18<br>20-17<br>20-11<br>23-29<br>20-09<br>13-23<br>20-04<br>23-16<br>13-28<br>18-22<br>2-29<br>23-26 |                            |                            | G-45<br>G-46<br>G-47<br>G-47<br>G-47<br>G-76<br>G-77<br>G-78<br>G-79<br>G-80<br>G-81<br>G-84<br>G-84<br>G-86<br>G-87<br>G-89<br>G-90<br>G-91<br>G-92<br>G-94 |   |



| Former reference  | Source                         | New reference   |
|---|--------------------------------|---|
| <div> Chap.: III<br/> Art. : 3 and 4<br/> Nos. : 86-96 </div> | Committee: 4<br>Doc. No. : 361 | <div> Chap.: II<br/> Art. : 3 and 4<br/> Nos. : 3-01—3-05<br/> and 4-01—4-07 </div> |

## CHAPTER II

### Frequencies

#### ARTICLE 3

##### General Rules for the Assignment and Use of Frequencies

- 86                    **3-01** § 1.        The Members and Associate Members of the Union agree that in assigning frequencies to stations which are capable of causing harmful interference to the services rendered by the stations of another country, such assignments are to be made in accordance with the table of frequency allocations and other provisions of these Regulations.
- 87        MOD            **3-02** § 2.        Any new assignment or any change of frequency or other basic characteristic of an existing assignment (see Appendix 1), shall be made in such a way as to avoid causing harmful interference to services rendered by stations using frequencies assigned in accordance with the Table of frequency allocations in this Chapter and the other provisions of these Regulations, the characteristics of which assignments are recorded in the Master International Frequency Register.
- 88                    **3-03** § 3.        Administrations of the Members and Associate Members of the Union shall not assign to a station any frequency in derogation of either the table of frequency allocations given in this chapter or the other provisions of these Regulations, except on the express condition that harmful interference shall not be caused to services carried on by stations operating in accordance with the provisions of the Convention and of these Regulations.
- 89        MOD            **3-04** § 4.        The frequency assigned to a station of a given service shall be separated from the limits of the band allocated to this service in such a way that, taking account of the frequency band assigned to

a station, no harmful interference is caused to services to which frequency bands immediately adjoining are allocated.

90

- 3-05** § 5. Where a band of frequencies is allocated to different services in adjacent Regions or sub-Regions, the basic principle is the equality of right to operate. Accordingly, the station of each service in one Region or sub-Region must operate so as not to cause harmful interference with services in the other regions or sub-regions.

#### ARTICLE 4

##### Special Arrangements

91

- 4-01** § 1. Two or more Members or Associate Members of the Union may, in accordance with Article 41 of the Convention, conclude special arrangements regarding the sub-allocation of bands of frequencies to the appropriate services of the participating countries.

92

- 4-02** § 2. Two or more Members or Associate Members of the Union may, in accordance with Article 43 of the Convention, conclude special arrangements, as a result of a Conference to which all those Members and Associate Members of the Union affected have been invited, regarding the assignment of frequencies to those of their stations which participate in one or more specific services within the frequency bands allocated to these services by Article 5, either below 5 060 kc/s or above 27 500 kc/s but not between those limits.

93

- 4-03** § 3. The Members and Associate Members of the Union may, in accordance with Article 43 of the Convention, conclude, on a world-wide basis, and as a result of a Conference to which all Members and Associate Members of the Union have been invited, special arrangements concerning the assignment of frequencies to those of their stations participating in a specific service, on condition that such assignments are within the frequency bands allocated exclusively to that service in Article 5.

94

**4-04** § 4. Special arrangements concluded in accordance with the provisions of Nos. 4-01 to 4-03 shall not be in conflict with any of the provisions of these Regulations.

95

**4-05** § 5. The Secretary General shall be informed, in advance, of any Conference to be convened to conclude such an arrangement; he shall also be informed of the terms of the arrangement when concluded; and he shall inform the Members and Associate Members of the Union of the existence of such arrangements.

96

**4-06** § 6. In accordance with the provisions of Article 8 the International Frequency Registration Board may be invited to send representatives to participate in an advisory capacity in the preparation of these arrangements and in the proceedings of the conferences, it being recognized that in the majority of cases such participation is desirable.

96a ADD

**4-07** § 7. If, besides the action they may take in accordance with No. 4-02, two or more Members or Associate Members of the Union co-ordinate the use of individual frequencies in any of the frequency bands covered by Article 5 before notifying the frequency assignments concerned, they shall in all appropriate cases inform the Board of such co-ordination.

## ARTICLE 5

### Frequency Allocations 10 kc/s to 40 Gc/s

#### Section I. Regions and Areas

100

**5-01** § 1. For the allocation of frequencies the world has been subdivided into three Regions <sup>1</sup> (see Appendix 24).

100.1

**5-01.1** <sup>1</sup> It should be noted that where the words "regions" or "regional" are without a capital "R" in these Regulations they do not relate to the three Regions here defined for purposes of frequency allocation.



101

**5-02 Region 1 :**

Region 1 includes the area limited on the East by line A (lines A, B and C are defined below) and on the West by line B, excluding any of the territory of Iran which lies between these limits. It also includes that part of the territory of Turkey and the Union of Soviet Socialist Republics lying outside of these limits, the territory of the Mongolian Peoples' Republic, and the area to the North of the U.S.S.R. which lies between lines A and C.

102

**5-03 Region 2 :**

Region 2 includes the area limited on the East by line B and on the West by line C.

103

**5-04 Region 3 :**

Region 3 includes the area limited on the East by line C and on the West by line A, except the territories of the Mongolian Peoples' Republic, Turkey, the territory of the U.S.S.R. and the area to the North of the U.S.S.R. It also includes that part of the territory of Iran lying outside of those limits.

103a

**5-05** The lines A, B, and C are defined as follows :

104

**5-06 Line A :**

Line A extends from the North Pole along meridian 40° East of Greenwich to parallel 40° North ; thence by great circle arc to the intersection of meridian 60° East and the Tropic of Cancer ; thence along the meridian 60° East to the South Pole.

105

**5-07 Line B :**

Line B extends from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North ; thence by great circle arc to the intersection of meridian 50° West and parallel 40° North ; thence by great circle arc to the intersection of meridian 20° West and parallel 10° South ; thence along meridian 20° West to the South Pole.

106

**5-08** *Line C :*

Line C extends from the North Pole by great circle arc to the intersection of parallel  $65^{\circ} 30'$  North with the international boundary in Behring Strait ; thence by great circle arc to the intersection of meridian  $165^{\circ}$  East of Greenwich and parallel  $50^{\circ}$  North ; thence by great circle arc to the intersection of meridian  $170^{\circ}$  West and parallel  $10^{\circ}$  North ; thence along parallel  $10^{\circ}$  North to its intersection with meridian  $120^{\circ}$  West ; thence along meridian  $120^{\circ}$  West to the South Pole.

107

**5-09** § 2. The "European Broadcasting Area" is bounded on the West by the Western boundary of Region 1, on the East by the meridian  $40^{\circ}$  East of Greenwich and on the South by the parallel  $30^{\circ}$  North so as to include the western part of the U.S.S.R. and the territories bordering the Mediterranean, with the exception of the parts of Arabia and Saudi-Arabia included in this sector. In addition, Iraq is included in the European Broadcasting Area.

107a

**5-10** The "European Maritime Area" is bounded on the North by a line extending along parallel  $72^{\circ}$  North from its intersection with meridian  $55^{\circ}$  East to its intersection with meridian  $5^{\circ}$  West, then along meridian  $5^{\circ}$  West to its intersection with parallel  $67^{\circ}$  North thence along parallel  $67^{\circ}$  North to its intersection with meridian  $30^{\circ}$  West ; on the West by a line extending along meridian  $30^{\circ}$  West to its intersection with parallel  $30^{\circ}$  North ; on the South by a line extending along parallel  $30^{\circ}$  North to its intersection with meridian  $43^{\circ}$  East ; on the East by a line extending along meridian  $43^{\circ}$  East to its intersection with parallel  $60^{\circ}$  North, thence along parallel  $60^{\circ}$  North to its intersection with meridian  $55^{\circ}$  East and thence along meridian  $55^{\circ}$  East to its intersection with parallel  $72^{\circ}$  North.

107b

**5-11** The "Tropical Zone" (see Appendix 24) is defined as :  
a) the whole of that area in Region 2 between the Tropics of Cancer and Capricorn ;

b) the whole of that area in Regions 1 and 3 contained between the parallels 30° North and 35° South with the addition of :

1) the area contained between the meridian 40° East and 80° East of Greenwich and the parallels 30° North and 40° North ;

2) that part of Libya North of parallel 30° North.

107c

**5-12** In Region 2, the Tropical Zone may be extended to parallel 33° North, subject to appropriate special arrangements between the countries concerned in that Region.

## Section II. Categories of Services and Allocations

### *Primary Services, Permitted Services and Secondary Services*

97 MOD

**5-13** Where, in a box of the Table in Section IV of this Article, a band is indicated as allocated to more than one service, either on a world-wide or Regional basis, such services are listed in the following order :

a) services, the names of which are printed in "small capitals" (example: **FIXED**) ; these services are called "primary" services ;

b) services, the names of which are printed in "grotesque light" (example: Radiolocation) ; these are "permitted" services (see No. 5-14) ;

c) services, the names of which are printed in "italics" (example: *Mobile*) ; these are "secondary" services (see No. 5-15).

97a MOD

**5-14** Permitted and primary services have equal rights, except that, in the preparation of frequency plans, the primary service, as compared with the permitted service, shall have prior choice of frequencies.

97b ADD

5-15

Stations of a secondary service :

- a) shall not cause harmful interference to stations of primary or permitted services to which frequencies are already assigned or to which frequencies may be assigned at a later date ;
- b) cannot claim protection from harmful interference from stations of a primary or permitted service to which frequencies are already assigned or may be assigned at a later date ;
- c) can claim protection, however, from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.

97c ADD

5-16

Where a band is indicated in a footnote to the Table as allocated to a service "on a secondary basis" in an area smaller than a Region, or in a particular country, this is a secondary service (see No. 5-15).

97d

5-17

Where a band is indicated in a footnote to the Table as allocated to a service "on a primary basis", or "on a permitted basis" in an area smaller than a Region, or in a particular country, this is a primary service or a permitted service only in that area or country.

#### *Additional services*

97e

5-18

Where a band is indicated in a footnote to the Table as "also" allocated to a service in an area smaller than a Region, or in a particular country, this is an "additional" service, i.e. a service which is added in this area or in this country to the service or services which are indicated in the Table (see No. 5-19).

97f

5-19

If the footnote does not include any restriction on an additional service apart from the restriction to operate only in a particular area or country, stations of this service shall have equality

of right to operate with stations of the other service or services, the names of which are printed in "small capitals" in the Table.

97g

- 5-20** If restrictions are imposed on an additional service in addition to the restriction to operate only in a particular area or country, this is indicated in the footnote to the Table.

*Alternative allocations*

97h

- 5-21** Where a band is indicated in a footnote to the Table as allocated to one or more services in an area smaller than a Region, or in a particular country, this is an "alternative" allocation, i.e. an allocation which replaces, in this area or in this country, the allocation indicated in the Table (see No. 5-22).

97i

- 5-22** If the footnote does not include any restriction on stations of the service or services concerned, apart from the restriction to operate only in a particular area or country, these stations shall have an equality of right to operate with stations of the service or services, the names of which are printed in "small capitals" in the Table, and to which the band is allocated in other areas or countries.

97j

- 5-23** If restrictions are imposed on stations of a service to which an alternative allocation is made, in addition to the restriction to operate only in a particular country or area, this is indicated in the footnote.

*Miscellaneous Provisions*

97k

- 5-24** Where it is indicated in these Regulations that a service may operate in a specific frequency band subject to not causing harmful interference, this means also that this service cannot claim protection from harmful interference caused by other services to which the band is allocated under Chapter II of these Regulations.

- 97l                    **5-25**                    Except if otherwise specified in a footnote, the term "fixed service", where appearing in Section IV of this Article, does not include systems using ionospheric scatter propagation.

### **Section III. Description of the Table of Frequency Allocations**

- 97n                    **5-26**                    The heading of the Table in Section IV of this Article includes three columns, each of which corresponds to one of the Regions (see No. 5-01). Where an allocation occupies the whole of the width of the Table or only one or two of the three columns, this is a world-wide allocation or a Regional allocation, respectively.
- 97o                    **5-27**                    The frequency band referred to in each allocation is indicated in bold type in the left hand top corner of the part of the Table concerned.
- 97p                    **5-28**                    Within each of the categories specified in No. 5-13, services are listed in alphabetical order according to the French language. The order of listing does not indicate relative priority within each category.
- 97q                    **5-29**                    The footnote references which appear in the Table below the allocated service or services, apply to the whole of the allocation concerned.
- 97r      ADD                    **5-30**                    The footnote references which appear to the right of the name of a service are applicable only to that particular service.
- 97s      ADD                    **5-31**                    In certain cases, the names of countries appearing in the footnotes have been simplified in order to shorten the text.

### **Section IV. Table of Frequency Allocations — 10 kc/s to 40 Gc/s**

## Former reference

## Source

## New reference

Chap.: III  
Art.: 7  
Nos.: 234-239

Committee: 4  
Doc. No. : 631

Chap.: II  
Art.: 6  
Nos.: 6-01—6-07

## ARTICLE 6

## Special Rules for the Assignment and Use of Frequencies

- 234      **6-01** § 1. (1) Members and Associate Members of the Union recognize that among frequencies which have long-distance propagation characteristics, those between 5 000 and 30 000 kc/s are particularly useful for long-distance communications; they agree to make every possible effort to reserve this band for such communications. Whenever frequencies in this band are used for short or medium-distance communications, the minimum power necessary shall be employed.
- 235      **6-02**      (2) To reduce requirements for frequencies in the bands between 5 000 and 30 000 kc/s and thus to prevent harmful interference to long-distance radiocommunications, administrations are encouraged to use, whenever practicable, any other possible means of communication.
- 236      **6-03** § 2. (1) When special circumstances make it indispensable to do so, an administration may, as an exception to the normal methods of working authorized by these Regulations, have recourse to the special methods of working enumerated below, on the sole condition that the characteristics of the stations still conform to those inserted in the Master International Frequency Register :
- a) a fixed station may, on a secondary basis, transmit to mobile stations on its normal frequencies;
  - b) a land station may communicate, on a secondary basis, with fixed stations or other land stations of the same category.
- 236a      **6-04**      (2) However, in circumstances involving the safety of life, or the safety of a ship or aircraft, a land station may communicate with fixed stations or land stations of another category.

| Former reference  | Source   | New reference   |
|---|--|---|
| <div> Chap.: III<br/> Art.: 9<br/> Nos.: 242-283 </div> | Committee: 4, 5, 6, 7<br>Doc. Nos.: 593, 595,<br>631, 654, 685<br>and 838  | <div> Chap.: II<br/> Art.: 7<br/> Nos.: 7-01 to 7-49 </div> |
| 237.  | <b>6-05</b> § 3. Any administration may assign a frequency in a band allocated to the fixed service to a station authorized to transmit, unilaterally, from one specified fixed point to one or more other specified fixed points, provided that such transmissions are not intended to be received directly by the general public.        |   |
| 238   | <b>6-06</b> § 4. Any mobile station using an emission which satisfies the frequency tolerance applicable to the coast station with which it is communicating may transmit on the same frequency as the coast station on condition that the latter requests such transmission and that no harmful interference is caused to other stations. |   |
| 239   | <b>6-07</b> § 5. In certain cases provided for in Articles 32 and 35, aircraft stations are authorized to use frequencies in the bands allocated to the maritime mobile service for the purpose of communicating with stations of that service (see No. 27-04).  |   |
| ADD   | <b>6-08</b> § 6. In Region I stations which use frequencies in the band 1 625-1 670 kc/s allocated for low-power telephony services, shall, in principle, employ a power which is as low as possible. Such power shall not exceed 20 watts.  |   |
| 240   | <b>6-09</b> § 7. Any emission capable of causing harmful interference to distress, alarm, urgency or safety signals on the international distress frequencies of 500 kc/s or 2 182 kc/s is prohibited (see Nos. 140-148, 32-18 and 35-07).   |   |

## ARTICLE 7

## Special Rules Relating to Particular Services

## Section I. Broadcasting Service

242

*General*

242a

- 7-01** § 1. (1) The establishment and use of broadcasting stations (sound broadcasting and television broadcasting stations) on board ships, aircraft or any other floating or airborne objects outside national territories is prohibited.



243

- 7-02** (2) In principle, except in the frequency band 3 900-4 000 kc/s, broadcasting stations using frequencies below 5 060 kc/s or above 41 Mc/s shall not employ power exceeding that necessary to maintain economically an effective national service of good quality within the frontiers of the country concerned.

250

*Broadcasting in the Tropical Zone*

251

- 7-03** § 2 (1) In these Regulations, the expression "broadcasting in the Tropical Zone" indicates a type of broadcasting for internal national use in countries in the zone defined in Nos. 5-11 and 5-12, where it may be shown that because of the difficulty of high atmospheric noise level and propagation it is not possible to provide economically a more satisfactory service by using low, medium, or very high frequencies.

244

- 7-04** (2) The use by the broadcasting service of the bands listed below is restricted to the Tropical Zone :

2 300 - 2 498 kc/s (Region 1)  
 2 300 - 2 495 kc/s (Regions 2 and 3)  
 3 200 - 3 400 kc/s (All Regions)  
 4 750 - 4 995 kc/s (All Regions)  
 5 005 - 5 060 kc/s (All Regions)

253

- 7-05** (3) Within the Tropical Zone, the broadcasting service has priority over the other services with which it shares the bands listed in No. 7-04.

253a

- 7-06** (4) However, in that part of Libya north of parallel 30° North the broadcasting service in the bands listed in No. 7-04 has equal rights to operate with all services in the Tropical Zone with which it shares these bands.

254

- 7-07** (5) The broadcasting service operating inside the Tropical Zone, and other services operating outside the Zone, are subject to the provisions of No. 3-05.

## Section II. Aeronautical Mobile Service

- 256      **7-08** § 3. Frequencies in any band allocated to the aeronautical mobile (R) service are reserved for communications between any aircraft and those aeronautical stations primarily concerned with the safety and regularity of flight along national or international civil air routes.
- 257      **7-09** § 4. Frequencies in any band allocated to the aeronautical mobile (OR) service are reserved for communications between any aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.
- 257a      **7-10** § 5. Frequencies in the bands allocated to the aeronautical mobile service between 2 850 and 18 030 kc/s (see Article 5) shall be assigned in conformity with the provisions of Appendix 26 and the other relevant provisions of these Regulations.
- 255      **7-11** § 6. Administrations shall not permit public correspondence in the frequency bands allocated exclusively to the aeronautical mobile service, unless permitted by special aeronautical regulations adopted by a Conference of the Union to which all interested Members and Associate Members of the Union are invited. Such regulations shall recognize the absolute priority of safety and control messages.

## Section III. Aeronautical Radiobeacons

- 261a      **7-12** § 7. (1) The assignment of frequencies to aeronautical radio-beacons operating in the bands between 160 and 415 kc/s shall be based on a protection ratio against interference of at least 10db for each beacon throughout its service area.
- 261b      **7-13**      (2) It is agreed that, to provide the protection ratio required, the radiated power is to be kept to the value necessary to give the desired field strength at the service range.

- 261c                    **7-14**        (3) The daylight service range of radiobeacons referred to in No. 7-12 shall be based on the following field strengths ;
- 261d                    **7-15**        (4) *Regions 1 and 2*
- 70 microvolts per metre for radiobeacons north of 30°N.
  - 120 microvolts per metre for radiobeacons between 30°N and 30°S.
  - 70 microvolts per metre for radiobeacons south of 30°S.
- 261e                    **7-16**        (5) *Region 3*
- 70 microvolts per metre for radiobeacons north of 40°N.
  - 120 microvolts per metre for radiobeacons between 40°N and 50°S.
  - 70 microvolts per metre for radiobeacons south of 50°S.
- Section IV. Maritime Mobile Service**
- 262                    **7-17** § 8. (1) Except as provided in No. 6-06, ship stations authorized to work in the bands between 415 and 535 kc/s shall transmit on the frequencies indicated in Article 32 (see No. 32-29).
- 2620a                  **7-18** § 9.        In the band 405 - 415 kc/s in Region 1, no frequency is assigned to coast stations, in order to protect the frequency 410 kc/s which is designated for the maritime radionavigation service (radio direction-finding).
- 262a                    **7-19** § 10. (1) In the African Area of Region 1, in the bands 415 - 490 kc/s and 510 - 525 kc/s, the separation between adjacent frequencies used by coast stations is, as a general rule, 3 kc/s.

However, in order that the channels may coincide with those used in the European Area in these bands this spacing is reduced in certain cases.

262b

**7-20** (2) The separation between adjacent channels used respectively by coast stations and by ship stations is 4 kc/s.

262c MOD

**7-21** § 11. (1) In Region 1, frequencies assigned to stations of the maritime mobile service, operating in the bands between 1 605 and 3 800 kc/s (see Article 5) should, whenever possible, be in accordance with the following subdivision :

- 1 605 - 1 625 kc/s : Radio telegraphy exclusively.
- 1 625 - 1 670 kc/s : Low power radio telephony.
- 1 670 - 1 950 kc/s : Coast stations.
- 1 950 - 2 053 kc/s : Ship stations working to coast stations.
- 2 053 - 2 065 kc/s : Intership working.
- 2 065 - 2 170 kc/s : Ship stations working to coast stations.
- 2 170 - 2 194 kc/s : *Guard-band for the distress frequency 2 182 kc/s.*
- 2 194 - 2 440 kc/s : Intership working.
- 2 440 - 2 578 kc/s : Ship stations working to coast stations.
- 2 578 - 2 850 kc/s : Coast stations.
- 3 155 - 3 340 kc/s : Ship stations working to coast stations.
- 3 340 - 3 400 kc/s : Intership working.
- 3 500 - 3 600 kc/s : Intership working.
- 3 600 - 3 800 kc/s : Coast stations.

- 262d                    **7-22**        (2) In these bands, the frequencies assigned to the maritime mobile service are spaced, as far as possible by :
- 7 kc/s when two adjacent frequencies are used for radiotelephony ;
- 3 kc/s when two adjacent frequencies are used for radiotelegraphy ;
- 5 kc/s when one frequency is used for radiotelephony and the adjacent frequency is used for radiotelegraphy.
- 262e                    **7-23**        (3) However, in the case of intership bands, the spacing is reduced to 5 kc/s for adjacent frequencies used for radiotelephony.
- 262f    MOD            **7-24**        (4) In Region 3, the frequency 2 638 kc/s is used as an intership radiotelephony working frequency in addition to the specific frequencies prescribed for common use in certain services, and is protected by a guard-band between 2 634 and 2 642 kc/s.
- 263                    **7-25**    § 12. (1) The bands exclusively allocated to the maritime mobile service between 4 000 and 27 500 kc/s (see Articles 5, 32 and 35) are subdivided into the following categories :
- 264                    **7-26**        (a) *Ship stations, telephony*
- 4 063 - 4 133 kc/s
- 8 195 - 8 265 kc/s
- 12 330 - 12 400 kc/s
- 16 460 - 16 530 kc/s
- 22 000 - 22 070 kc/s
- 265                    **7-27**        (b) *Coast stations, telephony*
- 4 368 - 4 438 kc/s
- 8 745 - 8 815 kc/s
- 13 130 - 13 200 kc/s
- 17 290 - 17 360 kc/s
- 22 650 - 22 720 kc/s

|      |      |   |   |
|------|------|---|---|
| 265a | 7-28 | (c) <i>Ship stations</i> , telephony (single sideband only)                                 | 4 133 - 4 140 kc/s<br>4 200 - 6 211 kc/s<br>8 273 - 8 280 kc/s<br>12 407 - 12 421 kc/s<br>16 537 - 16 562 kc/s<br>22 078 - 22 100 kc/s                                      |
| 265b | 7-29 | (d) <i>Ship stations</i> , telephony (double sideband calling channel)                      | 8 265 - 8 273 kc/s<br>12 400 - 12 407 kc/s<br>16 530 - 16 537 kc/s<br>22 070 - 22 078 kc/s  |
| 265c | 7-30 | (e) <i>Ship stations</i> , wideband telegraphy, facsimile, and special transmission systems | 4 140 - 4 160 kc/s<br>6 211 - 6 240 kc/s<br>8 280 - 8 320 kc/s<br>12 421 - 12 471 kc/s<br>16 562 - 16 622 kc/s<br>22 100 - 22 148 kc/s                                      |
| 266  | 7-31 | (f) <i>Ship stations</i> , telegraphy   | 4 160 - 4 238 kc/s<br>6 240 - 6 357 kc/s<br>8 320 - 8 476 kc/s<br>12 471 - 12 714 kc/s<br>16 622 - 16 952 kc/s<br>22 148 - 22 400 kc/s<br>25 070 - 25 110 kc/s <sup>1</sup> |
| 267  | 7-32 | (g) <i>Coast stations</i> , telegraphy and facsimile  | 4 238 - 4 368 kc/s<br>6 357 - 6 525 kc/s<br>8 476 - 8 745 kc/s  |

266.1

731-1<sup>1</sup> The frequencies in the band 25 070 - 25 110 kc/s shall be used as working frequencies in addition to frequencies in the band 22 148 - 22 400 kc/s.

12 714 - 13 130 kc/s  
 16 952 - 17 290 kc/s  
 22 400 - 22 650 kc/s <sup>1</sup>

268

**7-33** (2) Within the bands listed in No. 7-31, the following bands are reserved exclusively for calling:

4 177 - 4 187 kc/s  
 6 265.5 - 6 280.5 kc/s  
 8 354 - 8 374 kc/s  
 12 531 - 12 561 kc/s  
 16 708 - 16 748 kc/s  
 22 220 - 22 270 kc/s

269

**7-34** (3) In Regions 2 and 3 the band 2 088.5 - 2 093.5 kc/s is reserved exclusively for calling (telegraphy only).

269a

**7-35** § 13. (1) Appendix 17 shows the two-way radiotelephone channels of the maritime mobile service in the frequency bands listed in Nos. 7-26 and 7-27.

269b

**7-36** (2) Appendix 25 contains the allotment plan for radio-telephone coast stations in the bands listed in No. 7-27. If necessary, an Extraordinary Administrative Radio Conference to which all the Members and Associate Members of the Union would be invited could be convened in accordance with the provisions of Article 7 of the Convention for the purpose of revising Appendix 25 and if required, Appendix 17, as well as other relevant provisions of these Regulations.

#### Section V. Maritime Radiobeacons

277a

**7-37** § 14. (1) The protection ratio required for maritime radiobeacons operating in the bands between 285 and 325 kc/s is based on the radiated power being kept to the value necessary to give the desired field strength at the service range.

267.1

**7-32.1** <sup>1</sup> Frequencies in the bands 25 010 - 25 070 kc/s, 25 110 - 25 600 kc/s, and 26 100 - 27 500 kc/s may be assigned to coast stations. They are then considered as frequencies additional to those in the band 22 400 - 22 650 kc/s.

- 277b                      **7-38**            (2) The daylight service range of the radiobeacons referred to in No. 7-37 shall be based on the following field strengths :
- 277c                      **7-39**            (3) *Region 1*
- 50 microvolts per metre for radiobeacons north of 43°N.
  - 75 microvolts per metre for radiobeacons between 43°N and 30°N.
  - 100 microvolts per metre for radiobeacons between 30°N and 30°S.
  - 75 microvolts per metre for radiobeacons between 30°S and 43°S.
  - 50 microvolts per metre for radiobeacons south of 43°S.
- 277d                      **7-40**            (4) *Region 2*
- 50 microvolts per metre for radiobeacons north of 40°N.
  - 75 microvolts per metre for radiobeacons between 43°N and 30°N.
  - 100 microvolts per metre for radiobeacons between 31°N and 30°S.
  - 75 microvolts per metre for radiobeacons between 30°S and 43°S.
  - 50 microvolts per metre for radiobeacons south of 43°S.
- 277e                      **7-41**            (5) *Region 3*
- 75 microvolts per metre for radiobeacons north of 40°N.
  - 100 microvolts per metre for radiobeacons between 40°N and 50°S.



— 75 microvolts per metre for radiobeacons south of 50°S.

- 277f                    **7-42**        (6) In Region 1, for maritime radiobeacons in these bands, the assignment of frequencies is based on a separation of 2.3 kc/s between adjacent channels used for class A2 emissions.
- 277g                    **7-43**        (7) In Region 1, for maritime radiobeacons, the depth of modulation should be at least 70 %.

## Section VI. Fixed Service

### *General*

- 277h                    **7-44** § 15. (1) Administrations are earnestly requested to discontinue, in the fixed service, the use of double sideband radiotelephone transmissions in the bands below 30 Mc/s, if possible as from January 1, 1970.
- 277i                    **7-45**        (2) Class F3 emissions are prohibited in the fixed service in the bands below 30 Mc/s.

### *Selection of Frequencies for the International Exchange of Police Information.*

- 279                    **7-46** § 16. (1) The frequencies necessary for the international exchange of information to assist in the apprehension of criminals shall be selected from the bands allocated to the fixed service, if necessary by special arrangement among interested administrations, in accordance with Article 43 of the Convention.
- 280                    **7-47**        (2) To obtain economy in the use of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

281

*Selection of Frequencies for the International Exchange  
of Synoptic Meteorological Information.*

282

**7-48** § 17. (1) The frequencies necessary for the international exchange of synoptic meteorological information shall be selected from the bands allocated to the fixed service if necessary by special arrangement among interested administrations, in accordance with Article 43 of the Convention.

283

**7-49** (2) To obtain economy in the use of frequencies, the International Frequency Registration Board should be consulted by the administrations concerned whenever such arrangements are under discussion on a regional or world-wide basis.

| Former reference                         | Source                         | New reference                                |
|--|--------------------------------|--|
| Chap.: IX<br>Art. : 21<br>Nos. : 485-487 | Committee: 7<br>Doc. No. : 448 | Chap. : V<br>Art. : 17<br>Nos. : 17-01—17-03 |
| Chap.: X<br>Art.: 22<br>Nos.: 488-492d   | Committee: 7<br>Doc. No.: 755  | Chap.: V<br>Art.: 18<br>Nos.: 18-01—18-10    |

## CHAPTER V

### ADMINISTRATIVE PROVISIONS FOR STATIONS

#### ARTICLE 17

##### Secrecy

- |     |              |  |
|-----|--------------|--|
| 485 | <b>17-01</b> | The administrations bind themselves to take the necessary measures to prohibit and prevent :   |
| 486 | <b>17-02</b> | a) the unauthorized interception of radiocommunications not intended for the general use of the public ;   |
| 487 | <b>17-03</b> | b) the divulgence of the contents, simple disclosure of the existence, publication or any use whatever, without authorization, of information of any nature whatever obtained by the interception of the radiocommunications mentioned in No. 17-02. |

#### ARTICLE 18

##### Licences

- |      |              |   |
|------|--------------|---|
| 488  | <b>18-01</b> | § 1. (1) No transmitting station may be established or operated by a private person or by any enterprise without a licence issued by the government of the country to which the station in question is subject. (However, see Nos. 18-02 and 18-08.)  |
| 488a | <b>18-02</b> | (2) However, the government of a country may conclude with the government of a neighbouring country a special agreement concerning one or several stations of its broadcasting service or of its land mobile services, operating on frequencies above 41 Mc/s, situated in the territory of the neighbouring country and intended to improve national coverage. This arrangement, which shall be compatible with the provisions of the present Regulations as well as of those regional agreements to which the countries concerned are |

signatories, may allow exceptions to the provisions of No. 18-01 and shall be communicated to the Secretary General in order that it may be brought to the notice of administrations for their information.

489

**18-03** (3) Mobile stations which are registered in a territory or group of territories which does not have full responsibility for its international relations may be considered, in so far as the issue of licences is concerned, as subject to the authority of that territory or group of territories.

490 MOD

**18-04 § 2.** The holder of a licence is required to preserve the secrecy of telecommunication, as provided in Article 34 of the Convention. Moreover, the licence must provide, specifically or by reference, that if the station includes a receiver, the interception of radiocommunication correspondence, other than that which the station is authorized to receive, is forbidden, and that in the case where such correspondence is involuntarily received, it shall not be reproduced, nor communicated to third parties, nor used for any purpose, and even its existence shall not be disclosed.

491

**18-05 § 3.** To facilitate the verification of licences issued to mobile stations, there shall be added, when necessary, to the text written in the national language, a translation of the text in a language widely used in international relations.

492

**18-06 § 4.** (1) The government which issues a licence to a mobile station shall mention therein in clear form the particulars of the station, including its name, call sign and public correspondence category, as well as the general characteristics of the installation.

492a

**18-07** (2) For land mobile stations a clause shall be included in the licence, specifically or by reference, under which the operation of these stations shall be forbidden in countries other than the country which has issued the licence, except as may be provided by special agreement between the governments of the countries concerned.

492b

**18-08 § 5.** (1) In the case of a new registration of a ship or aircraft in circumstances where delay is likely to occur in the issue of a licence by the country in which it will be registered, the administration of

| Former reference                           | Source                         | New reference                             |
|--|--------------------------------|---|
| Chap.: VII<br>Art. : 19<br>Nos. : 411a-445 | Committee: 7<br>Doc. No. : 758 | Chap.: V<br>Art.: 19<br>Nos.: 19-01—19-54 |

the country from which the mobile station wishes to make its voyage or flight may, at the request of the operating company, issue a certificate to the effect that the station complies with these Regulations. This certificate, drawn up in a form determined by the issuing administration, shall give the particulars mentioned in No. 18-06 and shall be valid only for the voyage or flight to the country in which the registration of the ship or aircraft will be effected, or for a period of three months, whichever is the lesser.

- 492c                    **18-09**        (2) The administration issuing the certificate shall inform the administration responsible for issuing the licence of the action taken.
- 492d                    **18-10**        (3) The holder of the certificate shall comply with the provisions of these Regulations applicable to licence-holders.

## ARTICLE 19

### Identification of Stations

#### Section I. General Provisions

- 411a                    **19-01** § 1. (1) Transmissions without identification or with false identification<sup>1</sup> are prohibited.
- 411b                    **19-02**        (2) However, the requirements of identification need not apply to survival craft stations when transmitting distress signals automatically.
- 427a    MOD            **19-03** § 2.     A station shall be identified either by a call sign or other recognized means of identification. Such recognized means of identification may be one or more of the following necessary for complete identification : name of station, location of station, operating agency, official registration mark, flight identification number, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.
- 411a.1                    **19-01.1**<sup>1</sup> In the present state of the technique it is recognized, nevertheless, that the transmission of identifying signals for certain radio systems (e.g. radio determination and radio relay systems) is not always possible.

411c

**19-04 § 3.** In order that stations may be readily identified, each station shall transmit its identification as frequently as practicable during the course of transmissions, including those made for tests, adjustments or experiments. During such transmissions, however, identification shall be transmitted at least hourly, preferably within the period from ten minutes before to ten minutes after the hour (G.M.T.), unless to do so would cause unreasonable interruption of traffic. To meet these identification requirements, administrations are urged to ensure that, wherever practicable, superimposed identification methods be employed in accordance with C.C.I.R. Recommendations.

427b

**19-05 § 4.** (1) The identifying signal shall be transmitted by methods which, in accordance with C.C.I.R. Recommendations, do not require the use of special terminal equipment for reception.

427c

**19-06** (2) If a superimposed identifying signal is used, the identification shall be preceded by the signal QTT.

427d

**19-07 § 5.** When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on different frequencies, each station shall, as far as practicable, transmit its own identification or those of all the stations concerned.

445

**19-08 § 6.** Each Member or Associate Member reserves the right to establish its own measures for identifying its stations used for national defence. However, it shall use, as far as possible, call signs recognizable as such, and containing the distinctive letters of its nationality.

## Section II. Allocation of International Series, and Assignment of Call Signs

412

**19-09 § 7.** (1) All stations open to the international public correspondence service, all amateur stations, and other stations which are capable of causing harmful interference beyond the boundaries of

the country to which they belong, shall have call signs from the international series assigned to each country as given in the Table of Allocation of Call Signs Series in No. 19-13.

413

**19-10** (2) However, it is not compulsory to assign call signs from the international series to stations which are easily identified by other means (see No. 19-03) and whose signals of identification or characteristics of emission are published in international documents.

419

**19-11** § 8. (1) The first character or the first two characters of the call signs given in the following table show the nationality of the stations.

419zero a

**19-12** (2) The series of call signs preceded by an asterisk indicate the international organization to which they are allocated.

419zero b

**19-13 Table of Allocation of International Call Sign Series**

| Call Sign Series | Allocated to:                  | Call Sign Series | Allocated to:  |
|------------------|--------------------------------|------------------|--|
| AAA-ALZ          | United States of America       | EKA-EKZ          | Union of Soviet Socialist Republics  |
| AMA-AOZ          | Spain                          | ELA-ELZ          | Liberia  |
| APA-ASZ          | Pakistan                       | EMA-EOZ          | Union of Soviet Socialist Republics  |
| ATA-AWZ          | India (Republic of)            | EPA-EQZ          | Iran   |
| AXA-AXZ          | Australia (Commonwealth of)    | ERA-ERZ          | Union of Soviet Socialist Republics  |
| AYA-AZZ          | Argentina (Republic)           | ESA-ESZ          | Estonia  |
| BAA-BZZ          | China                          | ETA-ETZ          | Ethiopia   |
| CAA-CEZ          | Chile                          | EUA-EWZ          | Bielorussian Soviet Socialist Republic   |
| CFA-CKZ          | Canada                         | EXA-EZZ          | Union of Soviet Socialist Republics  |
| CLA-CMZ          | Cuba                           | FAA-FZZ          | France and Overseas States of the French Community and French Overseas Territories |
| CNA-CNZ          | Morocco (Kingdom of)           | GAA-GZZ          | United Kingdom of Great Britain and Northern Ireland                               |
| COA-COZ          | Cuba                           | HAA-HAZ          | Hungarian People's Republic  |
| CPA-CPZ          | Bolivia                        |                  |  |
| CQA-CRZ          | Portuguese Overseas Provinces  |                  |  |
| CSA-CUZ          | Portugal                       |                  |  |
| CVA-CXZ          | Uruguay (Oriental Republic of) |                  |  |
| CYA-CZZ          | Canada                         |                  |  |
| DAA-DTZ          | Germany                        |                  |  |
| DUA-DZZ          | Philippines (Republic of the)  |                  |  |
| EAA-EHZ          | Spain                          |                  |  |
| EIA-EJZ          | Ireland                        |                  |  |

| Call Sign Series | Allocated to:  | Call Sign Series | Allocated to:  |
|------------------|--|------------------|--|
| HBA-HBZ          | Switzerland (Confederation)  | MAA-MZZ          | United Kingdom of Great Britain and Northern Ireland                               |
| HCA-HDZ          | Ecuador  |                  | United States of America   |
| HEA-HEZ          | Switzerland (Confederation)  | NAA-NZZ          | Peru   |
| HFA-HFZ          | Poland (People's Republic of)  | OAA-OCZ          | Lebanon  |
| HGA-HGZ          | Hungarian People's Republic  | ODA-ODZ          | Austria  |
| HHH-HHZ          | Haiti (Republic of)  | OEA-OEZ          | Finland  |
| HIA-HIZ          | Dominican Republic   | OFA-OJZ          | Czechoslovakia   |
| HJA-HKZ          | Colombia (Republic of)   | OKA-OMZ          | Belgium  |
| HLA-HMZ          | Korea (Republic of)  | ONA-OTZ          | Denmark  |
| HNA-HNZ          | Iraq (Republic of)   | OUA-OZZ          | Netherlands  |
| HOA-HPZ          | Panama (Republic of)   | PAA-PIZ          | Netherlands Antilles   |
| HQA-HRZ          | Honduras (Republic of)   | PJA-PJZ          | Indonesia (Republic of)  |
| HSA-HSZ          | Thailand   | PKA-POZ          | Brazil   |
| HTA-HTZ          | Nicaragua  | PPA-PYZ          | Surinam  |
| HUA-HUZ          | El Salvador (Republic of)  | PZA-PZZ          | (Service abbreviations)  |
| HVA-HVZ          | Vatican City State   | QAA-QZZ          | Union of Soviet Socialist Republics  |
| HWA-HYZ          | France and Overseas States of the French Community and French Overseas Territories | RAA-RZZ          | Sweden   |
|                  |  | SAA-SMZ          | Poland (People's Republic of)  |
| HZA-HZZ          | Saudi Arabia (Kingdom of)  | SNA-SRZ          | United Arab Republic (Egyptian Region)   |
| IAA-IZZ          | Italy and Territories under mandate of U.N.  | SSA-SSM          | Sudan (Republic of the)  |
| JAA-JSZ          | Japan  | SSN-STZ          | United Arab Republic (Egyptian Region)   |
| JTA-JVZ          | Mongolian People's Republic  | SUA-SUZ          | Greece   |
| JWA-JXZ          | Norway   | SVA-SZZ          | Turkey   |
| JYA-JYZ          | Jordan (Hashemite Kingdom of)  | TAA-TCZ          | Guatemala  |
| JZA-JZZ          | Netherlands New Guinea   | TDA-TDZ          | Costa Rica   |
| KAA-KZZ          | United States of America   | TEA-TEZ          | Iceland  |
| LAA-LNZ          | Norway   | TFA-TFZ          | Guatemala  |
| LOA-LWZ          | Argentina Republic   | TGA-TGZ          | France and Overseas States of the French Community and French Overseas Territories |
| LXA-LXZ          | Luxembourg   | THA-THZ          | Costa Rica   |
| LYA-LYZ          | Lithuania  |                  | France and Overseas States of the French Community and French Overseas Territories |
| LZA-LZZ          | Bulgaria (People's Republic of)  | TIA-TIZ          |  |
|                  |  | TJA-TRZ          |  |



| Call Sign Series  | Allocated to:   | Call Sign Series   | Allocated to:   |
|---|---|--|---|
| TSA-TSM<br>TSN-TZZ  | Tunisia<br>France and Overseas<br>States of the French<br>Community and<br>French Overseas Ter-<br>ritories   | XYA-XZZ<br>YAA-YAZ<br>YBA-YHZ<br>YIA-YIZ<br>YJA-YJZ          | Burma (Union of)<br>Afghanistan<br>Indonesia (Republic of)<br>Iraq (Republic of)<br>New Hebrides (Anglo-<br>French Condominium)   |
| UAA-UQZ   | Union of Soviet Socialist<br>Republics  | YKA-YKZ  | United Arab Republic<br>(Syrian Region)   |
| URA-UTZ   | Ukrainian Soviet<br>Socialist Republic  | YLA-YLZ<br>YMA-YMZ   | Latvia<br>Turkey  |
| UUA-UZZ   | Union of Soviet Socialist<br>Republics  | YNA-YNZ<br>YOA-YRZ   | Nicaragua<br>Roumanian People's Re-<br>public   |
| VAA-VGZ<br>VHA-VNZ  | Canada<br>Australia (Common-<br>wealth of)  | YSA-YSZ<br>YTA-YUZ   | El Salvador (Republic of)<br>Yugoslavia (Federal Re-<br>public of)  |
| VOA-VOZ<br>VPA-VSZ  | Canada<br>Overseas Territories for<br>the international rela-<br>tions of which the<br>government of the<br>United Kingdom of<br>Great Britain and<br>Northern Ireland are<br>responsible | YVA-YYZ<br>YZA-YZZ<br>ZAA-ZAZ<br>ZBA-ZJZ                     | Venezuela (Republic of)<br>Yugoslavia (Federal Re-<br>public of)<br>Albania (People's Re-<br>public of)<br>Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great Bri-<br>tain and Northern Ire-<br>land are responsible |
| VT A-VWZ<br>VXA-VYZ<br>VZA-VZZ  | India (Republic of)<br>Canada<br>Australia (Common-<br>wealth of)   |  | New Zealand   |
| WAA-WZZ<br>XAA-XIZ<br>XJA-XOZ<br>XPA-XPZ<br>XQA-XRZ<br>XSA-XSZ<br>XTA-XTZ | United States of America<br>Mexico<br>Canada<br>Denmark<br>Chile<br>China<br>France and Overseas<br>States of the French<br>Community and<br>French Overseas Ter-<br>ritories             | ZKA-ZMZ<br>ZNA-ZOZ<br><br><br><br><br><br>ZPA-ZPZ<br>ZQA-ZQZ | Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great Bri-<br>tain and Northern Ire-<br>land are responsible.   |
| XUA-XUZ<br>XVA-XVZ<br>XWA-XWZ<br>XXA-XXZ                                  | Cambodia (Kingdom of)<br>Viet-Nam (Republic of)<br>Laos (Kingdom of)<br>Portuguese Overseas Pro-<br>vinces  |  | Paraguay<br>Overseas Territories for<br>the international rela-<br>tions of which the Go-<br>vernment of the United<br>Kingdom of Great<br>Britain and Northern<br>Ireland are responsible  |

| Call Sign Series | Allocated to:  | Call Sign Series | Allocated to:  |
|------------------|--|------------------|--|
| ZRA-ZUZ          | Union of South Africa and Territory of South West Africa | 5RA-5VZ          | France and Overseas States of the French Community and French Overseas Territories |
| ZVA-ZZZ          | Brazil   | 5WA-5ZZ          | (Not allocated)  |
| 2AA-2ZZ          | United Kingdom of Great Britain and Northern Ireland     | 6AA-6BZ          | United Arab Republic (Egyptian Region)   |
| 3AA-3AZ          | Monaco   | 6CA-6CZ          | United Arab Republic (Syrian Region)   |
| 3BA-3FZ          | Canada   | 6DA-6JZ          | Mexico   |
| 3GA-3GZ          | Chile  | 6KA-6NZ          | Korea (Republic of)  |
| 3HA-3UZ          | China  | 6OA-6OZ          | Somaliland (Italian administration)  |
| 3VA-3VZ          | Tunisia  | 6PA-6SZ          | Pakistan   |
| 3WA-3WZ          | Viet-Nam (Republic of)                                   | 6TA-6UZ          | Sudan (Republic of)  |
| 3XA-3XZ          | Guinea (Republic of)                                     | 6VA-6ZZ          | (Not allocated)  |
| 3YA-3YZ          | Norway   | 7AA-7IZ          | Indonesia (Republic of)  |
| 3ZA-3ZZ          | Poland (People's Republic of)                            | 7JA-7NZ          | Japan  |
| 4AA-4CZ          | Mexico   | 7OA-7RZ          | (Not allocated)  |
| 4DA-4IZ          | Philippines (Republic of the)                            | 7SA-7SZ          | Sweden   |
| 4JA-4LZ          | Union of Soviet Socialist Republics                      | 7TA-7YZ          | (Not allocated)  |
| 4MA-4MZ          | Venezuela (Republic of)                                  | 7ZA-7ZZ          | Saudi Arabia (Kingdom of)  |
| 4NA-4OZ          | Yugoslavia (Federal People's Republic of)                | 8AA-8IZ          | Indonesia (Republic of)  |
| 4PA-4SZ          | Ceylon   | 8JA-8NZ          | Japan  |
| 4TA-4TZ          | Peru   | 8OA-8RZ          | (Not allocated)  |
| * 4UA-4UZ        | United Nations (U.N.)                                    | 8SA-8SZ          | Sweden   |
| 4VA-4VZ          | Haiti (Republic of)                                      | 8TA-8YZ          | India  |
| 4WA-4WZ          | Yemen  | 8ZA-8ZZ          | Saudi Arabia (Kingdom of)  |
| 4XA-4XZ          | Israel (State of)  | 9AA-9AZ          | San Marino (Republic of)   |
| * 4YA-4YZ        | International Civil Aviation Organization (ICAO)         | 9BA-9DZ          | Iran   |
| 4ZA-4ZZ          | Israel (State of)  | 9EA-9FZ          | Ethiopia   |
| 5AA-5AZ          | Libya (United Kingdom of)                                | 9GA-9GZ          | Ghana  |
| 5BA-5BZ          | (Not allocated)  | 9HA-9JZ          | (Not allocated)  |
| 5CA-5GZ          | Morocco (Kingdom of)                                     | 9KA-9KZ          | Kuwait   |
| 5HA-5IZ          | (Not allocated)  | 9LA-9LZ          | (Not allocated)  |
| 5JA-5KZ          | Colombia (Republic of)                                   | 9MA-9MZ          | Malaya (Federation of)   |
| 5LA-5MZ          | Liberia  | 9NA-9NZ          | Nepal  |
| 5NA-5OZ          | (Not allocated)  | 9OA-9UZ          | Belgian Congo and Territory of Ruanda-Urundi                                       |
| 5PA-5QZ          | Denmark  | 9VA-9ZZ          | (Not allocated)  |

419zero c

**19-14** § 9. Should the available call sign series in this table be exhausted, new call-sign series may be allocated according to the principles set out in Resolution No. 8 relating to the Formation of Call Signs and to Allocation of New Series.

419a

**19-15** § 10. Between administrative radio conferences, the Secretary General is authorized to deal with questions relating to changes in the allocation of series of call signs, on a provisional basis, and subject to confirmation by the following Conference. (See also No. 19-14.)

417

**19-16** § 11. (1) Each country shall choose the call signs of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary General the call signs which it has assigned together with the information which is to appear in Lists I to VI inclusive. These notifications do not include call signs assigned to amateur and experimental stations.

418

**19-17** (2) The Secretary General shall ensure that the same call sign is not assigned more than once and that call signs which might be confused with distress signals, or with other signals of the same nature, are not assigned.

414

**19-18** § 12. (1) When a *fixed station* uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency.

415

**19-19** (2) When a *broadcasting station* uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency or by some other appropriate means, such as announcing the name of the place and frequency used.

416

**19-20** (3) When a *land station* uses more than one frequency, each frequency may, if desired, be identified by a separate call sign.

- 416a                    **19-21**        (4) Where practicable *coast stations* should use a common call sign for each frequency series <sup>1</sup>.

### Section III. Formation of Call Signs

- 438                    **19-22** § 13. (1) The twenty-six letters of the alphabet, as well as digits in the cases specified below, may be used to form call signs. Accented letters are excluded.

- 439                    **19-23**        (2) However, the following combinations may not be used as call signs :

- 440                    **19-24**            a) combinations which might be confused with distress signals or with other signals of a similar nature ;

- 441                    **19-25**            b) combinations reserved for the abbreviations to be used in the radiocommunication services (see Appendix 13);

- 443                    **19-26**            c) those four-letter combinations commencing with the letter A which are used for the geographical portion of the International Code of Signals, in cases where confusion is likely to arise ;

- 442                    **19-27**            d) for amateur stations, combinations commencing with a digit when the second character is the letter O or the letter I.

- 420                    **19-28** § 14.        Call signs in the international series are formed as indicated in Nos. 19-29 to 19-39. The first letter in a particular series of letters may be replaced, in certain cases, by a digit (see Nos. 19-13 and 19-14).

- 416a.1                    **19-21**<sup>1</sup> By "frequency series" is meant a group of frequencies, each of which belongs to one of the different bands between 4000 and 27 500 kc/s that are allocated exclusively to the maritime mobile service.



*Aircraft survival craft stations*

- 425b                    **19-35** § 19.        — the call sign of the parent aircraft, followed by a single digit other than 0 or 1.

*Land mobile stations*

- 426                    **19-36** § 20. (1)     — four letters followed by a single digit other than 0 or 1.
- 433<sup>1</sup>                   **19-37**        (2) However, *land mobile stations* employing radiotelephony may also use a call sign consisting of :
- two or three letters followed by four digits (other than the digits 0 or 1 in cases where they immediately follow a letter).

*Amateur and experimental stations*

- 427<sup>1</sup>                   **19-38** § 21. (1)     — one or two letters and a single digit (other than 0 or 1), followed by a group of not more than three letters.
- 427<sup>2</sup>                   **19-39**        (2) However, the prohibition of the use of the digits 0 and 1 does not apply to *amateur stations*.

**Section IV. Identification of Stations using Radiotelephony**

- ADD                   **19-40** § 22.        Stations using radiotelephony shall be identified as indicated in Nos. 19-41 to 19-49.
- 428    ADD           **19-41** § 23. (1) *Coast stations*
- a call sign (see Nos. 19-29 and 19-30) ; *or*
- the geographical name of the place as it appears in the List of Stations, followed preferably by the word RADIO or by any other appropriate indication.
- 429<sup>2</sup>                   **19-42**        (2) *Ship stations*
- a call sign (see Nos. 19-31 and 19-32) ; *or*

- the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no possible confusion with distress, urgency and safety signals.
- 429a                    **19-43**            (3) *Ships survival craft stations*
  - a call sign (see No. 19-34)
  - a signal of identification consisting of the name of the parent ship followed by two digits.
- 430                    **19-44 § 24.** (1) *Aeronautical stations*
  - the name of the airport or geographical name of the place followed, if necessary, by a suitable word indicating the function of the station.
- 431                    **19-45**            (2) *Aircraft stations*
  - a call sign (see No. 19-33), which may be preceded by a word designating the owner or the type of aircraft ;
  - a combination of characters corresponding to the official registration mark assigned to the aircraft ;
  - a word designating the airline, followed by the flight identification number.
- 431a                   **19-46**            (3) In the exclusive aeronautical mobile frequency bands, *aircraft stations* using radiotelephony may use other methods of identification, after special agreement between governments, and on condition that they are internationally known.
- 431b                   **19-47**            (4) *Aircraft survival craft stations*
  - a call sign (see No. 19-35) ;

- 432                    **19-48** § 25. (1) *Base stations*
- a call sign (see No. 19-29) ;
  - the geographical name of the place followed, if necessary, by any other appropriate indication.
- 433                    **19-49**            (2) *Land mobile stations*
- a call sign (see No. 19-36) ;
  - the identity of the vehicle or any other appropriate indication.

#### Section V. Special provisions

- 434                    **19-50** § 26. (1) In the aeronautical mobile service, after communication has been established by means of the complete call sign, the aircraft station may use, if confusion is unlikely to arise, an abbreviated call sign consisting of :
- 435                    **19-51**            a) in radiotelegraphy, the first character and last two letters of the complete 5-letter call sign ;
- 436                    **19-52**            b) in radiotelephony :
- the first character of the complete five-letter call sign ; *or*
  - the abbreviation of the name of the owner of the aircraft (company or individual) ; *or*
  - the type of aircraft, followed by the last two letters of the complete five-letter call sign or by the last two characters of the registration mark.
- 437                    **19-53**            (2) The provisions of Nos. 19-50, 19-51 and 19-52 may be amplified or modified by arrangement between administrations concerned.



| Former reference                         | Source                                      | New reference                                |
|--|---|--|
| Chap.: VIII<br>Art.: 20<br>Nos.: 447-484 | Committee: 7<br>Doc. No.: 709 and<br>DT 851 | Chap.: V<br>Art.: 20<br>Nos.: 20-01 to 20-49 |

- 444                    **19-54** § 27.      The distinguishing signals allotted to ships for visual and aural signalling shall, in general, agree with the call signs of ship stations.

## ARTICLE 20

### Service Documents

- 446                    **20-01** § 1.      The following documents shall be published by the Secretary General.
- 447                    **20-02**      (I) *List 1. The International Frequency List.*  
This list shall contain :
- 447(a)                **20-03**      a) particulars of frequency assignments recorded in the Master International Frequency Register. These particulars shall include the data enumerated in Appendix 9 ;
- 448    MOD            **20-04**      b) the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed by these Regulations for common use by certain services, including frequencies specified in Appendices 15, 17 and 18 ;
- 448a                    **20-05**      c) the allotments in the Allotment Plans included in Appendices 25 and 26.
- 448b                    **20-06**      An indication of the use of the frequencies and allotments in Nos. 20-04 and 20-05 shall be included in the entries concerned.
- 448c                    **20-07**      Frequency assignments in the International Frequency List shall be arranged in numerical ascending order of the frequencies assigned.
- 448d                    **20-08**      The International Frequency List above 28 Mc/s shall be in four separate parts as follows :
- 448e                    **20-09**      a) frequency assignments in bands between 28 and 50 Mc/s, excluding broadcasting stations ;

- 448f                    **20-10**            b) frequency assignments<sup>1</sup> in Region 1 in the bands between 50 and 40 000 Mc/s, and frequency assignments<sup>1</sup> to broadcasting stations in Region 1 in the bands between 28 and 50 Mc/s;
- 448g                    **20-11**            c) frequency assignments in Region 2 in the bands between 50 and 40 000 Mc/s;
- 448h                    **20-12**            d) frequency assignments in Region 3 in the bands between 50 and 40 000 Mc/s, and frequency assignments to broadcasting stations in Region 3 in the bands between 28 and 50 Mc/s.
- 449                    **20-13**    (II) *List II. List of Fixed Stations Operating International Circuits.*  
This list shall contain the fixed stations operating international circuits, the frequencies of which appear in List I.
- 450                    **20-14**    (III) *List III. List of Broadcasting Stations Operating in Bands below 26 100 kc/s.*  
The list shall be divided into two volumes :
- 450a                    **20-15**            a) *List III A. List of Broadcasting Stations Operating in Bands below 5 950 kc/s.*  
This list shall contain those broadcasting stations the frequency assignments of which are shown in List I.
- 450b                    **20-16**            b) *List III B. List of Broadcasting Stations Operating in Bands between 5 950 and 26 100 kc/s.*  
This list shall contain those broadcasting stations the frequency assignments of which are shown in the Annual High Frequency Broadcasting Frequency List, published each year in accordance with the provisions of Section V of Article 10.
- 448f.1                    **20-10.1**<sup>1</sup> In the case of television broadcasting stations in Region 1, separate entries shall be inserted for the carrier frequencies of the vision and sound channels.

451

**20-17** (IV) *List IV. List of Coast Stations.*

There are annexed to this List a Table and a Chart showing the zones and hours of service of ships of the second category (see Appendix 12) and a Table of inland telegraph rates, limitrophic rates, etc.

451a

**20-18** (V) *List V. List of Ship Stations.*

This List shall contain particulars of :

- a) ship stations fitted with radiotelegraph installations ;
- b) ship stations fitted with radiotelegraph and radiotelephone installations ;
- c) ship stations fitted with radiotelephone installations only, of ships communicating with stations of the maritime mobile service other than those of their own nationality or making international voyages.

This List shall contain a Table and a Chart showing the zones and hours of service of ships of the second category (see Appendix 12).

453

**20-19** (VI) *List VI. List of Radiodetermination and Special Service Stations.*

This list shall contain radio direction-finding stations and radiobeacon stations of the maritime radionavigation service, and include radiobeacons of the aeronautical radionavigation service reliable for maritime navigation, ocean-station vessels, direction-finder calibration stations as well as stations transmitting time signals, regular meteorological bulletins, notices to navigators, medical advice, standard frequencies, epidemiological bulletins and ursigrams. In this list, each class of station shall occupy a special section.

- 460                    **20-20**    (VII) *List VII. Alphabetical List of Call Signs Assigned from the International Series to Stations Included in Lists I to VI.*
- This list shall be published in two volumes :
- 460a                   **20-21**            a) *List VII A. Alphabetical List of Call Signs of Stations used by the Maritime Mobile Service (Coast, Ship, Radiodetermination and Special Service Stations).*
- This list shall be preceded by the Table of Allocation of Call Signs given in Article 19 and a table of signals characterizing the emissions of radio beacons used in the maritime mobile service.
- 460b                   **20-22**            b) *List VII B. Alphabetical List of Call Signs of Stations other than Amateur Stations, Experimental Stations and Stations of Maritime Mobile Service.*
- This list shall be preceded by the Table of Allocation of Call Signs given in Article 19 and by a Table indicating the form of call signs assigned by each administration to its amateur and experimental stations.
- 460c                   **20-23**    (VIII) *List VIII. List of International Monitoring Stations.*
- This list shall contain, in tabulated form, particulars of monitoring stations participating in international monitoring.
- 462                   **20-24**    (IX) *Map of coast stations which are open to public correspondence or which participate in the port operations service.*
- 465                   **20-25**    (X) *Chart in colours showing frequency allocations as specified in Article 5.*

- 466 **20-26** (XI) *Radiocommunication Statistics.*
- 467 **20-27** § 2. (1) The Secretary General shall publish the amendments to be made in the documents listed in Nos. 20-02 to 20-26 inclusive. Once a month, administrations shall inform him, in the form shown for the lists themselves in Appendix 9, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 10. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II and III, he shall use the data provided by the International Frequency Registered in Board, obtained from the information received in application of the provisions of Articles 9 and 10. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI.
- 468 **20-28** (2) For permanent changes affecting the operation of Radio-determination stations (List VI) see No. 44-03.
- 470 **20-29** § 3. (1) New editions of the International Frequency List shall be published at intervals to be determined by the Secretary General, but not exceeding two years. This list shall be kept up to date by quarterly recapitulative supplements published in the same form as the list itself. New or modified entries made in the Master International Frequency Register after the publication of the latest recapitulative supplement and which appear in a new recapitulative supplement or in a new edition of the list, shall be indicated therein in an appropriate manner.
- 470a **20-30** (2) The recapitulative supplements shall be divided into two sections as follows :
- 470b **20-31** — Section A shall contain new entries and modifications of entries already listed in the International Frequency List.
- 470c **20-32** — Section B shall contain entries in the International Frequency List which have been deleted in their entirety.
- 470d **20-33** § 4. The List of Fixed Stations operating international circuits (List II) shall be republished at intervals to be determined by the Secretary General. The list shall be kept up to date by the publication of recapitulative supplements at intervals of three months.

- 471 **20-34 § 5.** (1) The List of Broadcasting Stations operating in bands below 5 950 kc/s (List III A) shall be republished at intervals to be determined by the Secretary General. Recapitulative supplements shall be published every six months.
- 471a **20-35** (2) The List of Broadcasting Stations operating in the bands between 5 950 and 26 100 kc/s (List III B) shall be republished each year without supplements.
- 472 **20-36 § 6.** The List of Coast Stations (List IV) shall be republished every three years and kept up to date by recapitulative supplements issued every six months.
- 472a **20-37 § 7.** The List of Ship Stations (List V) shall be republished every year without supplements.
- 472b **20-38 § 8.** The List of Radiodetermination and Special Service Stations (List VI) shall be republished at intervals to be determined by the Secretary General. Recapitulative supplements shall be published every six months.
- 474 **20-39 § 9.** (1) The Alphabetical List of Call Signs of Stations Used by the Maritime Mobile Service (List VII A) shall be republished every two years and kept up to date by recapitulative supplements every three months.
- 474a **20-40** (2) The Alphabetical List of Call Signs of Stations other than Amateur Stations, Experimental Stations and stations in the Maritime Mobile Service (List VII B) shall be republished at intervals determined by the Secretary General, and kept up to date by recapitulative supplements issued every three months.
- 474b **20-41 § 10.** The List of International Monitoring Stations (List VIII) shall be published at intervals to be determined by the Secretary General. It shall be kept up to date by the publication of recapitulative supplements at intervals to be determined by the Secretary General.
- 475 **20-42 § 11.** The Radiocommunication Statistics shall be republished at intervals to be determined by the Secretary General.

| Former reference                         | Source                        | New reference                               |
|--|-------------------------------|---|
| Chap.: XI<br>Art. : 23<br>Nos. : 493-499 | Committee: 7<br>Doc. No.: 448 | Chap.: V<br>Art. : 21<br>Nos. : 21-01—21-07 |

- 476 **20-43** § 12. (1) The forms in which the Lists I to VI inclusive, List VIII and the Radiocommunication Statistics are to be prepared are given in Appendix 9. Information concerning the use of these documents shall be given in the prefaces thereto. Each entry shall include the appropriate symbol, as shown in Appendix 10, to designate the category of station concerned. Additional symbols, where necessary, may be selected by the Secretary General, any such new symbols being notified by the Secretary General to administrations.
- 477 **20-44** (2) In the service documents, the names of coast, radio direction-finding and radiobeacon stations are followed by the words:
- 478 **20-45** — RADIO for coast stations ;
- 479 **20-46** — GONIO for maritime radio direction-finding stations ;
- 480 **20-47** — PHARE for maritime radiobeacon stations ;
- 483 **20-48** — AEROPHARE for aeronautical radiobeacon stations.
- 484 **20-49** § 13. For the purpose of the service documents, a country shall be understood to mean the territory within the limits of which the station is located ; a territory which does not have full responsibility for its international relations shall also be considered as a country for this purpose.

## ARTICLE 21

### Inspection of Mobile Stations

- 493 **21-01** § 1. (1) The governments or appropriate administrations of countries which a mobile station visits, may require the production of the licence for examination. The operator of the mobile station, or the person responsible for the station, shall facilitate this examination. The licence shall be kept in such a way that it can be produced upon request. As far as possible, the licence, or a copy certified by the authority which has issued it, should be permanently exhibited in the station.

- 494                   **21-02**       (2) The inspectors shall have in their possession an identity  
card or badge, issued by the competent authority, which they shall  
show on request of the master or person responsible for the ship,  
aircraft or other vehicle carrying the mobile station.
- 495                   **21-03**       (3) When the licence cannot be produced or when manifest  
irregularities are observed, governments or administrations may  
inspect the radio installations in order to satisfy themselves that  
these conform to the conditions imposed by these Regulations.
- 496                   **21-04**       (4) In addition, inspectors have the right to require the  
production of the operators' certificates, but proof of professional  
knowledge may not be demanded.
- 497                   **21-05** § 2. (1) When a government or an administration has found it  
necessary to adopt the course indicated in No. 21-03, or when  
the operators' certificates cannot be produced, the government or  
administration to which the mobile station is subject shall be so  
informed without delay. In addition, the procedure specified in  
Article 16 is followed when necessary.
- 498                   **21-06**       (2) Before leaving, the inspector shall report the result of his  
inspection to the master, or the person responsible for the ship,  
aircraft or other vehicle carrying the mobile station. If any breach  
of the conditions imposed by these Regulations is observed, the  
inspector shall make this report in writing.
- 499                   **21-07** § 3.     The countries Members and Associate Members of the  
Union undertake not to impose upon foreign mobile stations which  
are temporarily within their territorial waters or make a temporary  
stay in their territory, technical and operating conditions more  
severe than those contemplated in these Regulations. This under-  
taking in no way affects arrangements which are made under inter-  
national agreements relating to maritime or air navigation, and  
which are therefore not covered by these Regulations.



## Former reference

## Source

## New Reference

|                 |
|-----------------|
| Chap.: XVIII    |
| Art.: 47        |
| Nos.: 1076-1078 |

Committee: 5 and 8  
Doc. No.: DT 865

|                     |
|---------------------|
| Chap.: XI           |
| Art.: 45            |
| Nos.: 45-01 - 45-04 |

## CHAPTER XI

## ARTICLE 45

## Effective Date of the Radio Regulations

- |             |   |
|-------------|---|
| 1076 (MOD)  | <b>45-01§ 1.</b> These Regulations, which are annexed to the International Telecommunication Convention, shall come into force on 1st May, 1961.  |
| 1077. (MOD) | <b>45-02§ 2.</b> The provisions of the Extraordinary Administrative Radio Conference Agreement, Geneva, 1951, shall be abrogated upon the coming into force of the provisions of the Radio Regulations.   |
| ADD         | <b>45-03§ 3.</b> The Delegate signing these Regulations hereby declare that, should an Administration make reservations about the application coming into force of the provisions of the Radio Regulations.   |
| 1078        | <b>45-04§ 4.</b> In witness whereof the delegates of the Members and Associate Members of the Union represented at the Administrative Radio Conference of Geneva, 1959, have signed in the names of their respective countries the present Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to every Member and Associate Member of the Union. |

Done at Geneva, 21st of December, 1959.

## RECOMMENDATION No. 18,

**Relating to International Co-ordination  
in the Selection of an Appropriate Frequency Band for the Development  
of Air-Ground Public Correspondence Systems**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that there is not at present an adequate air-ground public correspondence system ;
- b) that such systems are specifically excluded by the Radio Regulations from operating in frequency bands allocated exclusively to the aeronautical mobile (R) service ;
- c) that some administrations are actively engaged in the development of such systems without the benefit of international co-ordination on the subject of the appropriate frequency bands for such development ;
- d) that, because of the international character of the aeronautical service, it is essential that international agreement be reached on the appropriate frequency bands ;
- e) that transmissions from aircraft may cause interference over considerable distances ;

*recommends*

1. that administrations now engaged, or planning to engage, in the development of an air-ground public correspondence system advise the International Frequency Registration Board of the relevant details of their planning so that the Board can advise all other administrations of the current trends in development ;
2. that administrations ensure, by frequency co-ordination or otherwise, that no interference is caused to the services of other countries by the operation of air-ground public correspondence systems.

## RECOMMENDATION No. 19

**Concerning the Matter of Providing a Suitable Frequency  
Allocation for a Collision Avoidance System  
in the Aeronautical Radionavigation Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) the ever-increasing speed of modern aircraft and, taking into account that an adequate collision avoidance system providing a means of enhancing safety in the air has not been developed but is urgently required ;
- b) that if such a collision avoidance system, when developed, requires the use of radio frequencies, it should be accommodated in one of the frequency bands allocated to the aeronautical radionavigation service ;
- c) that it is impossible to forecast at this time whether the bands allocated to the aeronautical radionavigation service will prove to be suitable for such a system ;

*recommends*

that administrations and the International Civil Aviation Organization pay especial attention to the progress being made in developing a suitable collision avoidance system, noting that if radio frequencies are required, and if the bands allocated to the aeronautical radionavigation services are not suitable for such a system, international consideration of this matter will be necessary.

## RECOMMENDATION No. 20

**Relating to Technical Provisions for Maritime Radiobeacons  
in the African Area**

The Administrative Radio Conference, Geneva, 1959,

*considering*

the need to facilitate the planning for new maritime radio-beacons in the band 285 - 315 kc/s particularly in the neighbouring localities of the European and African areas,

*recommends*

that the administrations of the countries of the African area adopt provisions similar to those contained in the "Regional Arrangement for Maritime Radiobeacons in the European Area of Region 1", Paris, 1951.

## RECOMMENDATION No. 21

**to the Inter-governmental Maritime Consultative Organization,  
the International Civil Aviation Organization and to Administrations**

**Relating to an International Radiotelephone Code  
for the Maritime Mobile Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) the Recommendation No. 5 of the Baltic and North Sea Radio Conference, Gothenburg, 1955 ;
- b) that radiotelephone communication between stations of different nationalities, within the maritime mobile service, or between a

station of the maritime mobile service and a station of the aeronautical mobile service may, in certain cases, prove to be impossible or give rise to dangerous misinterpretations on account of language difficulties ;

- c) that no common international language for such communications exists between maritime and aeronautical mobile services ;
- d) that the work of certain administrations has made it possible to develop an international radiotelephone code for the maritime mobile service ;
- e) that the phrases, expressions and symbols in the code annexed to this Recommendation are extracted from the International Code of Signals ;
- f) that it will doubtless be necessary to expand the proposed code to facilitate the co-ordination of search and rescue operations by ships and aircraft ;
- g) that similar proposals for an international radiotelephone code will undoubtedly be considered at the International Conference on the Safety of Life at Sea to be held in May/June, 1960 ;
- h) that I.M.C.O. has also been requested to examine proposals for such a code in connection with the assumption by I.M.C.O.'s Maritime Safety Committee of duties in connection with the International Code of Signals.

*recommends*

1. that I.M.C.O. be invited to seek the views of the International Conference on the Safety of Life at Sea on the Annexes attached to this Recommendation and to transmit these views as soon as possible after the Conference, together with any additional comments they may desire to make, to the Secretary General of the Union ;
2. that the Maritime Safety Committee of I.M.C.O. be invited to study the proposed code and take it into account in connection with

any revision of the International Code of Signals which they may undertake ;

3. that I.M.C.O. and I.C.A.O. be invited to study the second and third parts (code and decode) of the proposed code with a view to recommending to the Secretary General of the Union those signals which should be included for communications to be exchanged between ships and aircraft engaged in air-sea rescue operation ;

4. that administrations should study the proposed code taking into account the discussions at the Administrative Radio Conference, Geneva, 1959 (Document Nos. 426, 427, 504, 505 and 790), and, at their discretion, base this study on limited and controlled tests under practical conditions ;

5. that the studies referred to in 1, 3, and 4. above be completed and comments on the proposed code sent to the Secretary General of the Union by 1 December, 1960 ;

#### *requests*

1. that the Secretary General of the Union circulate these comments to administrations and request them to notify him of their views on these comments and of their intention to introduce the code on an experimental basis to obtain a practical evaluation (any such test to be subject to rigid control by administrations to prevent any misunderstanding in cases of distress) ;

2. that the Secretary General of the Union co-ordinate his experimental introduction of the code in collaboration as necessary with the Secretaries General of the I.M.C.O. and the I.C.A.O. ;

3. that the Secretary General of the Union circulate to all Administrations a copy of the code amended as a result of the above studies, for their approval and adoption ;

#### *and invites*

administrations, if the code is generally adopted, to propose its inclusion in the Radio Regulations at the next Administrative Radio Conference.

## ANNEX 1

**International Radiotelephone Basic Characteristics  
of a Means of Expression for the Maritime Mobile Service**

1. The growth of maritime mobile radiotelephony, particularly in the 2 Mc/s bands used by all categories of ships including fishing vessels and in the 156 Mc/s bands, allocated to the port operations service, has convinced administrations of the need for a rapid means of expression in communications between stations of different nationalities (see the Recommendation No. 5 of B.N.R.C.).

2. The Administrative Radio Conference, Geneva, 1959, after studying the problem and the methods proposed for its resolution concluded :

that, taking account of the categories of users and their needs, any code for use in international radiotelephone communications must meet the following requirements :

- 2.1 It must be simple enough both in form and in method of use to be correctly understood and used by relatively uneducated seamen having no special linguistic knowledge.
- 2.2 It should be capable of almost immediate translation, at least as far as very urgent information is concerned.
- 2.3 It should provide for, at least, the exchange of information relative to :
  - distress
  - urgency
  - safety of navigation
  - search and rescue
  - establishment of communications.

Almost all the phrases and expressions to be used can be extracted from the International Code of Signals.

2.4 The best method of symbolisation of these phrases and expressions consists of a combination of very few letters, figures, or letters and figures which would be spelled out from an international spelling table.

2.5 A code which conforms to the principles stated above must present in a simple form the following :

- a general description and method of use,
- a code,
- a decode (if necessary),
- special signals for towing,
- signals of procedure for the establishment of radio communication.

2.6 The signals to be included in a distress message, the procedure for sending the distress message and the spelling table should be reproduced in tabular form and mounted within sight of the radiotelephone operator ; a specimen table is given in Annex 3 attached.

3. The Conference after examining the code given in Annex 2 has decided that it met the above stated principles. The Conference therefore recommended that if, after a practical evaluation, the code were to be adopted by administrations, it should be included in the Radio Regulations.

4. However, it was recognized that the general vocabulary (Parts 2, 3 and 4 of Annex 2) needs a complementary study by experts in the field of navigation and air-sea rescue with a view to producing any modifications or additions which would appear necessary, it being well understood that :

- This code should be limited to the information described in paragraph 2.3 above.
- It is necessary to make use of this code only when language difficulties are anticipated.



## ANNEX 2

**International Radiotelephone Code for the Maritime Mobile Service**

This annex is divided into five parts :

*Part one* — General

1. Description.
2. Main Signal and Complementary Signals.
3. How are Complements Signalled ?
4. Spelling tables.

*Part two* — Decode.

*Part three* — Code.

*Part four* — Towing signals.

*Part five* — Radiotelephone procedure signals.

## PART ONE

**General****1. Description.**

The code comprises a number of the phrases and expressions which are most widely used in distress, search and rescue operations or which relate to the safety of ships or aircraft. Each phrase or expression is represented by a symbol consisting of two or three letters or of one letter followed by digits. The letters and digits are transmitted in accordance with the spelling table below (paragraph 4).

**2. Main Signal and Complementary Signals.**

An item of information may be expressed in one or more symbols. In the latter event, the most important idea to be communicated is expressed by the symbol called the "main signal" and the details by one or more symbols called "complementary signals" or, in abbreviated form, "complements". An indication of necessary complementary signals is usually given in the text of the main signal; the complementary signals must be made in the order specified.

*Example :* A drifting wreck was sighted or signalled at (position) at (time) on (date).

This information includes the main signal above and, in order, the complementary signals : position of the wreck, time and date. Should the name of the wreck have been recognized and be useful to know (in search or rescue operations, for example), it may be a complement of primary importance and the signal would become :

The wreck of (name of ship) was sighted at (position) at (time) on (date).

In this case, the name of the ship is called an " incidental complement ".

### 3. How are Complements Signalled ?

- 3.1. *Azimuth (or true bearing, true course, etc. . . .)*. — By the letter A followed always by three digits indicating the degrees; e. g.  $45^{\circ}$  is expressed as A 045 — Alfa zero quarto penta.
- 3.2. *Distances*. — By the letter R followed by digits indicating the distance in nautical miles ; e. g. 152 miles is expressed as R 152 Romeo wun penta bis.
- 3.3. *Date*. By the letter D followed by two, four or six digits. The first two digits indicate the day of the month. When used alone, they refer to the current month.

For example :

the signal D 14 — Delta wun quarto — transmitted on 15 September means : 14 September.

— The two digits which follow indicate the month of the year.

D 1409 — Delta wun quarto zero nona — means : 14 September.

— Where necessary, the year may be indicated by two further digits.

D 140959 — Delta wun quarto zero nona penta nona — means : 14 September 1959.

- 3.4. *Local time.* By the letter H followed always by four digits. The first two digits indicate the hours, the second two digits the minutes.  
E. g. : H 0430 — Hotel zero quarto ter zero — means : at 4 h 30 local time.
- 3.5. *G.M.T.* By the letter T followed always by four digits having the same meaning as above.
- 3.6. *Wind direction and speed.* By the letter W followed always by five digits, the first three giving the azimuth from which the wind blows, the last two the speed of the wind according to the Beaufort scale.  
E. g. : W 13508 — Whiskey wun ter penta zero octo — means: south-east wind speed 8.
- 3.7. *Name of the ship.* By pronouncing the name slowly and clearly, or preferably by the call sign spelled according to the spelling table. Whenever possible, by the name followed by the call sign.  
E. g. : Cap Lihou (TRXB) is transmitted :  
Cap Lihou Tango Romeo X-Ray Bravo.
- 3.8. *Figures.* By the letter N followed by the figure to be transmitted :  
E. g. : 2078 is transmitted as : November bis zero sette octo.
- 3.9. *Position.* There are two ways of signalling one's position :  
— by indicating the latitude and longitude (see 3.10)  
— by indicating the azimuth and the distance from a given point (see 3.11).
- 3.10. *Latitude — Longitude.*

*Latitude* is transmitted by the letter L followed always by four figures (the first two giving the degrees and the last two the minutes) and also, when misunderstanding is possible, by one of the words North or South (the pronunciation of which is practically the same in the main maritime languages).

*Longitude* is transmitted by the letter G followed always by five figures (the first three giving the degrees and the last two the minutes), and also, when misunderstanding is possible, by one of the words East or West (the pronunciation of which is practically the same in the main maritime languages).

E. g. : position :  $48^{\circ} 52' N-006^{\circ} 35' W$  is transmitted as :  
Lima quarto octo penta bis North Golf zero saxo ter penta West.

- 3.11. *Azimuth and distance from a given point.* By the name of the point, followed by the letter X and by four or more figures, the first three of which indicate the azimuth in degrees from the given point and the rest the distance in nautical miles.

E. g. : a position in the direction 64 and 25 miles from Barfleur is transmitted as : Barfleur X-ray zero saxo quarto bis penta.

- 3.12. *Speed.* By the letter V followed by a whole number of knots :

E. g. : speed 12 knots is transmitted as : Victor wun bis.

- 3.13 *Separation.* Each group of letters or figures is separated from the following group by the word "Stop".

Thus, in a distress message, the code groups relating to the position of the ship, to the nature of the distress, and possibly to the type of service requested will be separated from each other by the word "Stop".

E. g. : "Latitude  $43^{\circ} 52' N$  Longitude  $023^{\circ} 20' W$  I must abandon ship. Send all lifeboats available." Is transmitted as follows :

Lima quarto ter penta bis Golf zero bis ter bis zero Stop  
Alfa Delta Stop Quebec Golf.

#### 4. Spelling Tables.

##### 4.1. Letter Spelling Table

| Letter | Code word | Pronunciation of code word <sup>1)</sup>  |
|--------|-----------|---|
| A      | Alfa      | <u>AL</u> FAH                             |
| B      | Bravo     | <u>BRAH</u> VOH                           |
| C      | Charlie   | <u>CHAR</u> LEE or <u>SHAR</u> LEE        |
| D      | Delta     | <u>DELL</u> TAH                           |
| E      | Echo      | <u>ECK</u> OH                             |
| F      | Foxtrot   | <u>FOKS</u> TROT                          |
| G      | Golf      | GOLF                                      |
| H      | Hotel     | HOH <u>TELL</u>                           |
| I      | India     | <u>IN</u> DEE AH                          |
| J      | Juliette  | <u>JEW</u> LEE <u>ETT</u>                 |
| K      | Kilo      | <u>KEY</u> LOH                            |
| L      | Lima      | <u>LEE</u> MAH                            |
| M      | Mike      | MIKE                                      |
| N      | November  | NO VEM BER                                |
| O      | Oscar     | <u>OSS</u> CAH                            |
| P      | Papa      | PAH <u>PAH</u>                            |
| Q      | Quebec    | KEH <u>BECK</u>                           |
| R      | Romeo     | <u>ROW</u> ME OH                          |
| S      | Sierra    | <u>SEE</u> AIR RAH                        |
| T      | Tango     | <u>TANG</u> GO                            |
| U      | Uniform   | <u>YOU</u> NEE FORM or <u>OO</u> NEE FORM |
| V      | Victor    | <u>VIK</u> TAH                            |
| W      | Whiskey   | <u>WISS</u> KEY                           |
| X      | X-ray     | <u>ECKS</u> <u>RAY</u>                    |
| Y      | Yankee    | <u>YANG</u> KEY                           |
| Z      | Zulu      | <u>ZOO</u> LOO                            |

<sup>1)</sup> The syllables underlined carry the accent.

4.2. *Figure Spelling Table*

| Figure to be transmitted | Word to be used |
|--------------------------|-----------------|
| 0                        | Zero            |
| 1                        | Wun             |
| 2                        | Bis             |
| 3                        | Ter             |
| 4                        | Quarto          |
| 5                        | Penta           |
| 6                        | Saxo            |
| 7                        | Sette           |
| 8                        | Octo            |
| 9                        | Nona            |
| Point                    | Decimal         |

E. g. : 250 will be : bis penta zero.

43.1 will be : quarto ter decimal wun.

## PART TWO \*

## Decode

## A

- A Azimuth (or true bearing, true course, etc. ...) which must be followed by three figures.
- AC Aircraft *indicated if necessary* will have to be abandoned.
- AD I must abandon my vessel.
- AE I shall abandon my vessel unless you will stand by me.
- AF I, or crew of vessel indicated, wish to abandon my, or their, vessel but have not the means.
- AG I do NOT intend to abandon my vessel.
- AH You should abandon your vessel as quickly as possible.
- AI You should NOT abandon aircraft. I shall attempt to take you in tow.
- AJ You should NOT abandon your vessel.

\* The form of presentation of this second part is the same as that of the English edition of the International Code of Signals.

AK Do you intend to abandon your vessel.  
 AM Accident has occurred. I require a doctor.  
 AT I am aground and require immediate assistance.  
 AV I am aground. Will you endeavour to tow me off.

## B

BD I have headway.  
 BJ You should keep going ahead.  
 BKW I have intercepted SOS or Mayday from vessel indicated, in position indicated, am going to her assistance.  
 BKX I have received SOS or Mayday from vessel indicated, in position indicated, at time indicated, but am unable to render assistance. Can you assist her.  
 BM Aeroplane reported in distress is receiving assistance.  
 BTK Can I cross the bar.  
 BV I am alighting in position indicated : am short of petrol.  
 BW I am alighting in position indicated with engine trouble.  
 BX I am alighting to pick up crew of disabled aircraft in position indicated.  
 BY I am forced to alight. Stand by to pick up crew.

## C

CA I sighted an aeroplane at time indicated, in position indicated, steering course indicated.  
 CD Sea is smooth enough for you to alight near me.  
 CE Sea is too rough for you to alight.  
 CG You should alight as near to me as possible.  
 CH You should alight to leeward of me, I am stopped.  
 CI You should alight to windward of me, I am stopped.  
 CN Have you sighted or heard of aeroplane in distress.  
 CR Is the sea smooth enough for me to alight near you.  
 CS You should endeavour to come alongside.  
 CT You should NOT come alongside.

## D

- D Date followed by two, four or six figures.  
The first two figures indicate the day of the month. Used alone they indicate that the month in question is the current one.  
The two following figures indicate the month.  
The year may be specified by two further figures.
- DIP You should keep as close as possible to pick up my people.
- DN I am coming to your assistance.
- DO I am drifting and require assistance.
- DQ I am on fire and require immediate assistance.
- DR I am proceeding to the assistance of vessel in distress in position indicated.
- DS I cannot assist you, or vessel indicated.
- DV I have sprung a leak and require immediate assistance.
- DX I require assistance, *of, from* . . .

## E

- EA I will stand by you, or vessel indicated.
- EC Vessel indicated is in distress and requires immediate assistance.
- ED Vessel indicated requires assistance.
- EI Can you assist me, or vessel indicated.
- EJ Do you require any further assistance.
- EK Do you require assistance, *from, of*.
- EM Do you require immediate assistance.
- EN What assistance do you require.
- EP Will you assist me into port, or port indicated. I am disabled as indicated.
- EU Bar is dangerous.
- EW Bar is NOT dangerous.
- EX Bar is impassable.

## F

- FER Doctor (s) (Surgeon).
- FM I am sinking. Send boats to take off passengers and crew.

## G

- G Longitude followed by five figures and if necessary one of the words East or West.



GU Breakers, reef, rock or shoal ahead of you.  
 GV Breakers, reef, rock or shoal on your port bow.  
 GW Breakers, reef, rock or shoal on your starboard bow.

## H

H Local time followed by four figures.  
 HV Vessel indicated is standing into danger.  
 HY You should beware of derelict dangerous to navigation in position indicated.

## I

IL You should remain where you are.  
 IN You should NOT come any closer.  
 IY I have sunk a vessel, *name indicated if necessary*.  
 IZ There has been a collision between vessels indicated.

## J

JA Vessel indicated has been in collision.  
 JD *You are standing into danger.*  
 JM I am altering course, *at, to . . .*  
 JN You should alter course, *at, to . . .*  
 JZ I have damaged my rudder. I cannot steer.

## K

KA My vessel is very seriously damaged.  
 KB My vessel is seriously damaged. I wish to transfer passengers.  
 KF Derelict has been sighted, or reported, off place or in position indicated, at time and on date indicated.  
 KI Have you seen derelict.  
 KL I CANNOT save the vessel : take off passengers and crew.  
 KM I will endeavour to connect with line throwing apparatus.  
 KR Can you connect with line throwing apparatus.

## L

|     |   |
|-----|---|
| L   | Latitude followed by four figures and if necessary one of the words North or South.   |
| LC  | You should keep within visual signal distance.  |
| LEW | My position by dead reckoning is.   |
| LFB | Position given by vessel making SOS or Mayday is wrong. I have her bearing by D.F. and can exchange bearings with any other vessel. |
| LFX | What is your present position.  |
| LI  | I am disabled.  |
| LJ  | I am disabled. Will you tow me in or into place indicated.  |
| LK  | I passed disabled vessel in position indicated.   |
| LN  | I sighted a disabled vessel in position indicated apparently without radio.   |
| LO  | My engines are disabled.  |
| LP  | My steering gear is disabled.   |
| LR  | Have you sighted a disabled vessel.   |
| LV  | I am in distress for want of fuel.  |
| LVV | There is a raft in position indicated.  |
| LY  | My aircraft is in distress. Stand by me.  |
| LZ  | My vessel is NOT under command.   |

## M

|    |   |
|----|---|
| MA | Position given with SOS or Mayday from aircraft was.              |
| MB | There is a vessel in distress in direction or position indicated. |
| MC | Vessel indicated appears to be in distress.                       |
| MD | Did you hear SOS or Mayday made by aircraft at time indicated.    |
| ME | Have you sighted or heard of a vessel in distress.                |
| MF | Is vessel <i>bearing indicated if necessary</i> in distress.      |
| MG | What was position given with SOS or Mayday from aircraft.         |
| MT | My engines are stopped.   |

## N

N Number followed by figures . . .  
 NC *I am in distress and require immediate assistance.*  
 NSE I have intercepted SOS or Mayday from an aeroplane in approximate position indicated.  
 NSF I have intercepted SOS or Mayday from vessel in approximate position indicated.  
 NSG I have received SOS or Mayday from vessel indicated, in position indicated, at time indicated, but have heard nothing since.  
 NW I am on fire. Send boats to take off passengers and crew.  
 NZ Vessel indicated is on fire.

## O

ONO I have rescued number indicated survivors from vessel indicated.

## P

PKM Ocean-going tug, (s).  
 PKN Salvage tug, (s).  
 PY I have NO lifeboat.

## Q

QA Lifeboats CANNOT get alongside.  
 QB Lifeboat CANNOT reach you.  
 QC Lifeboat is going to you.  
 QG You should send all available lifeboats.  
 QH Do you require a lifeboat.  
 QJ You should keep a light showing.  
 QXD I have found aircraft wreckage in position indicated.  
 QXE Wreckage is reported in position indicated.

## R

R Range in nautical miles followed by requisite number of figures.  
 RDG Fire boat, (s). Fire float, (s).  
 RJJ Lightship, (s). Light vessel, (s).

## S

- SA What is the name of the vessel or signal station in sight, *bearing indicated if necessary*.  
 SB What is the name of vessel with which you collided.  
 SC What is the name of your vessel.  
 SF Can you discharge some oil to smooth sea.  
 SI I require orders.

## T

- T G.M.T. followed by four figures.  
 TH I have lost my propeller.  
 TI Propeller shaft is broken.

## U

- UI Reply is "Yes" (In the affirmative).  
 UJ Reply is "No" (In the negative).

## V

- V Speed followed by the knots in whole numbers.  
 VC Your distress signals are understood. Assistance is coming out to you.

## W

- W Direction and force of wind followed by five figures.

## X

- X Position in azimuth and distance from a landmark followed by four, five or six figures of which the first three must be the azimuth, the others being the distance in nautical miles.  
 XU I cannot take you, or vessel indicated, in tow.  
 XV I, or vessel indicated require, (s) towing.  
 XZ Shall I take you in tow.

## Y

- YC Tug is, or number indicated tugs are, on its, their, way to you.  
 YP I have sternway.

## Z

ZL You should sound whistle or siren at intervals.  
 ZN What is the wind direction and force.

## PART THREE

## Code

The coding part of the present annex is divided into nine sections with general titles giving an idea of the messages contained under each.

To code a message it is sufficient to refer to the section recalling the general idea to be expressed and to seek the phrase which is closest to the idea to be transmitted by code.

The same idea may well appear in several sections, thus facilitating use of the code.

*Sections*

- Section 1. Aircraft.
- Section 2. Damage.
- Section 3. Dangers, urgency, safety of navigation.
- Section 4. Distress, request for aid.
- Section 5. Manoeuvres.
- Section 6. Position, date, time, number and miscellaneous.
- Section 7. Search.
- Section 8. Towing. Tugs.
- Section 9. Distress and rescue traffic.

**Section 1. Aircraft.**

CD Sea is smooth enough for you to alight near me.  
 CE Sea is too rough for you to alight.  
 CG You should alight as near to me as possible.  
 CH You should alight to leeward of me ; I am stopped.  
 CI You should alight to windward of me ; I am stopped.  
 BV I am alighting in position indicated ; I am short of petrol.

BW I am alighting in position indicated, with engine trouble.  
 BX I am alighting to pick up crew of disabled aircraft in position indicated.  
 BY I am forced to alight. Stand by to pick up crew.  
 CR Is the sea smooth enough for me to alight near you.  
 AC Aircraft *indicated if necessary* will have to be abandoned.  
 AI You should NOT abandon aircraft. I shall try to take you in tow.  
 LY My aircraft is in distress. Stand by me.  
 MA Position given with SOS or Mayday from aircraft was.  
 CA I sighted an aeroplane at time indicated in position indicated, steering course indicated.  
 CN Have you sighted or heard of aeroplane in distress.

## Section 2. Damage.

KA My vessel is very seriously damaged.  
 KB My vessel is seriously damaged. I wish to transfer passengers.  
 LO My engines are disabled.  
 LP My steering gear is disabled.  
 JZ I have damaged my rudder. I CANNOT steer.  
 TI Propeller shaft is broken.  
 TH I have lost my propeller.  
 DV I have sprung a leak and require immediate assistance.

## Section 3. Dangers, Urgency, Safety of Navigation.

ZN What is the wind direction and force.  
 W Direction and force of wind followed by five figures.  
 AM Accident has occurred. I require a doctor.  
 HV Vessel indicated is standing into danger.  
 JD *You are standing into danger.*  
 HY You should beware of derelict dangerous to navigation in position indicated.  
 EU Bar is dangerous.

EW Bar is NOT dangerous.  
 EX Bar is impassable.  
 BTK Can I cross the bar.  
 GU Breakers, reef, rock or shoal ahead of you.  
 GV Breakers, reef, rock or shoal on your port bow.  
 GW Breakers, reef, rock or shoal on your starboard bow.

#### Section 4. Distress, Request for Aid.

NC *I am in distress and require immediate assistance.*  
 AT I am aground and require immediate assistance.  
 FM I am sinking. Send boats to take off passengers and crew.  
 DV I have sprung a leak and require immediate assistance.  
 DQ I am on fire and require immediate assistance.  
 DO I am drifting and require assistance.  
 NW I am on fire. Send boats to take off passengers and crew.  
 LY My aircraft is in distress. Stand by me:  
 AD I must abandon my vessel.  
 AE I shall abandon my vessel unless you will stand by me.  
 AF I, or crew of vessel indicated, wish to abandon my, or their, vessel  
 but have not the means.  
 LI I am disabled.  
 LO My engines are disabled.  
 LV I am in distress for want of fuel.  
 DX I require assistance, *of, from*.  
 EP Will you assist me into port, or port indicated. I am disabled as  
 indicated.  
 KB My vessel is seriously damaged. I wish to transfer passengers.  
 KL I CANNOT save the vessel : take off passengers and crew.  
 EI Can you assist me, or vessel indicated.  
 LJ I am disabled. Will you tow me in or into place indicated.  
 AV I am aground. Will you endeavour to tow me off.

**Section 5. Manoeuvres.**

|     |  |
|-----|--|
| MT  | My engines are stopped.                      |
| BD  | I have headway.                              |
| YP  | I have sternway.                             |
| JM  | I am altering course, <i>at, to</i> . . .    |
| JN  | You should alter course, <i>at, to</i> . . . |
| CS  | You should endeavour to come alongside.      |
| CT  | You should NOT come alongside.               |
| IN  | You should NOT come any closer.              |
| BJ  | You should keep going ahead.                 |
| LZ  | My vessel is NOT under command.              |
| BTK | Can I cross the bar.                         |

**Section 6. Position, Date, Time, Number and Miscellaneous.**

|     |  |
|-----|--|
| LFX | What is your present position.   |
| LEW | My position by dead reckoning is.  |
| LFB | Position given by vessel making SOS or Mayday is wrong. I have her bearing by D.F. and can exchange bearings with any other vessel.  |
| MB  | There is a vessel in distress in direction or position indicated.  |
| A   | Azimuth (or true bearing, true course, etc.) which must be followed by three figures.  |
| MG  | What was position given with SOS or Mayday from aircraft.  |
| MA  | Position given with SOS or Mayday from aircraft was . . .  |
| G   | Longitude followed by five figures and if necessary the words East or West.  |
| L   | Latitude followed by four figures and if necessary the words North or South.   |
| X   | Position in azimuth and distance from a landmark followed by four, five or six figures, of which the first three must be the azimuth, the others being the distance in nautical miles. |
| N   | Number followed by figures . . .   |
| R   | Range in nautical miles followed by requisite number of figures.   |



|     |   |
|-----|---|
| D   | Date followed by two, four or six figures. The first two figures indicate the day of the month. Used alone they indicate that the month in question is the current one. The two following figures indicate the month. The year may be specified by two further figures. |
| H   | Local time followed by four figures.  |
| T   | G.M.T. followed by four figures.  |
| V   | Speed followed by the knots in whole numbers.   |
| ZN  | What is the wind direction and force.   |
| W   | Direction and force of wind followed by five figures.   |
| FER | Doctor, (s) (Surgeon).  |
| RDG | Fire boat, (s). Fire float, (s).  |
| RJJ | Lightship, (s). Light vessel, (s).  |
| UI  | Reply is "Yes" (In the affirmative).  |
| UJ  | Reply is "No" (In the negative).  |

#### Section 7. Search.

|     |  |
|-----|--|
| MB  | There is a vessel in distress in direction or position indicated.  |
| MC  | Vessel indicated appears to be in distress.  |
| MF  | Is vessel <i>bearing indicated if necessary</i> in distress.   |
| ME  | Have you sighted or heard of a vessel in distress.   |
| LR  | Have you sighted a disabled vessel.  |
| LK  | I passed disabled vessel in position indicated.  |
| LN  | I sighted a disabled vessel in position indicated apparently without radio.                                |
| KI  | Have you seen derelict.  |
| KF  | Derelict has been sighted, or reported, off place or in position indicated, at time and on date indicated. |
| NZ  | Vessel indicated is on fire.   |
| LVV | There is a raft in position indicated.   |
| CN  | Have you sighted or heard of aeroplane in distress.  |
| CA  | I sighted an aeroplane at time indicated, in position indicated, steering course indicated.                |
| QXD | I have found aircraft wreckage in position indicated.  |
| QXE | Wreckage is reported in position indicated.  |

|     |  |
|-----|--|
| BM  | Aeroplane reported in distress is receiving assistance.  |
| BX  | I am alighting to pick up crew of disabled aircraft in position indicated.   |
| MG  | What was position given with SOS or Mayday from aircraft.  |
| MA  | Position given with SOS or Mayday from aircraft was . . .  |
| MD  | Did you hear SOS or Mayday by aircraft at time indicated.  |
| BKX | I have received SOS or Mayday from vessel indicated, in position indicated, at time indicated, but am unable to render assistance. Can you assist her. |
| BKW | I have intercepted SOS or Mayday from vessel indicated, in position indicated, am going to her assistance.   |
| NSF | I have intercepted SOS or Mayday from vessel in approximate position indicated.  |
| NSE | I have intercepted SOS or Mayday from an aeroplane in approximate position indicated.  |
| NSG | I have received SOS or Mayday from vessel indicated, in position indicated, at time indicated, but have heard nothing since.                           |
| LFB | Position given by vessel making SOS or Mayday is wrong. I have her bearing by D.F. and can exchange bearings with any other vessel.                    |
| SC  | What is the name of your vessel.   |
| SA  | What is the name of the vessel or signal station in sight <i>bearing indicated if necessary.</i>   |
| SB  | What is the name of vessel with which you collided.  |
| SI  | I require orders.  |
| IL  | You should remain where you are.   |
| QJ  | You should keep a light showing.   |
| ZL  | You should sound whistle or siren at intervals.  |

#### Section 8. Towing. Tugs.

|    |  |
|----|--|
| XU | I cannot take you, or vessel indicated in tow.             |
| XV | I, or vessel indicated require, (s), towing.               |
| XZ | Shall I take you in tow.                                   |
| LJ | I am disabled. Will you tow me in or into place indicated. |

AV I am aground. Will you endeavour to tow me off.  
 EP Will you assist me into port or port indicated. I am disabled as indicated.  
 YC Tug is, or number indicated tugs are, on its, their, way to you.  
 PKM Ocean-going tug, (s).  
 PKN Salvage tug, (s).

#### Section 9. Distress and Rescue Traffic.

EC Vessel indicated is in distress and requires immediate assistance.  
 MB There is a vessel in distress in direction or position indicated.  
 DR I am proceeding to the assistance of vessel in distress in position indicated.  
 DS I cannot assist you, or vessel indicated.  
 NZ Vessel indicated is on fire.  
 BKW I have intercepted SOS or Mayday from vessel indicated, in position indicated, am going to her assistance.  
 BKX I have received SOS or Mayday from vessel indicated, in position indicated, at time indicated, but am unable to render assistance. Can you assist her.  
 EK Do you require assistance, *from, of*.  
 EM Do you require immediate assistance.  
 EJ Do you require any further assistance.  
 ED Vessel indicated requires assistance.  
 AK Do you intend to abandon your vessel.  
 AG I do NOT intend to abandon my vessel.  
 AH You should abandon your vessel as quickly as possible.  
 AJ You should NOT abandon your vessel.  
 AI You should NOT abandon aircraft. I shall attempt to take you in tow.  
 AC Aircraft *indicated if necessary* will have to be abandoned.  
 IY I have sunk a vessel *name indicated if necessary*.  
 EN What assistance do you require.  
 VC Your distress signals are understood. Assistance is coming out to you.  
 YC Tug is or number indicated tugs are, on its, their, way to you.

|     |  |
|-----|--|
| DN  | I am coming to your assistance.                                  |
| QA  | Lifeboat, (s) CANNOT get alongside.                              |
| QH  | Do you require a lifeboat.                                       |
| PY  | I have NO lifeboat.  |
| QB  | Lifeboat CANNOT reach you.                                       |
| QC  | Lifeboat is going to you.  |
| QG  | You should send all available lifeboats.                         |
| CS  | You should endeavour to come alongside.                          |
| CT  | You should NOT come alongside.                                   |
| LY  | My aircraft is in distress. Stand by me.                         |
| DIP | You should keep as close as possible to pick up my people.       |
| IN  | You should NOT come any closer.                                  |
| CR  | Is the sea smooth enough for me to alight near you.              |
| CE  | Sea is too rough for you to alight.                              |
| CD  | Sea is smooth enough for you to alight near me.                  |
| EA  | I will stand by you, or vessel indicated.                        |
| SF  | Can you discharge some oil to smooth sea.                        |
| KM  | I will endeavour to connect with line-throwing apparatus.        |
| KR  | Can you connect with line-throwing apparatus.                    |
| QJ  | You should keep a light showing.                                 |
| IZ  | There has been a collision between vessels indicated.            |
| JA  | Vessel indicated has been in collision.                          |
| LC  | You should keep within visual signal distance.                   |
| ZL  | You should sound whistle or siren at intervals.                  |
| ONO | I have rescued number indicated survivors from vessel indicated. |

#### PART FOUR

##### Towing Signals

These signals should be used only when towing and being towed. They are sent by radiotelephony to confirm visual signals. The attention of all who use them is drawn to the fact that the symbols used do not

always have the same meaning here as in single-letter signals of the concise Code.

The signals are transmitted by radiotelephony, in accordance with the spelling table (see Part One).

They are set out in the following table :

**Table of Towing Signals**

| By the ship towing |  | By the ship towed |  |
|--------------------|--|-------------------|--|
| A                  | Is the towing hawser fast ?                      | A                 | Towing hawser is fast.                                   |
| B                  | Is all ready for towing ?                        | B                 | All is ready for towing.                                 |
| C                  | Yes (or Affirmative).                            | C                 | Yes (or Affirmative).                                    |
| D                  | Shorten in the towing hawser.                    | D                 | Shorten in the towing hawser.                            |
| E                  | I am altering my course to starboard.            | E                 | Steer to starboard.                                      |
| F                  | Pay out the towing hawser.                       | F                 | Pay out the towing hawser.                               |
| G                  | Cast off the towing hawser.                      | G                 | Cast off the towing hawser.                              |
| H                  | I must cast off the towing hawser.               | H                 | I must cast off the towing hawser.                       |
| I                  | I am altering my course to port.                 | I                 | Steer to port.   |
| J                  | The towing hawser has parted.                    | J                 | The towing hawser has parted.                            |
| K                  | Shall I continue the present course ?            | K                 | Continue the present course.                             |
| L                  | I am stopping my engines.                        | L                 | Stop your engines at once.                               |
| M                  | I am keeping away before the sea.                | M                 | Keep away before the sea.                                |
| N                  | No (or Negative).                                | N                 | No (or Negative).  |
| O                  | Man overboard.                                   | O                 | Man overboard.   |
| P                  | I must get shelter or anchor as soon as possible | P                 | Bring me to shelter or to an anchor as soon as possible. |
| Q                  | Shall we anchor at once.                         | Q                 | I wish to anchor at once.                                |
| R                  | I will go slower.                                | R                 | Go slower.   |
| S                  | My engines are going astern.                     | S                 | Go astern.   |
| T                  | I am increasing speed.                           | T                 | Increase speed.  |
| U                  | You are standing into danger.                    | U                 | You are standing into danger.                            |
| V                  | Set sails.                                       | V                 | I will set sails.  |
| W                  | I am paying out the towing hawser.               | W                 | I am paying out the towing hawser.                       |
| X                  | Get spare towing hawser ready.                   | X                 | Spare towing hawser is ready.                            |
| Y                  | I cannot carry out your order.                   | Y                 | I cannot carry out your order.                           |
| Z                  | I am commencing to tow.                          | Z                 | Commence towing.   |

## PART FIVE

**Radiotelephony Procedure Signals**

The following abbreviations are given in the form of a question when followed by the letter B (question mark).

| Abbreviation | Question  | Answer or advice  |
|--------------|---|---|
| QRA          | <b>Name</b><br>What is the name of your station?  | The name of my station is ...   |
|              | <b>Transmission quality</b><br>What is the intelligibility of my signals (or those of ...)? | The intelligibility of your signals (or those of ...) is<br>1. bad<br>2. poor<br>3. fair<br>4. good<br>5. excellent |
| QRM          | Are you being interfered with?  | I am being interfered with.   |
| QRN          | Are you troubled by static?   | I am troubled by static.  |
| QSW          | <b>Choice of Frequency</b><br>Will you send on this frequency [or on ... kc/s (or Mc/s)]?   | I am going to send on this frequency [or on ... kc/s (or Mc/s)].  |
|              | QSX<br>Will you listen to (call sign) on ... kc/s (or Mc/s)?                                | I am listening to ... (call sign) on ... kc/s (or Mc/s).  |
| QRU          | <b>Traffic</b><br>Have you anything for me?   | I have nothing for you.   |
|              | QSL<br>Can you acknowledge receipt?   | I am acknowledging receipt.   |
| QTC          | How many radiotelegrams have you to send?   | I have ... radiotelegrams for you.  |
|              | QRJ<br>How many radiotelephone calls have you to book?                                      | I have ... radiotelephone calls to book.  |
| QRC          | <b>Charges</b><br>By what enterprise are the accounts for charges for your station settled? | The accounts for charges of my stations are settled by ...  |
|              | QSJ<br>What is the charge to be collected to ... including your internal charge?            | The charge to be collected to ... including my internal charge is ... francs.                                       |

**Miscellaneous**

|     |  |
|-----|--|
| CQ  | General call to all stations.  |
| AS  | Wait ... minutes.  |
| K   | Invitation to transmit (equivalent to English "over").   |
| OK  | We agree (or "that is correct").   |
| VA  | End of work (equivalent to English "end of message").  |
| RPT | Will you repeat (or I repeat) ... (if necessary, indicate the part to be repeated).                            |
| ADS | Abbreviation designating address of the addressee of the radiotelegram or the number of the called subscriber. |
| TXT | Abbreviation designating the text of the radiotelegram.  |
| SIG | Abbreviation designating the signature of the radiotelegram.   |

## ANNEX 3

# TO BE USED ONLY IF IMMEDIATE ASSISTANCE IS NEEDED

**NAME OF SHIP :** CAP LIHOU/TRXB - Tango Romeo X-Ray Bravo  
**CALL SIGN:**

## To indicate DISTRESS:

Transmit the **ALARM SIGNAL** for 30 SECONDS

Send the following **DISTRESS CALL**:

MAYDAY MAYDAY MAYDAY THIS IS CAP LIHOU CAP LIHOU CAP LIHOU

Then send the **DISTRESS MESSAGE** composed as follows:

MAYDAY CAP LIHOU (or TANGO ROMEO X-RAY BRAVO)

Position of ship (See table II)

Nature of distress (See table III)

If necessary, nature of aid required and any other information facilitating the rescue

[SEE **RADIOTELEPHONE CODE (CODING SECTION)**]

**NOTES: I. SPELL OUT LETTERS AND FIGURES AS IN TABLE I**  
**II. CALL OUT NUMBERS FIGURE BY FIGURE (SEE EXAMPLES BELOW)**

### TABLE I. LETTER AND FIGURE SPELLING

|           |            |            |           |          |          |                |
|-----------|------------|------------|-----------|----------|----------|----------------|
| A ALFA    | G GOLF     | M MIKE     | S SIERRA  | Y YANKEE | ZERO     | 6 SAXO         |
| B BRAVO   | H HOTEL    | N NOVEMBER | T TANGO   | Z ZULU   | 1 WUN    | 7 SETTE        |
| C CHARLIE | I INDIA    | O OSCAR    | U UNIFORM |          | 2 BIS    | 8 OCTO         |
| D DELTA   | J JULIETTE | P PAPA     | V VICTOR  |          | 3 TER    | 9 NONA         |
| E ECHO    | K KILO     | Q QUEBEC   | W WHISKEY |          | 4 QUARTO | Decimal point: |
| F FOXTROT | L LIMA     | R ROMEO    | X X-RAY   |          | 5 PENTA  | DECIMAL        |

### TABLE II - POSITION

#### BY LATITUDE AND LONGITUDE

latitude - letter **L (LIMA)**

followed by:

2 figures for DEGREES

2 figures for MINUTES

and if necessary, either

**NORTH** - latitude North, or

**SOUTH** - latitude South

longitude - letter **G (GOLF)**

followed by:

3 figures for DEGREES

2 figures for MINUTES

and if necessary, either

**EAST** - longitude East, or

**WEST** - longitude West

#### BY BEARING AND DISTANCE

**FROM LANDMARK**

Name of LANDMARK

Letter **X (X-RAY)**, followed by:

3 figures for ship's TRUE BEARING FROM LANDMARK

1 or MORE figures for DISTANCE in nautical miles

### TABLE III - NATURE OF DISTRESS

#### TEXT OF SIGNAL

I have been in **COLLISION**  
 I am **DRIFTING** and require assistance  
 I am **AGROUND** and require immediate assistance  
 I am **ON FIRE** and require immediate assistance  
 I am in distress for **WANT OF FUEL**  
 I have sprung a **LEAK** and require immediate assistance  
 I am **SINKING**; send boats to take off passengers and crew

Words to be transmitted

|    |              |
|----|--------------|
| JA | JULIET ALFA  |
| DO | DELTA OSCAR  |
| AT | ALFA TANGO   |
| DQ | DELTA QUEBEC |
| LV | LIMA VICTOR  |
| DV | DELTA VICTOR |
| FM | FOXTROT MIKE |

#### ANSWER TO A SHIP IN DISTRESS

Your distress signals are understood; assistance is coming out to you  
 I am coming to your assistance.

|    |                |
|----|----------------|
| VC | VICTOR CHARLIE |
| DN | DELTA NOVEMBER |

### EXAMPLES OF DISTRESS MESSAGES

- I - MAYDAY CAP LIHOU (or TANGO ROMEO X-RAY BRAVO) STOP LIMA PENTA QUARTO BIS PENTA GOLF ZERO ZERO SAXO TER TER STOP DELTA QUEBEC.  
 CAP LIHOU/TRXB in distress latitude 54° 25' Longitude 006° 33' - I am on fire and require immediate assistance.
- II - MAYDAY CAP LIHOU (or TANGO ROMEO X-RAY BRAVO) STOP USHANT X-RAY TER WUN PENTA WUN NONA ZERO STOP DELTA VICTOR.  
 CAP LIHOU/TRXB in distress 315° and 190 miles from Ushant; I have sprung a leak and require immediate assistance.



## RECOMMENDATION No. 22

**Recommendation to the Safety of Life at Sea Conference  
relating to the Use of the Term "Emergency (Reserve)"**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) that the terms "Emergency (Reserve) Installation" and "Emergency (Reserve) Transmitter" are used both in the Radio Regulations and in the International Convention for the Safety of Life at Sea, but have not been defined in either document;
- b) that the requirements to be met by such installations are not the same in the two documents;

*considering*

- a) that it would be desirable to eliminate the possibility of misinterpretation which exists in the use of these terms and which has been apparent at the Administrative Radio Conference;
- b) that the best means to resolve this difficulty is to avoid the use of these ambiguous terms;

*having decided*

that in so far as the Radio Regulations are concerned the only term which needs to be defined in this context is "Ship's Emergency transmitter", which has been defined as "A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes";

*recommends*

1. that the International Conference on Safety of Life at Sea should consider, as a complementary measure, the possibility of deleting the

terms "Emergency (Reserve) Installation", "Emergency (Reserve) Transmitter", "Emergency (Reserve) Receiver" and "Emergency Source of Energy" from the International Convention for the Safety of Life at Sea and of substituting new terms such as "Reserve Installation", "Reserve Transmitter", "Reserve Receiver" and "Reserve Source of Energy", which would thus avoid the use of the word "emergency";

2. that the new terms used should be precisely defined.

#### RECOMMENDATION No. 23

##### **to the Governments Signatory to the International Convention for the Safety of Life at Sea Relating to the Adoption of a Radiotelephone Alarm Signal**

The Administrative Radio Conference, Geneva, 1959,

##### *considering*

1. that the adoption on a world-wide basis of a radiotelephone alarm signal for use in cases of distress, would contribute to safety;
2. That Articles 35 and 36 of the Radio Regulations include operational instructions relating to the use of such a signal, and Appendix 20 of the Radio Regulations includes provisions specifying conditions to be fulfilled by automatic alarm receiving equipments;

##### *recommends*

that the attention of the International Conference on Safety of Life at Sea, to be held in London in 1960, be drawn to Articles 35 and 36 of the Radio Regulations and to C.C.I.R. Recommendation No. 219.

## RECOMMENDATION No. 24

**to the International Conference on Safety of Life at Sea  
Relating to Distress, Urgency and Safety Communications**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the frequency 2 182 kc/s is the international radiotelephone distress frequency for the maritime mobile service ;
- b) that the provisions of the Radio Regulations relating to the maritime mobile service of radiotelephony have been revised to take account of the considerable development of this service ;

*invites*

the International Conference on Safety of Life at Sea, to be held in May/June 1960, in London, to take note of

- 1. the provisions of the Radio Regulations, Geneva, 1959, concerning distress, urgency and safety communications ;
- 2. the following Recommendations of the C.C.I.R. :
  - No. 45 : Avoidance of interference from ships' radar to other radiocommunication apparatus on board ;
  - No. 218 : Prevention of interference to radio reception on ships ;
  - No. 219 : Alarm signal for use on the maritime radiotelephony distress frequency of 2 182 kc/s ;
  - No. 224 : Testing of 500 kc/s radiotelegraph auto alarm receiving equipment on board ships.

## RECOMMENDATION No. 25

**Relating to a Re-Classification of International  
Public Correspondence Categories of Ship Stations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that those radiotelegraph ship stations which are required, in accordance with the provisions of Nos. 25-11 and 25-14 and Appendix 12 of the Radio Regulations, to maintain a daily service of eight hours (H8) or sixteen hours (H16), are both placed in the same category (the second) for the international service of public correspondence ;
- b) that in the same service all ship stations equipped exclusively for radiotelephony are placed in a single category in accordance with the provisions of No. 25-18, irrespective of the daily watch they maintain and regardless of the growth of traffic and other developments ;

*recommends*

1. that administrations study the advisability of increasing
  - the number of categories of ship radiotelegraph stations to four, viz. 24 hours, 16 hours, 8 hours, and no fixed hours, of watch,
  - the categories of ships equipped exclusively for radiotelephony to a number more suited to actual watch-keeping conditions ;
2. that administrations present to the next Administrative Radio Conference proposals concerning this matter, with a view to amending the Section IV, Article 25 of the Radio Regulations.

## RECOMMENDATION No. 26

**Relating to Hours of Service for Ship Stations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the number of ship stations equipped to operate on frequencies in the authorised bands between 4 000 and 27 500 kc/s is increasing ;
- b) that these bands are heavily loaded during single operator watch periods ;
- c) that, in accordance with the provisions of Appendix 12, watch is maintained at the same times, on ship stations in four of the zones, thus causing peak loading of the calling and working bands during single operator watch periods ;
- d) that this uneven loading in the bands between 4 000 and 27 500 kc/s leads to prolonged calling and excessive waiting by ships ;
- e) that more efficient use could be made of these bands if the hours of watchkeeping by single operator ship stations were staggered ;

*recommends*

1. that administrations should study the problem of watchkeeping by ship stations with a view to achieving a more even traffic loading of the bands between 4 000 and 27 500 kc/s ;
2. that administrations submit proposals to the next Administrative Radio Conference.

## RECOMMENDATION No. 27

**Relating to the Use of Single Sideband Systems  
by the Maritime Mobile Service**

The Administrative Radio Conference, Geneva, 1959,

*considering*

a) that the main advantages of single sideband systems (SSB) compared with double sideband systems (DSB) for mobile radiotelephony are as follows :

1. reduction of bandwidth required per channel ;
2. increase in signal-to-noise ratio or, alternatively, reduction in transmitter power (and hence antenna voltage) for the same signal-to-noise ratio, improvements dependent upon the degree of carrier suppression ;
3. reduction of the type of distortion that is due to selective fading ;
4. reduction of interference, particularly that due to beat notes between carriers, dependent on the degree of carrier suppression ;
5. reduction of interference, due to cross-modulation between adjacent channel transmissions ;

b) that the disadvantages of SSB compared with DSB for mobile radiotelephony are as follows :

1. more rigorous requirements for transmitter and receiver stability ;
2. greater complexity of apparatus ;
3. higher prices of the equipment ;
4. higher maintenance costs for the equipment ;

5. impracticability of conversion of existing mobile DSB equipments for SSB operation ;
- c) that the frequencies in Band 6 used for radiotelephony in the maritime mobile service (i.e. world-wide 1 605 to 2 850 kc/s and additionally in Region 1, 3 155 to 3 800 kc/s):
  1. include the international calling and distress frequency 2 182 kc/s ;
  2. are shared with the fixed service ;
  3. are used by many low-tonnage ships, some compulsorily and others voluntarily fitted exclusively with DSB radiotelephone equipments for use in Band 6 ;
- d) that the parts of Band 7 allocated exclusively to the maritime mobile service between 4 000 and 27 500 kc/s do not include any international distress frequency ;
- e) that in the maritime mobile service the advantages of SSB operation predominate over the disadvantages to a greater extent in Band 7 than in Band 6 ;
- f) that, in the maritime mobile service, in the interests of safety of life at sea, the introduction of SSB operation should not be allowed to discourage the extension of voluntary fitting of DSB radiotelephony equipment in Band 6 ;

*recommends*

for the maritime mobile service :

1. that SSB operation be introduced as far as operationally required for radiotelephony in Band 6 and Band 7 ;

2. that coast stations be prepared to communicate with both DSB and SSB shipborne equipment ;
3. that for SSB equipment, the technical characteristics recommended by the C.C.I.R. be used as a guide ;
4. that the upper sideband be used \* ;
5. that the channel arrangements be such that two SSB channels are accommodated within each existing DSB channel and the bandwidth of the SSB emissions be kept within such limits as will permit this to be done ;
6. that the transmitter audio frequency band be 350 to 2 700 c/s with a permitted amplitude variation of 6 db ;
7. that in Band 6 ship stations employing SSB equipment be able to insert a carrier at a level sufficient to permit satisfactory reception by DSB receivers when communicating with DSB stations ;
8. that, in the particular case of transmissions on the radiotelephony calling and distress frequency 2 182 kc/s, all transmissions be made either by DSB, or by SSB with carrier insertion sufficient to permit satisfactory reception by DSB receivers ;
9. that the attention of administrations be drawn to the fact that there would be technical and operational advantages in designating certain frequencies for international common use for ship-shore and inter-ship working on which SSB operation would be permitted.

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\* Exceptionally, in the 4-23 Mc/s bands independent sideband (ISB) may be used by special arrangement between administrations.



## RECOMMENDATION No. 28

**Relating to the Pronunciation of Words in the Phonetic Alphabet**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) that agreement has been reached on a world-wide phonetic alphabet (see Appendix 16) ;
- b) that the pronunciation of the words in this alphabet may vary according to the language habits of the speakers ;
- c) that in order to minimise the wide variations in pronunciation, a record has been prepared by the International Civil Aviation Organization which gives the pronunciation desired of the words in the newly adopted phonetic alphabet ;
- d) that this record contains preambles in English, French and Spanish, and is readily available ;

*considering*

that a similar record would be very useful ;

*recommends*

1. that the Secretary General be instructed to make similar records available as one of the publications of the Union ;
2. that for this purpose the Secretary General may investigate the possibility of making use of records that already exist.

## RECOMMENDATION No. 29

**Relating to the Phonetic Figure Table**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that in radiotelephone communications between stations normally using different languages there are, at present, no standard phonetic expressions for figures ;

- b) that Appendix 16 to the Radio Regulations permits such figures to be expressed by means of the application of the phonetic letter equivalents, printed on the same horizontal line of the table, with the indication "as a number" spoken twice before and after such expressions ;
- c) that this system of using letters for designating figures may lead to confusion ;
- d) that in the aeronautical mobile service international civil aviation uses a phonetic figure table (see column A below) which is subject to modification as a result of speech tests still being carried out ;
- e) that it has been agreed to evaluate the efficiency of a phonetic figure table (see column B below) in the "International Radiotelephone Code for Maritime Mobile Service" which itself is the subject of Recommendation No. 21 ;

*believes*

- a) that the adoption of a standard phonetic figure table is essential for the expression of figures between stations employing radiotelephony where different languages are normally used, especially in cases where the safety of life is involved ;
- b) that the ideal solution would be a phonetic figure table comprised of words or expressions, the pronunciation of which would be as identical as possible in the greatest number of languages and chosen to avoid any confusion with the words used in the phonetic letter table ;

*recommends*

1. that administrations study this whole question, taking into account the existing and proposed phonetic figure tables, their evaluation, and any modifications which might be made to them, also the possibilities of developing a new table likely to meet with universal appeal ;

2. that the result of their study should be communicated to the Secretary General for the information of the Members and Associate Members of the Union, well in advance of the next Administrative Radio Conference ;

3. that at the next Administrative Radio Conference consideration be given to the adoption of a standard phonetic figure table for the use of all services in radiotelephone communications where language difficulties are likely to arise.

| Figure        | Word to be used |         |
|---------------|-----------------|---------|
|               | A               | B       |
| 0             | ZE-RO           | ZERO    |
| 1             | WUN             | WUN     |
| 2             | TOO             | BIS     |
| 3             | TREE            | TER     |
| 4             | FOW-ER          | QUARTO  |
| 5             | FIFE            | PENTA   |
| 6             | SIX             | SAXO    |
| 7             | SEV-EN          | SETTE   |
| 8             | AIT             | OCTO    |
| 9             | NIN-ER          | NONA    |
| Decimal point | DAY-SEE-MAL     | DECIMAL |
| Thousand      | TOUS-AND        |         |

#### RECOMMENDATION No. 30

##### Relating to the Protection of Standard Frequency Guard-Bands for Use by Radio Astronomy

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that interference-free reception of standard frequency and time-signals in the standard frequency bands centred on 2.5, 5, 10, 15,

20 and 25 Mc/s, allocated to the standard frequency service in the Table of Frequency Allocations, is of world-wide interest ;

- b) that these bands may be used most efficiently for the observation of cosmic radiations by radio astronomers only if they are free from appreciable energy due to emissions of services other than the standard frequency service ;
- c) that the bands 10 003-10 005 kc/s and 19 990-20 010 kc/s may be used for space research ;

*recommends*

that administrations take all practicable measures to safeguard the standard frequency bands from any harmful interference.

RECOMMENDATION No. 31

**Relating to the Radio Astronomy Service**

The Administrative Radio Conference, Geneva, 1959,

*considering that*

- a) recognition has now been given to the radio astronomy service in the regulations, and that allocations to this service are included in the table of frequency allocations ;
- b) the radio astronomy service is devoted to the reception of extremely low-level electromagnetic radiations of extra-terrestrial origin, and needs therefore to be protected from radiations of man-made origin, to the maximum degree practicable ;
- c) the radio astronomy service must compete for spectrum space with other existing and expanding radio services ;

- d) the ability of the radio astronomy service to share frequency bands with other radio services is limited ;
- e) in the case of many radio astronomy service installations it would be very difficult, once they were established, to change the frequency bands being observed or locations to avoid harmful interference ;
- f) the radio astronomy service should be assured a reasonable degree of stability in the frequency bands allocated to it, so as to permit long-term study programmes ;
- g) the desired protection for the radio astronomy service in many of the bands allocated for its use will be difficult to obtain and can be achieved only on a long-term basis ;
- h) the provisions of the new table of frequency allocations do not meet fully the stated requirements of the radio astronomy service, particularly in Band 8 and the lower part of Band 9 ;
- i) it will assist administrations to protect the radio astronomy service if information is available showing the locations of the observatories, and those of the bands allocated in the table of frequency allocations that are in use at each observatory ;

*recommends that*

1. administrations, when preparing for the next Administrative Radio Conference, should consider further the question of frequency allocations for the radio astronomy service ;
2. the possibility of making a firm allocation in the range 37-41 Mc/s be specially considered and that, in the meantime, when assigning frequencies to stations of other services, administrations should avoid, as far as practicable, the bands  $38.0 \pm 0.25$  Mc/s or  $40.68 \pm 0.25$  Mc/s, which are in use, or are proposed for use for radio astronomical observations in certain countries ;

3. administrations when drawing up frequency assignment plans should leave, as far as practicable, the band 606–614 Mc/s free for radio astronomical observations or should assign frequencies to stations of other services in this band in such a way as to afford the maximum practicable protection for the radio astronomy service ;

4. administrations should notify to the Secretary General the locations of observatories in their countries, and those of the bands allocated in the frequency allocation table that are in use at each observatory ; and that the Secretary General should communicate this information to Members and Associate Members and

*draws the attention of organizations concerned with radio astronomy to the following :*

1. the relevant provisions of the radio regulations ;
2. the need to maintain close co-ordination with their national administrations on matter of frequency usage ;
3. the need to select, for observatories, sites that are as remote as possible from sources of radio interference.

#### RECOMMENDATION No. 32

#### **to Administrations Relating to the Meteorological Aids Service in the Band 27.5-28 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*recommends :*

that administrations whose stations in the meteorological aid service operate in the band 27.5-28 Mc/s should arrange, as soon as

possible, for the transfer of these operations to higher frequency bands which are allocated to the meteorological aids service ;

*invites :*

the World Meteorological Organization to study this question and to proceed with such co-ordination among administrations as appears necessary.

#### RECOMMENDATION No. 33

##### **Relating to the Use of Radiotelegraph and Radiotelephone Links by Red Cross Organizations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the world-wide relief work of the Red Cross Organizations is of increasing importance particularly in the event of disasters, catastrophes, etc. ;
- b) that in such circumstances normal communication facilities are frequently overloaded, damaged or even completely interrupted ;
- c) that it is necessary to facilitate by all possible measures the rapid intervention of the Red Cross, national and international ;
- d) that rapid and independent contact is essential to the intervention of the national Red Cross Societies (Red Crescent, Red Lion and Sun) ;
- e) that for international relief work it is necessary that the national Red Cross Societies involved be able to communicate with each other as well as with the International Committee of the Red Cross and the League of Red Cross Societies ;

*recommends*

1. that administrations take account of the possible need of the Red Cross for rapid communication by radio when normal communication facilities are disrupted ;

2. that administrations study the possibility of assigning, for this purpose, at the upper or lower limits of the amateur bands, one or more common frequencies to stations of the Red Cross.
3. that the next Administrative Radio Conference should consider whether any further action is necessary.

#### RECOMMENDATION No. 34

##### **Relating to the Practical Needs of Countries in Need of Special Assistance**

The Administrative Radio Conference, Geneva, 1959,

##### *recommends*

1. that administrations of countries in need of special assistance should establish their own facilities for processing and adjusting quartz crystals, and obtain crystal-stabilized variable frequency oscillators to be employed as a temporary means of frequency control of their transmitters pending availability of crystals adjusted to precise operating frequencies. When assistance in this matter is requested, it should be provided through the appropriate Technical Assistance Organs of the United Nations ;

2. that all administrations should make special efforts to co-operate with the administrations of countries in need of special assistance by furnishing monitoring information and such technical assistance as may aid these countries in obtaining proper frequency assignments for their operations ;

##### *invites the International Frequency Registration Board*

to provide administrations of countries in need of special assistance with the necessary information and technical data, includ-



ing the detailed explanations of the Radio Regulations, which will permit these countries to choose and obtain proper frequency assignments for their operations.

RECOMMENDATION No. 35

**Relating to the Convening of an Extraordinary Administrative  
Radio Conference to allocate Frequency Bands  
for Space Radiocommunication Purposes**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a)* that several delegations participating in the Administrative Radio Conference have proposed to allocate frequencies for space research purposes only on the basis of the research requirements for the next few years ;
- b)* that the C.C.I.R. has already under study technical questions relating to radiocommunication with and between space vehicles ;
- c)* that the Administrative Radio Conference has recommended to the C.C.I.R. that the identification and control of space vehicle emissions be questions for study by the C.C.I.R. ;
- d)* that until the results of some space research programmes are available the extent to which space radiocommunication services and other radiocommunication services may share frequencies, without harmful interference, cannot accurately be assessed ;
- e)* that additional research experience and the results of studies by the C.C.I.R., and other interested organizations, relating to space radiocommunications are essential before it will be feasible for the Union to take decisions on firm frequency allocations for space radiocommunication purposes ;

*and bearing in mind*

that the Union is the specialized agency in the field of telecommunications and that it is necessary for the Union to provide adequate frequency allocations for all categories of space radio-communications as soon as the results of research and studies by the C.C.I.R. and other interested organizations make this possible ;

*recommends*

1. that an Extraordinary Administrative Radio Conference be convened, in principle during the latter part of 1963 with a duration of approximately one month and with an agenda which should include the the following basic items :

- 1.1 to examine the technical progress in the use of radio-communication for space research and the results of technical studies by the C.C.I.R. and other interested organizations ;
- 1.2 to decide, in the light of this examination, on the allocation of frequency bands essential for the various categories of space radiocommunication ;
- 1.3 to consider whether there is a continuing need for the allocation of certain frequencies for space research purposes and, if so, to take appropriate action in this regard ;
- 1.4 to adopt, if such action is considered desirable, new provisions revising the Radio Regulations to provide for the identification and control of radio emissions from space vehicles, taking into account possible Recommendations of the C.C.I.R. ;

2. that the Administrative Council review the situation during its 1962 and 1963 ordinary sessions on the basis of information received from Members and Associate Members of the Union, the C.C.I.R. and other interested organizations. Should the Administrative Council decide that there is sufficient justification for the convening of the Extraordinary Administrative Radio Conference in 1963, it shall recommend to Members and Associate Members of the Union the date and place for the Conference and its Agenda ;

*and invites*

those Members and Associate Members of the Union which launch satellites during the period of space research before the convening of the Extraordinary Administrative Radio Conference referred to above, to keep the Administrative Council, and the relevant technical organs of the Union, informed of the frequencies used and the technical progress achieved in the use of radio-communication for space research purposes.

#### RECOMMENDATION No. 36

##### **Relating to a Study by a Panel of Experts of Measures to Reduce Congestion in the Bands between 4 and 27.5 Mc/s**

The Administrative Radio Conference, Geneva, 1959,

*noting*

- a) the trend towards congestion in the bands between 4 and 27.5 Mc/s ;
- b) the need for adopting new policies for the solution of the frequency problems confronting administrations in the use of these bands ;

*realising*

- a) that before administrations will be willing to undertake a programme to relieve congestion in the bands between 4 and 27.5 Mc/s they will require a clear statement of the issues involved and of the measures that need to be taken ;
- b) that the ability of administrations to undertake such a programme is intimately linked to the financial implications involved ;

*considers*

- a) that the first step in the direction of reform should be a review of possibilities before taking the necessary policy decisions ;

- b) that this could best be done by a Panel of Experts convened for the sole purpose of devising ways and means of relieving the pressure on the bands concerned ;

*recommends*

1. that a Panel of Experts should be convened for the sole purpose of devising ways and means to relieve the pressure on the bands between 4 and 27.5 Mc/s This Panel should prepare a report on its work which should be submitted with a detailed and specific agenda which, when approved by the Administrative Council, would be the agenda for whatever body is to consider the policy decisions necessary to relieve the pressure on these bands ;
2. that the Panel meet in Geneva for a period of approximately 30 days in 1961 and approximately 30 days in 1962 ;
3. that each administration making one or more experts available be invited to make suitable arrangements for payment of the salaries of such experts ; these salaries shall not be a charge to the Union.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document N° 887-FES  
17 décembre 1959

SEANCE PLENIERE  
PLenary MEETING  
SESIÓN PLENARIA

## ORDRE DU JOUR

### Vingt-septième séance plénière

Jeudi 17 décembre 1959, 15 heures

1. Textes soumis pour deuxième lecture : Série C (Document rose N° 866).
2. Approbation du procès-verbal de la 22ème séance plénière (Document N° 878).
3. Approbation du procès-verbal de la 23ème séance plénière (Document N° 879).
4. Divers.

## A G E N D A

### Twenty-seventh Plenary Meeting

Thursday, 17 December, 1959, at 15.00 hours

1. Texts submitted for second reading : Series C (Pink Document No. 866).
2. Approval of the Minutes of the 22nd Plenary Meeting (Document No. 878).
3. Approval of the Minutes of the 23rd Plenary Meeting (Document No. 879).
4. Miscellaneous.

## ORDEN DEL DÍA

### 27ª Sesión plenaria

Jueves, 17 de diciembre de 1959, a las 3 de la tarde

1. Segunda lectura de textos, Serie C (Documento rosa N° 866).
2. Adopción del Acta de la 22ª sesión plenaria (Documento N° 878).
3. Adopción del Acta de la 23ª sesión plenaria (Documento N° 879).
4. Otros asuntos.

# ADMINISTRATIVE RADIO CONFERENCE

Document No. 888-E  
17 December 1959

GENEVA, 1959

COMMITTEE 7

## SUMMARY RECORD

### Twenty-eighth and last Meeting of Committee 7 (Operations Committee)

Monday, 14 December, 1959

- Chairman : Mr. A. J. Ehnle (Netherlands)
- Vice-Chairman : Mr. Y. Nomura (Japan)
- Agenda
1. Approval of Summary Records of  
Fifteenth to Twenty-seventh Meetings.
  2. Any other business

The above Agenda was accepted.

#### 1. Approval of Summary Records of Fifteenth to Twenty-seventh Meetings

##### i) Summary Record of the Fifteenth Meeting (Document No. 829)

The Summary Record of the Fifteenth Meeting was adopted without amendment.

##### ii) Summary Record of the Sixteenth Meeting (Document No. 826)

The Summary Record of the Sixteenth Meeting was adopted without amendment.

##### iii) Summary Record of the Seventeenth Meeting (Document No. 830)

The Summary Record of the Seventeenth Meeting was adopted without amendment.

##### iv) Summary Record of the Eighteenth Meeting (Document No. 827)

The Summary Record of the Eighteenth Meeting was adopted without amendment.

##### v) Summary Record of the Nineteenth Meeting (Document No. 828)

The Summary Record of the Nineteenth Meeting was adopted without amendment.



vi) Summary Record of the Twentieth Meeting (Document No. 835)

The Summary Record of the Twentieth Meeting was adopted without amendment.

vii) Summary Record of the Twenty-first Meeting (Document No. 836)

The Summary Record of the Twenty-first Meeting was adopted without amendment.

viii) Summary Record of the Twenty-second Meeting (Document No. 839)

The Summary Record of the Twenty-second Meeting was adopted subject to the following amendment:-

Page 2

Paragraph 2

Amend heading to read:-

"Approval of Texts for Article 34 (Document No. 633)"

ix) Summary Record of the Twenty-third Meeting (Document No. 840)

The Summary Record of the Twenty-third Meeting was adopted subject to the following amendment:-

Page 3

Last Paragraph, Second and Eleventh Lines

For "Sub-Committee 7" read "Sub-Committee 7B"

x) Summary Record of the Twenty-fourth Meeting (Document No. 841)

The Summary Record of the Twenty-fourth Meeting was adopted subject to the following amendment:-

Page 5

Penultimate Paragraph

Amend to read "..... with I.C.A.O. Annex 10"

xi) Summary Record of the Twenty-fifth Meeting (Document No. 842)

The Summary Record of the Twenty-fifth Meeting was adopted subject to the following amendment:-

Page 5

Paragraph 5, fourth line

For "No. 628" read "No. DT 628"

xii) Summary Record of the Twenty-sixth Meeting (Document No. 847)

The Summary Record of the Twenty-sixth Meeting was adopted subject to the following amendments:-

Page 3

First full Line

Amend to read:

"The Delegation of the United States of America stated that it reserved concerning this proposal"

Page 4

Paragraph 2, second line

Amend to read:

"..... series DTA to DTZ ....."

Paragraph 3, third line

Amend to read:

"..... series 90A to 9UZ ....."

xiii) Summary Record of the Twenty-seventh Meeting (Document No. 848)

The Summary Record of the Twenty-seventh Meeting was adopted without amendment.

2. Any Other Business

In his closing remarks the Chairman said that Committee 7 had now completed the agenda which had been assigned to it. This task had involved



a study of about 60% of the Regulations and about 45% of the Yellow Book proposals concerned with these Regulations. That this heavy commitment had been completed was undoubtedly due to the hard work and cooperation of all Delegations for which he was very grateful. He thanked the Vice-Chairman of Committee 7 and the Chairmen of all the Sub-committees, Working Groups and Ad Hoc Groups whose labours had all contributed largely to the successful outcome of Committee 7's work. He also thanked M. Bès, Mr. Cantero and Mr. Iturriz for their collaboration in the Language Group as well as Mr. Kunz of the General Secretariat and the Interpreters for their assistance.

In view of the large work programme of Committee 7 the demands which it had made on the Documents Section had been very great and the Chairman wished to record his appreciation of the willing cooperation and hard work done by M. Millot, Chief of Document Service and his "behind the scenes team". Finally, he thanked his Rapporteur for the heavy task which he had completed.

On behalf of Committee 7 M. Bès (France) congratulated the Chairman on the successful and very satisfactory results of Committee 7's work which were undoubtedly due to Mr. Ehnle's wise guidance. The Committee were also very grateful to Mr. Nomura and Mr. Wilson for the work they had done. The sentiments expressed by Mr. Bès were wholeheartedly seconded by Captain Graves (United States of America) who said the Committee might well not have finished its task but for the firm and kindly leadership of its Chairman and also the efforts of Mr. Nomura who had had to preside on those occasions when Mr. Ehnle was unavoidably absent, and who had earned himself the reputation of dealing with more documents more quickly than any other Chairman. In reply Mr. Nomura said he had been glad to assist the Committee and to translate the feelings of the meeting into action.

This concluded the business of the final meeting of Committee 7 and it was agreed that the Chairman should approve the Summary Record.

Rapporteur

G. E. Wilson

Chairman

A. J. Ehnle

ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 889-E (Rev)  
17 December, 1959

PLENARY MEETING

FINAL PROTOCOL

FOR THE STATE OF ISRAEL :

The Government of the State of Israel was not signatory to the Copenhagen broadcasting agreement, 1948, and by signing the present Radio Regulations will not recognize the plan annexed to it. Consequently it reserves the right to take any action deemed necessary to protect its interests which may be affected in connection with or by application of the notification and registration procedure of the present regulations to frequency assignments of the said plan.

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# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 339-E  
17 December, 1959

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PLENARY MEETING

FINAL PROTOCOL

FOR THE STATE OF ISRAEL:

The Delegation of the State of Israel reserves the right of its Government to safeguard its interest with regard to the application of Article 11 to the Plan annexed to the Copenhagen Broadcasting Agreement, 1948, and to High Frequency Broadcasting until such time as any solution to both of those problems will enable to satisfy its requirements in the field of broadcasting in the Medium and High Frequency Broadcasting bands.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 890-E  
17 December, 1959

COMMITTEE 7

## NOTE BY SUB-COMMITTEE 7A TO COMMITTEE 7

1. Documents:

|        |            |
|--------|------------|
| Nos.   | 574        |
|        | 575        |
|        | 590 (Rev.) |
|        | 594        |
|        | 601        |
|        | 602        |
|        | 603        |
|        | 604        |
|        | 605        |
|        | 610 (Rev.) |
|        | 620        |
| DT     | 628        |
|        | 697        |
|        | 698        |
|        | 708        |
|        | 709        |
|        | 755        |
|        | 758        |
| and DT | 790        |

stated: "The report itself concerning that article will be submitted to the Committee at a later date."

2. The Annex to this document fills this gap.

3. I would remind you that Documents Nos. 448 and 494 contained that report.

P. Bouchier  
Chairman

Annex : 1



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A N N E X

Art. 21 and 23

The references concerning these articles appear in Document No. 448.

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Art. 43 and Art. 45 - Sections I and III (ADD)

The references concerning these articles appear in Document No. 494.

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Art. 45 - Section II (NOC)

Document No. 574 concerning this section, for which there was no proposal, was adopted at the thirty-first meeting of Sub-Committee 7A (Document No. 693).

=====

Art. 19

Document No. 758 is based on the following documents:

a) Summary records of meetings:

- Document No. 340 - Twelfth meeting of Sub-Committee 7A
- " " 444 - Seventeenth meeting of Sub-Committee 7A
- " " 451 - Eighteenth " " " " "
- " " 687 - Twenty-fifth " " " " "
- " " 691 - Twenty-ninth " " " " "
- " " 692 - Thirtieth " " " " "
- " " 693 - Thirty-first " " " " "
- " " 815 - Thirty-third " " " " "

- Document No. 816 - Thirty-fourth meeting of Sub-Committee 7A
- " " 818 - Thirty-fifth " " " " "
- " " 824 - Thirty-seventh " " " " "
- " " 831 - Thirty-ninth " " " " "
- " " 832 - Fortieth " " " " "

- b) Documents:
- 42 (Spain)
  - 79
  - 79 (Union of South Africa)
  - 88 (Indonesia)
  - 202 (Republic of Korea)
  - 239 (Federal Republic of Germany)
  - 276 (Belgium, Belgian Congo and Territory of Ruanda Urundi)
  - 285 (Bielorussian S.S.R.)
  - 299 (Belgian Congo)
  - 316 (Israel)
  - 331 (Iran)
  - 333 (Ethiopia)
  - 347 (Spain)
  - 456 (Philippines)
  - 597 (Ireland)

c) Documents of Working Group 7A4

- No. DT 699
- No. DT 709
- No. DT 721
- No. DT 756
- No. DT 808

d) Document of the Ad Hoc Working Group

- No. DT 790

e) Documents brought out before the order of sections was altered in Art.19 :

|         |                      |
|---------|----------------------|
| No. 601 | Sections 00, 0 and I |
| " 605   | Section III          |
| " 697   | Section II           |

---

Art. 20

Document No. 709 is based on the following documents :

a) Summary Records of meetings :

|    |                  |                      |                             |
|----|------------------|----------------------|-----------------------------|
| -- | Document No. 496 | - twentieth          | meeting of Sub-Committee 7A |
| -- | " "              | 499 - twenty-first   | " " " " "                   |
| -- | " "              | 523 - twenty-second  | " " " " "                   |
| -- | " "              | 524 - twenty-third   | " " " " "                   |
| -- | " "              | 535 - twenty-fourth  | " " " " "                   |
| -- | " "              | 688 - twenty-sixth   | " " " " "                   |
| -- | " "              | 690 - twenty-eighth  | " " " " "                   |
| -- | " "              | 694 - thirty-second  | " " " " "                   |
| -- | " "              | 819 - thirty-sixth   | " " " " "                   |
| -- | " "              | 824 - thirty-seventh | " " " " "                   |
| -- | " "              | 832 - fortieth       | " " " " "                   |
| -- | " "              | 833 - forty-first    | " " " " "                   |

b) Document No. 807 of Committee 7

c) Documents of Working Group 7A7

No. DT 658

" DT 740

" DT 811

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Art. 22

Document No. 755 is based on the following documents :

a) Summary records of meetings :

|   |                  |   |   |   |   |   |   |
|---|------------------|---|---|---|---|---|---|
| - | Document No. 129 | - twenty-second meeting of Sub-Committee 7A |   |   |   |   |   |
| - | " "              | 178 - third                                 | " | " | " | " | " |
| - | " "              | 245 - fifth                                 | " | " | " | " | " |
| - | " "              | 246 - sixth                                 | " | " | " | " | " |
| - | " "              | 308 - eighth                                | " | " | " | " | " |
| - | " "              | 309 - ninth                                 | " | " | " | " | " |
| - | " "              | 310 - tenth                                 | " | " | " | " | " |
| - | " "              | 398 - thirteenth                            | " | " | " | " | " |
| - | " "              | 377 - fourteenth                            | " | " | " | " | " |
| - | " "              | 399 - fifteenth                             | " | " | " | " | " |
| - | " "              | 401 - sixteenth                             | " | " | " | " | " |
| - | " "              | 451 - eighteenth                            | " | " | " | " | " |
| - | " "              | 465 - nineteenth                            | " | " | " | " | " |
| - | " "              | 496 - twentieth                             | " | " | " | " | " |
| - | " "              | 691 - twenty-ninth                          | " | " | " | " | " |
| - | " "              | 825 - thirty-eighth                         | " | " | " | " | " |

b) Document No. 363 (Federal Republic of Germany)

c) Documents of Working Group 7A 1 :

No. DT 379

" DT 379 Rev.

d) Document of Working Group 7A6 :

No. DT 838

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Art. 24

Document No. 594 is based on the following documents :

a) Summary records of meetings :

|   |                          |                             |
|---|--------------------------|-----------------------------|
| - | Document No. 246 - sixth | meeting of Sub-Committee 7A |
| - | " " 248 - seventh        | " " " " "                   |
| - | " " 308 - eighth         | " " " " "                   |
| - | " " 309 - ninth          | " " " " "                   |
| - | " " 310 - tenth          | " " " " "                   |
| - | " " 339 - eleventh       | " " " " "                   |
| - | " " 340 - twelfth        | " " " " "                   |
| - | " " 398 - thirteenth     | " " " " "                   |
| - | " " 377 - fourteenth     | " " " " "                   |
| - | " " 399 - fifteenth      | " " " " "                   |
| - | " " 401 - sixteenth      | " " " " "                   |
| - | " " 444 - seventeenth    | " " " " "                   |
| - | " " 496 - twentieth      | " " " " "                   |
| - | " " 524 - twenty-third   | " " " " "                   |
| - | " " 688 - twenty-sixth   | " " " " "                   |
| - | " " 690 - twenty-eighth  | " " " " "                   |
| - | " " 694 - thirty-second  | " " " " "                   |
| - | " " 815 - thirty-third   | " " " " "                   |

Document No. 527 (Venezuela)

Yellow Document (United States of America) conc. No. 548

Documents of Working Group 7A2 :

No. DT 328

" DT 534

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Art. 24a

Document No. 604 contains the version of Article 24a (ADD) based on the following documents:

a) Summary records of meetings:

- Document No. 444 - 17th meeting of Sub-Committee 7A
  - " " 693 - 31st " " " " "
  - " " 818 - 35th " " " " "
- =====

Art. 25

Document No. 604 contains the version of Article 25 based on the following documents:

a) Summary records of meetings:

- Document No. 129 - 2nd meeting of Sub-Committee 7A
  - " " 401 - 16th " " " " "
  - " " 535 - 24th " " " " "
  - " " 693 - 31st " " " " "
  - " " 818 - 35th " " " " "
- =====

Art. 26 (NOC)

Document No. 603 is based on the following documents:

a) Summary records of meetings:

- Document No. 179 - 4th meeting of Sub-Committee 7A
- " " 246 - 6th " " " " "
- " " 693 - 31st " " " " "
- " " 818 - 35th " " " " "

Art. 35

Document No. 575 is based on the following documents:

a) Summary records of meetings:

- Document No. 575 - 14th meeting of Sub-Committee 7A
- " " 401 - 16th " " " " "
- " " 465 - 19th " " " " "
- " " 535 - 24th " " " " "
- " " 687 - 25th " " " " "
- " " 693 - 31st " " " " "

b) Document of Working Group 7A3:

No. DT 582

c) Document of Working Group 7A5:

No. DT 595

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Appendix 6

Document No. 708 is based on the following documents:

a) Summary records of meetings:

- Document No. 688 - 26th meeting of Sub-Committee 7A
- " " 689 - 27th " " " " "
- " " 819 - 37th " " " " "
- " " 832 - 40th " " " " "
- " " 833 - 41st " " " " "

b) Document No. 133 (Secretariat)

c) Document of Working Group 7A7:

No. DT 811

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Appendix 7

Document No. 698 is based on the following documents :

a) Summary records of meetings :

- Document No. 689 - 27th meeting of Sub-Committee 7A
- " " 825 - 38th " " " " "
- " " 832 - 40th " " " " "

b) Document No. 71 (Federal Republic of Germany)

c) Document of Working Group 7A8 :

No. DT 830

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Appendix 13

Document No. 590 Rev. is based on the following documents :

a) Summary records of meetings :

- Document No. 689 - 27th meeting of Sub-Committee 7A
- " " 690 - 28th " " " " "
- " " 815 - 33rd " " " " "

b) Document No. 72 (Federal Republic of Germany)

c) Document No. 590 first version of the final document.

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Recommendation relating to the application of standard forms for ship station licences and aircraft station licences.

Document No. 602 is based on the following documents :

a) Summary records of meetings :

- Document No. 245 - 5th meeting of Sub-Committee 7A
- " " 444 -17th " " " " "
- " " 687 -25th " " " " "
- " " 818 -35th " " " " "

b) Documents of Working Group 7A1 :

No. DT 401

" DT 401 Rev.

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Recommendation relating to the re-classification of public correspondence categories of ship and aircraft stations.

Document No. 610 Rev. is based on the following documents :

a) Summary records of meetings :

- Document No. 465 - 19th meeting of Sub-Committee 7A
- " " 818 - 35th " " " " "
- " " 831 - 39th " " " " "

b) Document No. 610, first version

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Recommendation relating to nomenclature of operator certificates

a) Document of Working Group 7A2 :

No. DT 628

(See also Article 24).

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Resolution - Publication of "service" documents

Document No. 620 is based on the following documents :

a) Summary records of meetings :

- Document No. 688 - 26th meeting of Sub-Committee 7A
- " " 818 - 35th " " " " "

b) Document of Working Group 7A7 :

No. DT 658

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# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 891-E  
17 December, 1959

## PLENARY MEETING

### MINUTES

of the

### Twenty-Fourth Plenary Meeting

Sunday 13 December, 1959 at 3 p.m.

Chairman: Mr. Charles J. Acton (Canada)

Vice Chairmen: Mr. Juan A. Autelli (Argentine Republic)  
Dr. M. B. Sarwate (Republic of India)

Deputy Secretary of  
the Conference: Mr. Clifford Stead

### Subjects discussed:

1. Eighteenth series of texts submitted by the Drafting Committee -  
Page 18 - 12 (Document No. 803)
2. Nineteenth series of texts submitted by the Drafting Committee  
(Document No. 813)
3. Twenty-Second series of texts submitted by the Drafting  
Committee (Document No. 856)
4. Announcement by the Chairman



The following Delegations were present:

Afghanistan; Albania (People's Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussia S.S.R.; Brazil; Bulgaria (People's Republic of); Canada; China; Colombia (Republic of); Belgian Congo and Territory of Ruanda Urundi; Korea (Republic of); Cuba; Denmark; El Salvador; United States of America; Ethiopia; Overseas States of The French Community and French Overseas Territories; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Japan; Malaya (Federation of); Morocco (Kingdom of); Mexico; Norway; New Zealand; Pakistan; Paraguay; Kingdom of the Netherlands; Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Overseas Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian S.S.R.; United Kingdom of Great Britain and Northern Ireland; Sudan; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

Private Operating Agencies:

B.B.C., Portuguese Marconi Radio Company;

Specialized Agencies:

E.B.U., I.B.T.O., C.I.N.,

1. Eighteenth Series of Texts submitted by the Drafting Committee - Page 18-12.  
(Document No. 803.)

The revised wording for 68b read out by the Chairman of the Drafting Committee was approved; it was, however, also decided at the proposal of the Delegate of the United States of America to delete paragraph 68b from Article 1 and insert it in the notes to Appendix I.

2. Nineteenth Series of Texts submitted by the Drafting Committee  
(Document No. 813).

Page 19-03

The Chairman of the Drafting Committee pointed out that in the English text the headings of Columns 9 and 10 should be reversed.

19-04

A Drafting change submitted by the Delegate of Israel was approved.



19-05

The Delegate of the United States of America proposed that the text of the footnote be changed to read: "These charges are fixed by each Administration or Private Operating Agency".

The Delegates of Brazil, Cuba, Austria, Belgium, Colombia, The United Kingdom and Mexico could not accept such an amendment.

The Delegate of the United States of America, in view of the statements made, withdrew his amendment.

It was therefore decided that the footnote would remain as given in Document No. 813.

19-16

After a discussion in which the Delegate of India, the Chairman of the Drafting Committee, the Chairman of Sub-Group 7A and the Delegates of Israel, France and Belgium took part, it was decided to delete the footnote marked with an asterisk and the symbol to which it referred.

19-17 and 19-18

It was decided that "G.M.T. Greenwich Mean Time" would be inserted in page 19 - 17 of the English text and "T.M.G. Greenwich Mean Time" deleted from page 19-18.

Drafting changes submitted by the Delegates of India and the United States of America were approved. It was decided that the abbreviations "L.R." for Land Radio positioning Station and "M.R." for Mobile Radio positioning Station would be adopted.

19-22

The Delegate of Indonesia made the following statement:

"You may recall, Mr. Chairman, that my Delegation has stated on many occasions during this Conference, that Indonesia strongly protests against the mention of Irian Barat or New Guinea being preceded by the word "Netherlands". My Delegation wishes to state clearly at this time that it reserved its position on this matter at this and coming meetings of the Assembly whenever the term "Netherlands New Guinea" is used in Conference documents".

The Delegate of the Kingdom of the Netherlands referred to the statement he had made at the Fourth Plenary Meeting of the Conference.

19-23

The Delegate of Australia referred to the fourth entry in Column 2 against the frequency 4377.4. "Territory of New Guinea" actually referred to that part of New Guinea which was administered by Australia, and to avoid ambiguity he proposed that the entry be changed to read: "Papua and Trust Territory of New Guinea", which was more accurate. It was so decided.

19-24

At the suggestion of the Delegate of the Belgian Congo, and with the agreement of the Delegate of the Overseas States of the French Community and French Overseas Territories, it was decided to add "(Rep. of)" after "Congo against the frequency 4 390.2."

The Delegate of the Portuguese Overseas Provinces apologised for taking up the time of the Plenary Assembly. His Delegation being small, he had been unable to raise the matter in the appropriate Working Group. He referred to frequencies allocated to the Portuguese Overseas Provinces on a sharing basis with other countries. The powers given in the Plan were so small that, taking into account the territory concerned and great extent of coastline, such allocations would in practice amount to the exclusion of the Portuguese Overseas Provinces from the shared use of such frequencies. He had therefore consulted other delegations concerned regarding an increase in power to 3 kW. for Angola and Mozambique and a 1 kW., or at least 500 watts, for other territories on condition that, should harmful interference result from the power increase, the matter would be settled by the administrations concerned. Some delegations had given a favourable reply and he thanked, in particular, the Delegate of Canada for his cooperation. He added that the increased power envisaged had already been in use by some coastal stations in accordance with No. 90 of the Radio Regulations, without causing harmful interference. His Administration could, of course, continue to use the increased power in application of No. 90 of the Radio Regulations, but felt that it was preferable for the Plan to be approved by a Conference of eminent specialists to contain the actual power in use. In any case, the power even when increased as indicated was modest in comparison to other powers shown in the Table on a sharing basis.

The Delegate of the United Kingdom suggested that the Delegate of the Portuguese Overseas Provinces raise each case when the relevant frequency was considered.

The Delegate of India, although sympathetic to the points raised by the Delegate of the Portuguese Overseas Provinces, could not take a position on the subject without an opportunity to study in detail the impact of the increase in power on sharing possibilities covered in the Plan. He therefore proposed that the I.F.R.B. be asked to study the matter.

The Delegate of Sweden could not agree to an increase in power from 0.5 to 3 kW for Portuguese Time or on the frequency 4383.8.

The Delegate of the Belgian Congo said that a similar situation existed in his country, although there were only two coastal stations. For several years a power of 3 kW had been in use causing no harmful interference, although the Table indicated a far smaller power. He thought it would be preferable for the Table to show the actual power in use in such cases where in practice no harmful interference was caused.

The Delegate of Mexico had not had an opportunity of carrying out a technical examination in the usual way, but thought that such an increase in power should not cause any difficulty in so far as his country was concerned. He therefore agreed to the proposal of the Portuguese Oversea Provinces, on condition that should harmful interference occur, the latter would be prepared to negotiate and, if necessary, cease operation on the frequency concerned.

The Vice-Chairman of the I.F.R.B. Mr. Gracie, in reply to the suggestion that the I.F.R.B. might deal with the matter, after the Conference, thought that advantage should be taken of the presence at the Conference, of all the delegations concerned and suggested that Working Group 5B3 under the leadership of Mr. Bos, might succeed in finding a compromise solution if necessary.

The Delegate of Brazil saw no difficulty in accepting the proposal of the Portuguese Oversea Provinces regarding the frequency 4383.8, on the conditions mentioned, in so far as Brazil was concerned.

The Chairman of the Drafting Committee (Delegate of France), and the Delegate of the United Kingdom said that Working Group 5B3 had already held meetings at which all delegations had had ample opportunity to raise such questions and that if discussions were initiated at that point the Conference would be unable to terminate its work on 21 December; a separate Conference would have to be convened to discuss the matter.

The Delegate of the Portuguese Oversea Provinces, with reference to a statement by the Delegate of Sweden, pointed out that the increase in power to 3 kW did not concern all territories but merely Angola and Mozambique which had a very long coastline.

The Delegate of Cuba had not raised the matter himself in order to avoid lengthy discussion, although his country was in a similar position to that of the Portuguese Oversea Provinces. The frequency allotments appearing in the Plan did not satisfy the needs of his country, and for that reason he would make reservations as appropriate to the various frequencies. His country was nevertheless anxious to collaborate with all other administrations to make the Plan as acceptable as possible. He felt that an acceptable solution to the problem should be found, perhaps at a special Conference as the Chairman of the Drafting Committee had mentioned; he realized that there was insufficient time at the Radio Conference to discuss the matter in detail.

The Delegate of the Portuguese Oversea Provinces apologised for the lengthy discussion he had provoked and, in view of the views expressed and the shortage of time, withdrew his proposal.

He was sure that other Administrations would be willing to come to an agreement and expressed his gratitude to the Chairman for the way in which he had dealt with the matter and to the Administrations who had shown good will.

19.25

The Delegate of the United Arab Republic pointed out that the third entry in column 2 against 4 396.6 kc/s should be "United Arab Republic (Egyptian Region)".

It was so decided.

19-28

The Delegate of Bulgaria said that no reply had been received from the Administrations of the Dominican Republic and Nicaragua in reply to a letter concerning the use of the frequency 4428.6 kc/s on a shared basis. He therefore requested the Delegations of those countries to indicate whether they could accept such a proposal, as this was a second frequency for Poland, and stressed that all necessary steps would be taken to ensure that no harmful interference was caused to the United Kingdom.

The Delegate of Israel made the following statement:

"My Delegation has given its consent to the sharing of the frequency 4428.6 kc/s by Poland on condition that, if harmful interference occurs, Poland will cease to transmit on this frequency."

The Delegate of the United Kingdom stated that the matter had been re-examined and he could accept the use by Poland of 4428.6 kc/s with a power of 2.5 kW, on the express understanding that if any harmful interference was caused to United Kingdom transmissions, Poland would cease to transmit on that frequency.

The Delegate of the P.R. of Poland thanked the Delegate of the United Kingdom and all the other Delegations who had agreed to his proposal.

The Delegate of Mexico speaking on behalf of Nicaragua and the Dominican Republic, the Delegations of which were not present, said that he had been consulted on the matter and that although all the necessary information for a technical examination was not available he had advised them that the allocation with the power given for Poland would be acceptable on a non-interference basis. He believed they shared his views.

The Delegate of Turkey could agree to the entry for Poland on a non-interference basis.

Subject to the inclusion in the Minutes of the statements made by the Delegations concerned, it was decided that the asterisk and brackets would be removed from "Poland" thus including that country in the list.

19-29

The Delegate of Iran referred to the sharing of 4434.9 kc/s by the Ukrainian S.S.R.. In view of the power proposed it had seemed impossible for Iran to agree but in view of the undertaking given by the U.S.S.R. in Committee 5 that all necessary steps would be taken to avoid harmful interference to the services of other countries sharing the frequency and since it was a second frequency for the Ukraine the Delegation of Iran agreed to the sharing by the Ukraine on a non-interference basis.

The Delegate of the Ukrainian S.S.R., addressing the Delegate of Iran, and referring to the frequency 4434.9 kc/s stated that his Administration would take all possible measures to avoid harmful interference to the stations of Iran; should harmful interference occur steps would be taken to prevent it.

On condition that the above statement by the Delegate of the Ukrainian S.S.R. was recorded in the Minutes, the Delegate of Iran accepted the sharing of 4434.9 kc/s by the Ukraine.

The Delegate of Belgium confirmed that his delegation agreed to the sharing of 4434.9 kc/s by the Ukrainian S.S.R. on a non-interference basis, in accordance with an agreement existing between the two countries.

There being no objection it was decided that a listing would be made for the Ukraine on 4434.9 kc/s.

The Delegate of the Belgian Congo said that the power used by his country 4434.9 kc/s was 3 kW. He would prefer the Table to show the actual power in use. The Delegate of France felt that the increased power did not justify a change in the Plan. If such a change were made other countries in similar circumstances might also request alterations and at such a late stage that would be most unfortunate.

The Delegate of the Belgian Congo could not see how the matter concerned France if delegations of countries operating on the frequency concerned had no objection.

The Delegate of France said that it was precisely because France was not directly concerned with that frequency that he had made his previous statement. He objected on the matter of principle; increases in power should not be discussed at that stage in Plenary, but rather be the subject of a separate conference.

The Delegates of Argentina, South Africa, French Overseas Territories and India, supported the statement made by the Delegate of France.

The Delegate of Cuba felt that the planning of the maritime bands should be effected with great care. He agreed with the Delegate of France and would support any concrete proposal for a conference on the subject.

The Delegate of the Belgian Congo, asked that it be recorded in the Minutes that the power of the Belgian Congo stations in the maritime service was 3 kW. If no change were made in the Table the Belgian Congo would have to reserve its position on the subject.

A vote was held, and it was decided by 39 votes to 0, with 11 abstentions that no changes in power should be made in the Plan.

The Delegate of the Belgian Congo stated that he had not taken part in the vote.

The Delegate of Iran made a reservation with regard to the sharing of the frequency 8748.1 kc/s with the Persian Gulf, in case harmful interference should arise.

19-30

The Delegate of Ethiopia said that his administration had instructed him to obtain the use of one frequency in the radio-telephone band. He had consulted the I.F.R.B. who had recommended 8754.4 kc/s as likely to cause least interference. He had consulted the administrations of the United States, Australia, Indonesia, Japan and the United Kingdom who had agreed to the use of that frequency for day-time operation with a power of 1 kW. He thanked the delegations concerned for their co-operation.

The Delegate of Indonesia stated that his delegation agreed to the use of the frequency on a sharing basis by Ethiopia, on a non-interference basis.

It was decided to add Ethiopia on page 19-30 with the hours of operation in the remarks column and the power of 1 kW in Column 3.

19-31

At the suggestion of the Delegate of Norway, who said that the text given did not reflect the decision taken in Committee 5, it was decided to delete "Caspian and Aral Sea" from Column 2 and add "for use in the Caspian and Aral Sea" after "U.S.S.R." in Column 4.

19-32

It was decided to replace "Territory of New Guinea" by "Papua and Trust Territory of New Guinea", at the suggestion of the Delegate of Australia.

19-33

The Delegate of the United States was unable to agree to the use of 8773.6 kc/s by Poland.

There being an objection it was decided to delete Poland against that frequency, and the Chairman suggested that the Polish Delegation negotiate with the I.F.R.E. regarding the possibility of sharing another frequency without harmful interference being caused to other users.

19-34

It was decided that the word "frequency" should be deleted from Note 2) at the top of the page.

19-36

The Delegate of China repeated the reservation he had made in Committee 5 that he could accept the sharing in the Plan on frequency 8811.9 kc/s only on a non-interference basis.

19-39

The Delegate of the United States could not agree to the sharing of 13161.5 kc/s with Poland.

There being an objection to the entry, it was decided to delete Poland.

The Delegate of Iran had no objection to the entry for the Ukrainian S.S.R. in view of their earlier statement with regard to frequency sharing.

There being no objection, a listing would be made for the Ukrainian S.S.R.

The Delegate of Iran could accept the listing for the U.S.S.R. if they gave a similar undertaking.

The Delegate of the U.S.S.R. stated that his Administration would take all necessary steps to ensure that no harmful interference would be caused to the stations of Iran by the sharing of the frequency in question and, should such harmful interference occur, would take the necessary measures to prevent it.

The Delegate of Iran declared his satisfaction with the statement by the delegate of the U.S.S.R., and it was decided that a listing would be made for the U.S.S.R. (Europe).

19-40

The Delegate of Italy stated that, at the request of the Delegate of the U.S.S.R., he agreed to the deletion of the second part of Note 2) against frequency 13168.5 kc/s, "nor to ships....Pacific". It was so decided.

19-41

The Delegate of the Belgian Congo stated that the actual power in use on 13189.5 kc/s would be 3kW, and that his Administration would come to an agreement with the Union of South Africa on the subject.

19-42

The Delegate of Indonesia stated that his Administration had agreed with the Federal Republic of Germany and the U.S.S.R. to the shared use of 13196.5 kc/s on condition that no harmful interference was caused to Indonesian stations. That condition also applied to all other frequencies used on a shared basis by the Indonesian Administration and the Federal Republic of Germany.

There being no objection, it was decided to make a listing for the U.S.S.R. (North West.)

19-44

The Delegate of the United States could not agree to Poland sharing the frequency 17321.5 kc/s.

The Delegate of the P.R. of Poland withdrew the entry in view of the above statement.

The Delegate of Iran stated that a request for co-ordination had been received from the U.S.S.R. regarding 17321.5 kc/s which they had been sharing since 1951. After studying the matter, it had been decided that the share could only be accepted if the U.S.S.R. and the Ukrainian S.S.R. gave similar undertakings to the ones they had previously made regarding non-interference.

19-47

The Delegates of Spain and Uruguay had no objection to the sharing of any frequency band on condition that, in practice, no harmful interference would result and that should harmful interference occur the Administration concerned undertook to adopt the necessary measures to prevent it.

There being no objection, it was decided that a listing would be made for the U.S.S.R. (North West) on frequency 17356.5 kc/s.



19-48

The Delegate of Iran stated that his country had been sharing 22681.5 kc/s with other countries since 1951 in accordance with Section II of the Plan. He could accept such sharing on condition that the U.S.S.R. gave a non-interference undertaking.

The Delegate of the U.S.S.R. stated that his Administration would take all necessary steps to ensure that no harmful interference was caused to the stations of Iran by the sharing of the frequency in question and, should such harmful interference occur, would take the necessary measures to prevent it.

The Delegates of South Africa, Italy, and Japan could accept the sharing of 22688.5 kc/s with Poland on condition that no harmful interference was caused to their stations. There being no objection, it was decided that a listing would be made for Poland on that frequency.

19-51

The Delegate of Israel stated that he had submitted a statement at a previous Plenary Meeting to the effect that it had been agreed with the Delegations of France and the Philippines to insert Israel on 22674.5 kc/s with a power of 3.5 kW. The Delegate of the Philippines confirmed to that statement. There being no objection, it was decided to insert Israel on 22674.5 kc/s with a power of 3.5 kW.

The Delegate of Brazil referred to the frequency 13189.5 Kc/s which had been in use in his country since 1951. He opposed the increase in power to 3 kW by the Belgian Congo, for an allocation indicated at 1 kW in the Plan. The Chairman recalled that it had been decided not to modify the powers given in the Plan.

19-52

The Chairman of the Drafting Committee explained that the printing of Appendix 12b would be made clearer, and Note d) on page 19-53 regarding "figures underlined" would be amended accordingly.

The Delegate of Norway made the following statement:

"In connection with Document No. 813, the Norwegian delegation would like, as it did in the Working Group, to express its concern with regard to the reduced channel separation in the new Table of Frequencies in Appendix 12, which will increase the possibilities of adjacent channel interference.

" However, we find that in the circumstances we can accept the new Table and revised Allotment Plan in spite of this disadvantage, and the expenditure in connection with new crystals for about 1250 Norwegian ships.

" We consider it important that this Conference has provided for an orderly introduction of single side-band technique in the HF maritime mobile radiotelephone service, but at the same time we emphasize that the complete change-over to SSB equipment will be very expensive and therefore take a long time.

" The Norwegian delegation wishes to make these comments because we feel that if the HF maritime mobile radiotelephone traffic continues to increase as it has done over the years since 1955 when the E.A.R.C. plans for this service were implemented, it might well be necessary for our Administration to propose to the next Administrative Radio Conference that some more room in the HF spectrum be allocated to the said service."

The Delegate of Sweden made the following statement:

"The Swedish Delegation in principle fully shares the views expressed in the statement made by the Delegate of Norway. Taking into account that the maritime mobile radiotelephone HF bands are getting more and more congested, the Swedish Delegation considers it necessary to study the possibilities of improving the situation for this service in the Table of Frequency Allocations."

The Delegate of Turkey referred to the statement he had made in connection with the request from Poland. Before Document No. 813 was approved, it might seem logical that he should make a similar statement with regard to the Federal Republic of Germany. An agreement had however been reached concerning the frequency 8811.9 kc/s and should harmful interference be caused to the services of Turkey, the Federal Republic of Germany would take all necessary steps to eliminate such interference.

Subject to the amendments approved, and the recording in the Minutes of the statements made Document No. 813 was approved as a whole.

3. Twenty-Second Series of Texts Submitted by the Drafting Committee  
(Document No. 856)

The Chairman of the Drafting Committee explained that a group had been set up at the time Document No. 823 was considered and Document No. 856 was the result of an exchange of views in the meeting of that group.

22-01

The Delegate of China, referring to certain geographical names mentioned in Nos. 101 and 103, reserved the right to make a statement on the subject for inclusion in the Regulations. He would submit the text to the Secretariat.

22-04

It was decided at the suggestion of the Delegate of the United States of America to delete the first three words of No. 97a, to avoid ambiguity.

The Delegates of Austria and Brazil could not accept No. 97a since it would seem that stations operating on a permitted basis would have to close down if a subsequent plan allocated the frequencies in question to a primary service. A discussion then ensued in which the Delegates of the United States of America, Brazil, Austria, the Chairman of the Drafting Committee and the Vice Chairman of the I.F.R.B. took part. The latter, comparing the text of 97a to that of 7(B) 1) of Document No. 242 (Rev.2), said that in the view of the I.F.R.B. Document No. 242 meant that if the I.F.R.B. received two notifications on the same day for the same frequency the one relating to the main service would have priority over the other.

The Delegate of the United States of America pointed out that insofar as plans previously approved were concerned, the situation was covered by a Resolution that had been adopted in series 18 of the blue texts entitled "Resolution Relating to Certain Entries in the Master Radio Frequency Record in the Bands below 27 500 kc/s. In such cases the status quo would be maintained and therefore 97a would not apply.

The Delegate of the Bielorussian S.S.R. thought that it was not clear from the text of 97a that stations planned in the primary service would have priority over plans drafted in the future.

The Delegate of India proposed that 97a be amended to read: "permitted and primary services have equal rights, except that, in the preparation of frequency plans, the primary service, as compared with the permitted service, shall have prior choice of frequencies."

The Delegates of Brazil, the United States and Austria supported that amendment.

The Delegate of France said that there were very few cases to which the footnote would apply. However he could not understand what the situation would be if the amendment proposed were adopted. If a regional broadcasting conference was held, for example in 1963 and attended by countries for which broadcasting was the primary service, he was not clear whether such a conference would have to take into consideration assignments made to other countries where the fixed service was also a primary service.

The Vice-Chairman of the I.F.R.B. said that in his opinion such a conference would certainly have to take into consideration such assignments of other countries.

The Delegate of Israel moved the adoption of 97a unamended.

The Delegates of Norway and Denmark supported the amendment proposed by the Delegate of India.

The Delegate of Spain found that the concept of a primary service was not clear, in view of the remarks made by the Delegate of France. He therefore proposed the deletion of the whole concept of primary services.

The Delegate of Colombia shared the concern expressed by the Delegate of Spain. The fate of primary services was not clear.

The Delegate of the United States could accept the text as it stood in Document No. 856 or the amendment proposed by the Delegate of India. He also shared the concern expressed by the Delegate of Spain.

The Delegate of Belgium said that if primary services were to be retained, he would support the proposed amendment by the Delegate of India. In view of the fact, however, that only a few cases were concerned, he agreed that it might be preferable to classify existing permitted services as secondary and delete all reference to permitted services when the pink documents were issued.

The Delegate of Italy said that the amendment proposed by India was inconsistent with a previous decision taken by a Plenary Meeting that out of band services would be considered permitted services. He therefore supported the views expressed by the Delegate of Spain.

The Delegate of the United Kingdom favoured as little change as possible to the Regulations at that late stage. He supported the amendment proposed by the Delegate of India.

In reply to a question from the Delegate of Colombia, the Vice-Chairman of the I.F.R.B. said that any future planning conference would have to take into account the various provisions of the Radio Regulations. If they did not do so an explanatory clause would be inserted in the Agreement of that Conference accompanying the plan, as had been done, for example, at the E.A.R.C. He thought it was unnecessary to go into the matter at the present stage, and that it could be left to such a future conference.

The Delegate of Norway said that Committee 4 had worked for three months on the basis of a concept of permitted services. He could not agree to abolish such a concept at the end of the conference.

The Delegate of Czechoslovakia favoured the amendment proposed by the Delegate of India but suggested an alternative wording.

The Delegate of the F.P.R. of Yugoslavia, supported by the Delegates of Italy, and Cuba suggested that discussion be postponed until the following day to give Delegations time to consult one another.

A vote was taken, and by 15 in favour and 23 against, with 10 abstentions, it was decided not to postpone the discussion.

A vote was also taken on the reference to permitted services, and by 35 to 1, with 7 abstentions, it was decided to retain the concept of permitted services.

The amendment to paragraph 97a, proposed by the Delegate of India, was also voted upon, and by 34 to 6, with 10 abstentions, was approved.

22-05

The Vice-Chairman of the I.F.R.B. referred to what appeared to him as a discrepancy between 97c and 97d. As it stood, 97c was contrary to No. 90 of the Radio Regulations. If 97c was world-wide in application No. 90 would have to be amended accordingly. Under the new Rules adopted in the setting out of the Allocation Table, the definition of the term "sub-region" was a group of countries smaller than a region; that definition also applied to No. 90 of the Radio Regulations.

The Delegate of Spain supported the statement made by the Vice-Chairman of the I.F.R.B.

The Delegate of the United States of America supported the views expressed, but proposed the deletion of "or sub-regions" from both the first and second sub-paragraphs of No. 90.

The Delegate of Brazil had intended to make a similar proposal later; he suggested the deletion of "sub-region" and the use of "Region" in No. 90.

The Delegate of the U.S.S.R. could not accept the proposal to delete "sub-region" from No. 90. He thought that 97d was not clear as to the relationship between a Region and a group of countries or a single country, and proposed that "the relationship between an individual country and the Region must be governed by No. 90 of the Radio Regulations" should be added to the end of 97d.

The Delegate of Denmark favoured the retention of 97c as given in Document No. 856. With regard to 97d, it had been his understanding throughout the work of Committee 4, that the primary basis applied only to the group of countries covered by the footnote and the Frequency Allocation Table applied to countries not mentioned therein. He supported the amendment proposed by the Delegate of the U.S.S.R.

The Delegate of France supported by the Delegate of Italy suggested that a vote be taken on paragraphs 97c and 97d, as contained in Document No. 856.

The Delegate of Pakistan favoured the texts of 97c and d contained in Document No. 856.

The Delegate of the United States of America could not support the amendment proposed by the Delegate of the U.S.S.R. to 97d.

The Delegate of Czechoslovakia supported the amendment proposed by the U.S.S.R. but thought that 97c and 97d should be completed by a similar **reference to** "restrictions imposed" to that given in 97g. A vote was not required on the matter as it was merely a drafting change.

The Delegate of the Federal Republic of Germany pointed out that the new Frequency Allocation Table had been adopted on the basis of 97c and 97d and if those notes were changed fundamentally it might be necessary to reconsider the whole of the Table of Frequency Allocations.

The Chairman of the Drafting Committee pointed out that the texts in Document No. 856 represented the unanimous views of the group that had prepared them.

In reply to a question from the Delegate of the U.S.S.R., the Vice-Chairman of the I.F.R.B. stated that if a fixed service and a mobile service were both allocated in the same region on a primary basis, it was his interpretation of No. 90 of the Radio Regulations that the two services would have equal status.

The Delegate of the United States of America supported the views expressed by the Delegate of Denmark and the Chairman of the Drafting Committee, that 97c and 97d should be approved as they stood; unless the area within a Region was defined in the Regulations as a sub-region covered by No. 90, No. 90 of the Radio Regulations would not be applicable.

The Delegate of the U.S.S.R. thanked the Vice-Chairman of the I.F.R.B. for his reply, and requested that it be recorded in the Minutes. The U.S.S.R. Delegation's interpretation of No. 90 coincided exactly with that given by Mr. Gracie, and he therefore withdrew his proposed amendment.

A vote was held and it was decided by 40 to 0, with 9 abstentions, that paragraphs 97c and 97d should be retained as given in Document No. 856.

The Delegate of the People's Republic of Bulgaria stated that he had abstained from voting because he had not been clear as to the Chairman's intentions regarding the drafting amendment proposed by the Delegate of Czechoslovakia.

The Chairman of the Drafting Committee and the Delegate of Portugal did not favour the amendment proposed by the Delegate of Czechoslovakia, and the Delegate of South Africa felt that since the text in Document No. 856 had been approved by vote, no addition could be made to it.

In view of the difference of opinion, the amendment proposed by the Delegate of Czechoslovakia was put to the vote and rejected by 9 votes to 30 with 6 abstentions.

The Delegate of the U.S.S.R. proposed the deletion of the word "only" in the penultimate line of 97d in view of the explanation given by the Vice-Chairman of the I.F.R.B.

The Delegate of the U.S.A. was of the opinion that 97d having been approved by vote, could not be changed

As there was not unanimous agreement to reopen discussion on 97d, the text was maintained as given in Document No. 856.

22-06

It was decided to delete note 97m.

The Delegate of the Argentine made the following statement :  
"My Delegation abstained in all the votes taken in connection with Section II (categories of services and allotments), on pages 22-03 to 22-06, on the grounds that the texts appearing in these blue documents differ from those in Documents Nos. 242 and 823, and the changes made deserve more careful consideration; these provisions are of great importance for the future interpretation of the Frequency Allocation Table."

The Delegate of the U.S.A., with reference to note 97L and in answer to a question by the Chairman of the Drafting Committee, specified that the agreement of his Delegation to the Table of Frequency Allocations, V.H.F. and above, was conditioned by the understanding that insofar as the fixed service was concerned, tropospheric scatter was permitted. He could not, therefore, agree to the inclusion of "tropospheric scatter" in that paragraph.

The Delegates of the Belgian Congo and the United Kingdom supported that statement.

It was decided that paragraph 97L should remain as given in Document No. 856.

Subject to drafting changes approved and to the inclusion in the Minutes of statements made, Document No. 856 was approved as a whole.

4. Announcement by the Chairman

The Chairman requested Delegations who had formal statements to be included in the Protocol to submit them by Wednesday, 16 December, 1959 at midnight.

The meeting rose at 8.30 p.m.

Rapporteur :

Deputy Secretary of the Conference :

Chairman :

V. Bouladon

C. Stead

Charles J. Acton



ADMINISTRATIVE  
RADIO CONFERENCE

GENEVA, 1959

Document No. 892-E  
17 December, 1959

PLENARY MEETING

COMMUNICATION BY THE ACTING CHAIRMAN  
COMMITTEE 4

In accordance with the provisions of Rule 20 of the General Regulations, which allow the Chairman to approve the Summary Record of the last meeting of a Committee, the Summary Record of the Thirty-Ninth Meeting of Committee 4, Document No. 862, is hereby approved subject to the following correction:

In the statement on page 1 which reads:

"The Delegation of Cuba formally protests against the way in which the Secretariat of this Conference has overstepped its duty ....." replace the words "Secretariat of this Conference has overstepped its duty" by the words "Rapporteur of the Committee has overstepped his duty".

E. J. Stewart  
Acting Chairman, Committee 4



INTERNATIONAL TELECOMMUNICATION UNION

E

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 893-E  
17, December, 1959

PLENARY MEETING

## NOTE BY THE CHAIRMAN

The attached letter from the Chairman of the Plenipotentiary Conference is published for the information of the Conference

Annex: 1



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A N N E X

Geneva, 17 December, 1959.

Mr. C. Acton,  
Chairman,  
Radio Conference.

Dear Mr. Acton,

I have to advise you that the Plenipotentiary Conference has now examined the credits which should be included within the budgetary ceiling of expenditure for 1960 on the basis of the estimates supplied by each of the permanent Organs; and it has decided that in view of the financial situation which is facing the Union, a reduction should be made in the credits requested by the I.F.R.B.

I understand that this reduction in credits will involve a postponement in bringing into force certain provisions of the Radio Regulations and I am sending you this letter for information and any action which you may consider appropriate.

Yours sincerely,

(signed). (J.D.H. van der Toorn,)

Dr. J.D.H. van der Toorn,  
Chairman, Plenipotentiary Conference.

ADMINISTRATIVE RADIO  
CONFERENCE  
GENEVA, 1959

Document No. 894-E  
17 December 1959

PLENARY ASSEMBLY

The Drafting Committee proposes that the Radio Regulations should enter into force on 1st May 1961.

Should this proposal be adopted by the Conference, the following amendments should be made to blue documents No. 861 (Series 23) and No. 803 (Series 18), already adopted.

1. SERIES 23. Article 45. page 23-12, read Nos. 45-01 and 45-02 as follows:

45-01     § 1.        These Regulations which are annexed to the International Telecommunication Convention, shall come into force on 1st May 1961.

45-02     § 2.        The provisions of the Extraordinary Administrative Radio Conference Agreement, Geneva, 1951, shall be abrogated upon the coming into force of the provisions of the Radio Regulations.

2. SERIES 18. page 18-20 read in the heading of the Resolution "30th April, 1961" instead of "31st December 1960".

3. SERIES 18. pages 18-34 and 18-35, read

"1.2        The effective date of the Master International Frequency Register shall be the first of May 1961.



2. Initial entries

2.1 The Master International Frequency Register shall include:

- a) the information contained in the Master Radio Frequency Record\* as on the thirteenth of April 1961 subject to the provisions of paragraph 3 below;
- b) the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed in the Radio Regulations, Geneva, 1959, for common use by certain services, including frequencies specified in Appendices 10, 12 and 12a of these Regulations;
- c) the allotments in the Plans included in Appendices 12.0 and 16a to the Radio Regulations, Geneva, 1959

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\* Master Radio Frequency Record: The interim master register of frequency assignments established and maintained pursuant to the provisions of the Agreement adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951 (E.A.R.C. Agreement)."

and delete the footnote with two asterisks at the bottom of page 18-34 and the footnote on page 18-35.

4. SERIES 18. page 18-35

- paragraph 3.1, 7th line, read "thirteenth of September, 1960"  
instead of "thirteenth of June 1960 "
- paragraph 3.1, last line, read "thirteenth of April 1961"  
instead of "thirty-first of December 1960".

5. SERIES 18, page 18-41, footnote (2), read "1st May 1961" instead of "1st January 1961"
6. SERIES 18, page 18-43
  - paragraph 1, 3rd line, read "1st May 1961" instead of "1st January 1961".
  - paragraph 2, read the beginning of the paragraph as follows:

"Upon the entry into force of the Radio Regulations, Geneva, 1951, assignments in conformity ....."
  - paragraph 2, 7th line, read "1st May 1961" instead of "1st July 1961".
  - paragraph 2, last line, read "1st May 1961" instead of "1st July 1961".
7. SERIES 18, page 18-44
  - paragraph 3, 1st line, read "1st May 1961" instead of "1st July 1961".
  - paragraph 3, last line, read "30th April 1961" instead of "30th June 1961".
8. SERIES 18, page 18-45
  - paragraph 1, 2nd line, read "1st May 1961" instead of "1st January 1961".
  - paragraph 2, read the beginning of the paragraph as follows:

"Upon the entry into force of the Radio Regulations, Geneva, 1951, assignments shall ...."
  - paragraph 2, 7th line, read "1st May 1961" instead of "1st July 1961".
  - paragraph 3, 1st line, read "1st May 1961" instead of "1st July 1961".
  - paragraph 3, last line, read "30th April 1961" instead of "30th June 1961".

9. SERIES 18, page 18-49
  - paragraph 2.2, 2nd line, read "1st October 1960" instead of "1st July 1960".
  
10. SERIES 18, page 18-50
  - paragraph 2.3, read the beginning of the paragraph as follows:  
"On 1st October 1960, the Board shall begin to transfer ..."



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 895-E  
17 December, 1959

## SUB-COMMITTEE 7A

### Note by the Chairman

of

### Sub-Committee 7A (General Operating Conditions)

1. At its Forty-first meeting on Thursday, 3 December, Sub-Committee 7A felt there was no call to hold a special meeting to approve the Summary Records not distributed by that date (Document No. 833, paragraph 5).
2. I have received the following request for a correction from the Delegation of the United States :

- In Document No. 833 (Summary Record) of the Forty-first meeting, paragraph 1b) should be changed to read :

Publication of a list on a world-wide basis of stations located on frequencies below 27.5 Mc/s.

P. Bouchier

Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document N° 896-FES  
17 décembre 1959

SEANCE PLENIERE  
PLENARY MEETING  
SESION PLENARIA

## ORDRE DU JOUR

### Vingt-neuvième séance plénière

Vendredi 18 décembre 1959, 11 heures

1. Textes soumis pour deuxième lecture : Série E (Document rose N° 881).
2. Protocole final (Documents N°s 885 et 889 Rev.).
3. Divers.

## A G E N D A

### Twenty-ninth Plenary Meeting

Friday, 18 December, 1959, at 11.00 hours

1. Texts submitted for second reading : Series E (Pink Document No. 881).
2. Final Protocol (Documents Nos. 885 and 889 Rev.).
3. Miscellaneous.

## ORDEN DEL DÍA

### 29.<sup>a</sup> sesión plenaria

Viernes, 18 de diciembre de 1959, a las 11 de la mañana

1. Segunda lectura de textos, Serie E (Documento rosa N.º 881).
2. Protocolo final (Documentos N.ºs 885 y 889 Rev.).
3. Otros asuntos.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 897-E  
CORRIGENDUM No. 1  
22 December, 1959

## PLENARY MEETING

### C O R R I G E N D U M

#### TO THE M I N U T E S --- OF THE

#### TWENTY-FIFTH PLENARY MEETING

Tuesday, 15 December, 1959 at 9.20 a.m.

Page 5, statement attributed to the Delegate of the Bielorussian Soviet Socialist Republic at the top of the page, fourth line, read :

"for the German Democratic Republic and for the Federal Republic of Germany".

Page 5, third paragraph, in the statement attributed to the Delegate of the Bielorussian Soviet Socialist Republic, add the following paragraph :

"The Bielorussian proposal was that in the notes to the Table, all call signs should be shown separately for the German Democratic Republic and the Federal Republic of Germany, and not just the call signs that had formerly belonged to the Bielorussian Soviet Socialist Republic. In that way the interests of neither of the two German governments would be deleteriously affected."

Page 24, second paragraph, in the statement attributed to the Delegate of Czechoslovakia, at the end read : "... which was no longer applicable and was not in accordance with the reference text submitted to the Drafting Committee."

Fifth paragraph, second statement attributed to the Delegate of Czechoslovakia, read : "... while insisting that the text in question should clearly show 'stations of the German Democratic Republic', agreed that the proposed reference was acceptable as a compromise solution."

On page 8, first paragraph, statement attributed to the Delegate of Belgium, fifth line of the French text (the Spanish and English are correct), read "paragraphe 3 de cette Résolution".

Page 8, statement attributed to the Delegate of China, line 2, read "Region 3" instead of "Region 1".

Page 3, first paragraph, first line, delete "speaking as Chairman of the Drafting Committee."

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 897-E  
19 December 1959

## PLENARY MEETING

### MINUTES

of the

### TWENTY-FIFTH PLENARY MEETING

Tuesday, 15 December, 1959 at 9.20 a.m.

|  |  |
|--|--|
| <u>Chairman:</u>                               | Mr. Charles J. Acton (Canada)  |
| <u>Vice-Chairman:</u>                          | Mr. Juan A. Autelli (Argentine Republic)<br>Dr. M.B. Sarwate (Republic of India) |
| <u>Deputy Secretary<br/>of the Conference:</u> | Mr. Clifford Stead   |

### Subjects discussed:

1. Reservations to the Radio Regulations.
2. Twentieth Series of Texts submitted by the Drafting Committee (Documents Nos. 822 and 794)
3. Twenty-first and Twenty-first bis Series of Texts submitted by the Drafting Committee (Documents Nos. 843 and 871)
4. Twenty-second bis Series of Texts submitted by the Drafting Committee (Document No. 870)
5. Twenty-third Series of Texts submitted by the Drafting Committee (Documents Nos. 861 and 775)
6. Eleventh Series of Texts submitted by the Drafting Committee (Documents Nos. 714 and 851)



Present::

Members of the Union :

Afghanistan; Albania (People's Republic of); Argentina (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian Soviet Socialist Republic; Brazil; Bulgaria (People's Republic of); Canada; China; Colombia (Republic of); Belgian Congo and Territory of Ruanda-Urundi; Korea (Republic of); Cuba; Denmark; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Guinea (Republic of); Hungarian People's Republic; India; Indonesia (Republic of); Iran; Iraq (Republic of); Ireland; Iceland; Israel (State of); Italy; Japan; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Panama; Paraguay; Netherlands (Kingdom of the); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Oversea Provinces; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of Southwest Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (Republic of).

Private Operating Agencies :

Portuguese Marconi Radio Company.

Specialized Agencies :

International Civil Aviation Organization

International Organizations :

European Broadcasting Union

International Chamber of Shipping

International Broadcasting and Television Organization

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1. Reservations to Radio Regulations

The Chairman reminded the Meeting that the deadline for the submission of Reservations to the Radio Regulations was 2400 hours on Wednesday, 16 December.

2. Twentieth Series of Texts submitted by the Drafting Committee  
(Documents Nos. 822 and 794)

pp. 20-04           The Delegate of France, speaking as Chairman of the Drafting  
to 20-06 Committee, drew attention to paragraph 3 on page 5 of the Recommendation relating to the Radio Astronomy Service where Administrations were recommended to leave the band 606 - 614 Mc/s free for radio astronomical observations or to use other means to afford the maximum practicable protection for the radio astronomy service. Footnote 21lp to the Table of Frequency Allocations dealt with the same subject and should, he thought, replace paragraph 3 of the Recommendation since it represented a more realistic assessment of what Administrations could do in the way of affording protection to the radio astronomy service.

The Delegate of Italy agreed with the Chairman of the Drafting Committee.

The Delegate of the United Kingdom, speaking as Chairman of the Ad Hoc Group that had drawn up the Recommendation in question, said that the Group, which had carefully reviewed all the allocations and footnotes relating to the radio astronomy service, had unanimously decided that paragraph 3 of the Recommendation provided more long-term security for radio astronomers than did footnote 21lp. He was thus in favour of the paragraph being retained.

The Delegate of the United States of America said that his delegation had every desire to provide all possible assistance for radio astronomers, but was not in favour of any change with regard to footnote 21lp, which, he wished to point out, only referred to Regions 1 and 3.

The Delegate of Yugoslavia said that either the text of paragraph 3 of the Recommendation and footnote No. 21lp should be brought into line, or one of those texts should be adopted and the other deleted. As matters stood, there was a certain contradiction between them.

The Delegate of Belgium said that he could see no contradiction between the texts. Footnote 21lp was statement of an existing state of affairs, while paragraph 3 expressed a hope for the future.

The Delegate of the Netherlands agreeing with the Delegate of Belgium was in favour of retaining paragraph 3.

The Chairman proposed that paragraph 3 remain as it stood.

It was so agreed, subject to reservations by the Delegates of France, Yugoslavia and Italy to the effect that their respective administrations believed that, in the application of the Radio Regulations so far as the band 606 - 614 Mc/s was concerned, the provision to be applied was that contained in footnote 21lp to the Table of Frequency Allocations, not that contained in paragraph 3 of the Recommendation on pages 20-04 to 20-06.

pp. 20-11            The Chairman of the Drafting Committee observed that sub-  
to 20-14 paragraph b) 6 on page 20-12 did not seem to be valid for the maritime  
mobile service, and that a revision of the frequency bands given in  
paragraph d) might be necessary.

The Delegate of the United States proposed that sub-paragraph  
b) 6 be deleted and that the question of the bands in paragraph d) be  
referred back to the Drafting Committee for consideration.

It was so agreed.

The Delegate of the United States proposed that the words "single  
sideband" be inserted before "working" in the last line of paragraph 9 on  
page 20-14.

It was so agreed.

pp. 20-15            The Delegate of Italy, speaking as Chairman of the Working Group  
to 20-16 that had drafted the Recommendation contained on pages 20-15 to 20-16, said  
that, in view of the adoption by the Plenipotentiary Conference of the  
Resolution on page 3-25 of that Conference's blue sheets, the Recommendation  
was no longer necessary. He proposed its deletion.

It was so agreed.

p. 20-21            The Chairman said that consideration of the Resolution contained  
on page 20-21 and of Document No. 794 which was connected with it would  
be deferred to a later session of the meeting.

The 20th Series of blue texts, as amended, was approved.

3. Twenty-first and twenty-first bis Series of Texts submitted by the  
Drafting Committee (Documents Nos. 843 and 871)

Art. 19            The Chairman of the Drafting Committee said that the new version  
of Article 19, which was based on Document No. 758, took account of the  
provisions of the existing Article on Call Signs, the comments of the  
C.C.I.R. and the development of identification methods other than Call  
Signs. Pages 21-11 to 21-13 had been replaced by new texts contained  
on pages 21 bis-02 to 21 bis-04.

The Delegate of the Bielorussian S.S.R. drew attention to the  
footnote on page 21-06 referring to the call signs for Germany shown in  
the Table on that page. He recalled that the Administrations of the Federal  
Republic of Germany and the German Democratic Republic had requested the  
Administration of Bielorussia to transfer its call signs to them. The  
Bielorussian Administration had agreed, and in return had received call  
signs previously belonging to the U.S.S.R. In view of the fact that  
there was no single Administration for the whole of Germany, and that it

was impossible to distinguish between the call signs used by each of the two Germanies, since no distinction between their respective call signs was made in the Regulations, he believed that separate call signs for the German Democratic Republic should be given as a footnote to the Table. He pointed out that great importance was attached in the Regulations to the exactness of call signs, and that the names of many countries which were not Members of the Union were included in the Table. There was thus no reason to exclude the German Democratic Republic and its call signs.

The Delegate of the Federal Republic of Germany said that he wished to state that, as had been agreed between his own Administration and that of Bielorussia, the call signs DTA-DTZ would not be used by any radio station in the Federal Republic of Germany. He was, however, opposed to the insertion of a footnote giving the call signs of the German Democratic Republic. Firstly, as a matter of principle, there should be no footnotes to the Table. Secondly, such a footnote was unnecessary, since all call signs were given in the List of Call Signs published by the Union. Thirdly, such a footnote would not even be correct, since the German Democratic Republic would not only use the call signs DTA-DTZ, but was already using call signs throughout the entire German block of call signs. To that extent, the insertion of the proposed footnote would deprive the German Democratic Republic of some of the call signs it was already using.

The Delegate of Bielorussia pointed out that in the most recent edition of the List of Call Signs, the same call signs were given for both Germanies, and it was therefore not possible to distinguish between them on the basis of the List.

The Chairman proposed that the Table should be kept as it stood, that the statements of the two previous speakers be recorded in the Minutes and that the footnote on page 21-06 be deleted.

It was so agreed.

The Delegate of the U.S.S.R. said that some of the Republics forming part of the U.S.S.R. had not been given their correct names in the Table. He would hand in the corresponding corrections to the Drafting Committee.

The Delegates of Portugal, the United Kingdom and the United States wondered what those corrections might be.

The Delegate of the U.S.S.R. said that, although he was reluctant to waste the time of the meeting with questions of drafting, the corrections were as follows: "Estonia", on page 21-06, should read "Estonian Soviet Socialist Republic"; "Lithuania", on page 21-07, should read "Lithuanian Soviet Socialist Republic"; and "Latvia", on page 21-08, should read "Latvian Soviet Socialist Republic".



The Delegate of the United States said that the proposed corrections could not be accepted by his delegation, since his country had not recognized the absorption of the three territories referred to into the Soviet Union. The names as given in the Table fulfilled all the technical requirements for the radio regulations.

The Delegate of Portugal supported the view of the Delegate of the United States. The Table should be left as it stood.

The Delegate of the United Kingdom said that the proposed corrections were not drafting changes at all. It was quite outside the competence of the Conference to take any decision with regard to the status of the three territories. The proposed corrections should not be made.

The Delegate of Bielorussia supported the corrections proposed by the Delegate of the U.S.S.R. The Conference had decided that abbreviated names of countries might be used in the Table of Frequency Allocations, but that elsewhere their full names should be given. No objection had been made to giving the full names of other countries.

The Delegate of the U.S.S.R. was a little surprised by some of the comments that had been made. The Republics referred to were in fact Soviet Socialist Republics - there could be no dispute about that. They should therefore be given their rightful names in the Table.

The Chairman said that he would put the matter to the vote.

The Delegate of the U.S.S.R. objected. A country's name was its own affair and could not be decided for it by other countries.

The Chairman said that, in view of the fact that objections had been raised to the changes in the Table put forward by the Delegate of the U.S.S.R., he had no alternative but to put the matter to the vote.

The corrections in the Table of Allocation of International Call Sign Series proposed by the Delegate of the U.S.S.R. were rejected by 25 votes to one, with 8 abstentions.

The Delegates of Bielorussia, Bulgaria, U.S.S.R., Poland, Czechoslovakia, Roumania, Hungary and the Ukraine said that they had not taken part in the vote, since the Radio Conference was not competent to proceed to a vote on the names that were to be given to sovereign countries.

The Delegate of Greece said that he had not taken part in the vote, because the whole matter should not have been raised by the Delegate of the U.S.S.R. The Radio Conference was purely a technical conference.

The Delegate of Ethiopia said that he had abstained in the vote, because it was the view of his Administration that call signs were allocated to countries, not to governments, and did not change when the governments of those countries changed. Geographical names should be used in all cases.

The Delegate of India asked that the call signs 8TA-8YZ which were shown as "Not allocated" on page 21-09 be allocated to India.

It was so agreed.

The Delegate of Mexico asked that the call signs 6DA-6JZ which were shown as "Not Allocated" on page 21-09 be allocated to Mexico.

It was so agreed.

Art. 22        The Delegate of the U.S.S.R. proposed that, in order to underline the responsibility of countries on whose territories stations were set up, the following sentence should be added at the end of 488a : "The licence for the operation of such stations is given by the country on whose territory they are set up and that country is then responsible with regard to their operation".

The Delegate of the Federal Republic of Germany said that the Soviet proposal would make 488a meaningless. The most important idea behind it was already contained in 488. 488a should be left as it was.

The proposal of the U.S.S.R. was rejected by 33 votes to 9, with 7 abstentions.

The Delegate of Mexico said that he had voted against the Soviet proposal not because it was unreasonable, but because it was superfluous

The Delegate of Czechoslovakia said that 488a as it stood was ambiguous. Could it not be interpreted to mean that a station could be operated without a licence ?

The Delegate of the Federal Republic of Germany said that the "exceptions" referred to in 488a were a matter for mutual arrangement between two Governments. They were free to make any arrangements they chose provided that they did not contravene the Regulations or Convention.

The Delegate of Ethiopia, referring to Article 19 in general, pointed out that between the present radio conference and the succeeding one, there would be many new countries in Africa which would have attained independence and which would be in need of call signs. He would therefore ask the Secretary-General elect to bear those needs in mind and to apply the provisions of 419a to satisfy them wherever possible.

The Deputy Secretary of the Conference said that note had been taken of the point raised by the Delegate of Ethiopia, and the Secretariat would act accordingly.

The Delegate of Belgium, speaking as Chairman of Sub-Committee 7A, said that he wished to draw attention to the Resolution relating to the Formation of Call Signs and the Allocation of New Series on pages 21-19 to 21-20, and in particular to paragraph 3 thereof. The aim of the paragraph was to make it possible for a reserve of call signs to be maintained in order to satisfy requests from new countries.

He would not ask the Delegates of Mexico and India to withdraw the requests for further call signs which they had made, but he hoped that it might be possible for them to re-examine their requirements to see whether they really needed the further allocations.

The Chairman echoed the view of the Delegate of Belgium. He hoped that all countries would review their present call sign allocations with a view to releasing any series possible for other countries which needed them.

The 21st and 21st bis Series of blue Texts, as amended, and subject to drafting changes proposed by the Delegates of the United States, India, Iran, United Kingdom, Israel and Venezuela, and by the Chairman of the Drafting Committee were approved.

4. Twenty-second bis Series of Texts submitted by the Drafting Committee (Document No. 870)

The 22bis Series of blue Texts was approved subject to drafting changes proposed by the Chairman and the Delegate of Ethiopia.

5. Twenty-third Series of Texts submitted by the Drafting Committee (Document Nos. 861 and 775)

Art. 9           The Delegate of China made the following statement:

"The Delegation of China cannot agree with the value of field strength for aeronautical radio beacons in Region 1 as laid down in 261e for areas between 40° N and 50° S and reserves its right to use lower values than 120 microvolts per meter in areas North of 30° N."

The Delegate of Japan, also referring to 261e, said that the latitude 40° N in the second line should be changed to 46° N in order to cover the whole of Japan.

The Chairman of the Drafting Committee pointed out that if the change proposed by the Delegate of Japan applied to the whole of Region 3, it might introduce certain difficulties so far as other parts of the Region were concerned.

After further discussion, in which the Chairman of the Drafting Committee, the Chairman of Committee 5, Mr. Bellamula, of the I.F.R.B.

and the Delegates of China and Japan took part, the Delegate of Japan said that he would be obliged to enter a reservation to the effect that the whole of Japan should be included within the field intensity of 120 microvolts per meter.

The Delegate of Venezuela proposed that 2540a on page 23-02 be deleted.

It was so agreed.

The Delegate of Mexico proposed that, since 2540a had been deleted, it would be necessary to delete the words "subject to appropriate special arrangements between the countries concerned in that Region" in the former 252c which had now become 107c.

After some discussion in which the Chairman of the Drafting Committee, the Delegates of Mexico and the United States took part, the Mexican proposal was rejected by 7 votes to 2, with 6 abstentions.

The Delegate of Mexico said that, since 107c as it stood was a discriminatory provision, he would be obliged to enter a reservation with regard to it on the part of the Mexican Administration.

The Delegate of the United States said that his delegation was in favour of 269 on page 23-08 as it stood. That number was, however, in contradiction with footnote 147c to the Table of Frequency Allocations, and he therefore proposed that 147c be deleted, insofar as it concerned Region 2.

The Delegate of India said that, as a Region 3 country, he was in favour of the entire deletion of 147c.

It was so agreed.

The Delegate of India further proposed that the second paragraph of 262f on page 23-06 be deleted.

It was so agreed.

The Delegates of China and Japan said that they wished to make the same reservations with respect to 277c on page 23-09 as they had made with respect to 261e. In particular, China reserved its right to use field strength lower than 100 microvolts per meter in areas north of 30° N.

The Delegate of Mexico said that, for the sake of consistency, the references to 31° N in 277d should be changed to 30° N.

After a short discussion, in which Mr. Dellamula, of the I.F.R.B., and Delegates of Mexico and the United States took part, it was so agreed\*.

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\* After the resumption of the meeting, the decision was reversed, and it was decided to retain "31°N" in 277d.

The meeting was suspended at 1 p.m. and resumed at 2.30 p.m.

pp. 23-12      The Chairman said that Proposal No. 5576 by Italy (Document No. 863) should be considered together with Article 47.

The Delegate of Italy explained that, at the last Administrative Telegraph and Telephone Conference, Italy had made a proposal designed to avoid overburdening the Telegraph Regulations and the Telephone Regulations by reproducing in them all the counter-reservations made by delegations wanting to protect themselves with regard to reservations made by other delegations. With the same purpose in view, the Delegation of Italy submitted a similar proposal to the Administrative Radio Conference, to add a new Regulation in Article 47 as follows :

"The Delegates signing these Regulations hereby declare that, should an Administration make reservations about the application of one or more provisions of these Regulations, no other Administration shall be obliged to observe that provision or those provisions in its relations with that particular Administration".

It was further proposed that the same text should be added in Article 13 of the Additional Radio Regulations.

Proposal No. 5576 was adopted.

The Delegate of the United Kingdom of Great Britain and Northern Ireland proposed that the words "and Associate members" should be added after the word "Members" in line 2 of Article 47, paragraph 3.

It was so agreed.

The Deputy Secretary of the Conference pointed out that the final formula of the Buenos Aires Convention included a reference to the five languages, and wondered whether such a reference had been intentionally omitted from the Radio Regulations.

The Chairman suggested that it was unnecessary to add the reference in the Radio Regulations, which were annexed to the Convention.

It was so agreed

pp. 23-13      Appendix 10.

The Delegate of Denmark regretted that the form of Section A of Appendix 10 was not the same as in the past.

The Delegate of France, speaking as Chairman of the Drafting Committee, explained that the intention of the Drafting Committee had been to present the Appendix in a more easily readable form.

The Delegate of the United States thought that, while Section A was more easily read in the new form, it might not be easily understood by those who had not been engaged in its preparation. He proposed that the Chairman of Sub-Committee 7B should assist the Chairman of the Drafting Committee to prepare an explanatory footnote to Appendix 10.

The Delegate of the United Kingdom supported that proposal.

The Chairman of the Drafting Committee pointed out that Appendix 10 was not a separate isolated document, but was explained in Article 33.

The Delegate of the United Kingdom thought that it would nevertheless be helpful to add an explanatory footnote in the Appendix itself.

The Chairman proposed that a suitable footnote should be drafted by the delegates concerned and handed to the Chairman of the Drafting Committee.

It was so agreed.

The Delegate of Mexico agreed with the Delegate of Denmark that the presentation of Section A was not quite clear and suggested that it might be considered whether the old form should not be retained.

The Chairman of the Drafting Committee said that he would be glad if the Delegate of Mexico would give him any practical suggestions for presenting the information in Section A in another way.

The Delegate of Israel, supported by the Delegate of the United Kingdom, proposed that a reference to Article 33 should be added in Appendix 10.

The Chairman pointed out that such a reference already existed in the French text and proposed that it should be added in the English text.

It was so agreed.

The Delegate of the United States proposed that the title of Section A should be amended to read " ..... Maritime Mobile Service Bands between 4 and 25.11 Mc/s" instead of " ..... Maritime Mobile Service Bands between 4 and 23 Mc/s", since the table covered the band 25 Mc/s.

The Chairman said that the title in French already referred to ".... Bands between 4 and 27.5 Mc/s" and suggested that the English text should be amended accordingly.

The Delegate of the United Kingdom thought that the upper limit in the title should be 25.11 Mc/s.

The Chairman of the Drafting Committee preferred the French text, and suggested that it would be clearer to use the upper limit of 27.5 Mc/s throughout the Appendix.

The Delegates of Belgium, Norway, the Belgian Congo, Yugoslavia, and the United States supported the suggestion of the Chairman of the Drafting Committee that the title should read "..... Bands between 4 and 27.5 Mc/s" in all three languages.

It was so agreed.

Pp. 23-14

The Delegate of Denmark proposed that, in Section B, the upper and lower limits of the band 6 Mc/s should be raised by .5 kc/s so that they would be 6 200.5 kc/s and 6 207.5 kc/s. It was advisable to raise the lower limit since there was broadcasting below it in that band.

The Delegate of the United States supported that proposal. The suppressed carrier on 6 200 kc/s, which was the band edge, might cause interference.

The Delegate of the United Kingdom thought that there was no point in changing the limits.

The Chairman of the Drafting Committee said that the same problem would arise for the band 4 Mc/s.

The Delegate of the United States said that the service below 4 153 kc/s was radio ship telegraphy, whereas below 6 200 kc/s it was broadcasting. The problem in that band was not the same, therefore, and was not so serious.

The Chairman proposed that the limits for the band 4 Mc/s should remain unchanged, while the Danish proposal to raise the limits for the band 6 Mc/s should be adopted, together with the necessary consequential changes in the footnote on page 23-14 and elsewhere in the Regulations.

It was so agreed.

The Chairman of the Drafting Committee asked if the expert delegates would point out to him where the new central frequency, which became 6 204 kc/s, came in the Regulations.

The Chairman proposed that the Delegate of Denmark should give the Chairman of the Drafting Committee his advice on that point.

It was so agreed.

The Delegate of the United Kingdom was perturbed that snap decisions were being taken to change limits which had been thoroughly discussed by the maritime experts for four months.

The Chairman suggested that the Delegates of the United Kingdom, the United States and Denmark should discuss the amended text and ensure that there had been no departure from decisions taken in the committees on points of principle.

The Delegate of the United States proposed that the title of the second main column of Section B should be "Assignable Carrier Frequencies" rather than "Assignable Working Frequencies".

The Delegates of the United Kingdom and Mexico supported the proposal that the title should be changed.

The Chairman of the Drafting Committee said that the title would also have to indicate that the assignable carrier frequencies were used only for traffic. He regretted that the proposals which were being made for amending Appendix 10 had not been made earlier.

The Chairman suggested that the experts of the United Kingdom and United States Delegations should find a suitable wording for the title of the column.

It was so agreed.

The Delegate of the United States proposed that, in the band 16 Mc/s, the lower limit should be amended to read 16 537 kc/s, as on page 23-07, and that the upper limit should be 16 558 kc/s.

It was so agreed.

Appendix 10 was approved as amended.

Pp.23-15      The Recommendation to the Safety of Life at Sea Conference relating to distress, urgency and safety communications was approved with a drafting change in the French text.

Pp.23-16      The Recommendation to Administrations relating to the Meteorological Aids Service in the band 27.5 - 28 Mc/s was approved without comment.

Pp.23-17 to 23-19      Resolution relating to the preparation of a Manual for use by the Mobile Services.

The Chairman pointed out that the draft Resolution should be considered together with Document No. 775 (Rev.).

There was no indication in the Draft Resolution as to when the money required, in accordance with paragraph 6, for the travel expenses and living allowances of the six members of the expert panel should be made available and there was no invitation to the Plenipotentiary Conference to provide the money.



The Deputy Secretary of the Conference explained that the Secretariat had taken advance action on that point and a document was being distributed to the Plenipotentiary Conference giving an estimate of 22,000 Sw. frs. based on two meetings of one week.

The Delegate of the United Kingdom was anxious about the number of meetings of experts and similar meetings envisaged by the Union. It was not certain that meetings of the proposed panel of experts would be necessary and the United Kingdom Delegation hoped that the work of advising the Secretary-General and approving the Manual before publication could be done by correspondence. If the experts were to meet in Geneva, paragraph 6 would have to be reworded but the United Kingdom Delegation would prefer that such meetings should be very exceptional and held only when it had not proved possible to do the work by correspondence.

The Delegate of India shared that view.

The Delegate of Yugoslavia also shared the views expressed by the Delegate of the United Kingdom.

The Delegate of Canada found the resolution perturbing. In Canada, the Administration had prepared a booklet concerning the radiotelephone service which had taken about 200 man hours to prepare. It would seem that the task of preparing the Manual for use by the Mobile Services could be done within the Secretariat, possibly with the assistance of an I.F.R.B. member. The Delegation of Canada was concerned about the cost of the proposed meetings.

The Delegate of Colombia supported the principle that the work of the expert panel should be carried on by correspondence, and suggested that Spanish speaking experts should take part.

The Delegate of the U.S.S.R. agreed that it was difficult to understand the Resolution, which would make the financial situation of the I.T.U. even worse than it was. There seemed to be no need for a special panel of experts, and the Delegation of the U.S.S.R. associated itself with those Delegations which considered that the Manual could be prepared by the Secretariat of the Union.

The Delegate of the United States endorsed the principle of the Manual but agreed with the United Kingdom in respect of the panel and its expenses.

The Delegate of Greece also expressed concern with the number of proposals for expert groups which would increase the expenses of the Union and in consequence, the contribution of his Administration. He therefore reserved his position on the Resolution.

The Delegate of Israel supported the views expressed by the Delegate of Canada and moved the closure of the debate.

The Delegate of Italy, speaking as Chairman of the Working Group set up by Committee 7 to consider the preparation of the Manual, said that in the course of the Group's work the Delegate of the United Kingdom had proposed that a panel of experts should check the work done by the Secretariat on the Manual before it was published. It had been considered that the checking could be done by correspondence but that it might be necessary for the panel to meet just before publication of the Manual. There had been no question of two meetings of the panel. In paragraph 5 of the draft Resolution it was clearly stated that the experts should be invited to meet "if necessary for the fulfilment of their task". The cost of such a meeting would in any case be small compared with the total expenditure of the I.T.U.

The Delegate of Belgium agreed with all the previous speakers who had emphasized that expenditure should be kept at a minimum. The Manual had been planned because some parts of the Radio Regulations were unnecessary for the maritime mobile service and, as presented hitherto, the Regulations might have been difficult to understand. The new presentation of the Regulations was, however, very clear, due to the excellent work done by the Drafting Committee, and the Belgian Delegation wondered whether a Manual was necessary or whether the new Regulations would not suffice.

The Delegate of Sweden said that his Administration hoped and believed that the panel's task could be fulfilled by correspondence but, if not, it was prepared to pay all expenses (including travel and living allowances), for its expert.

The Delegate of the United States said that much of the work on the manual had already been done so that the Secretary-General needed only to consult Administrations and ask their advice. He proposed, therefore, that the words "after approval by the experts named in paragraph 4, below" at the end of paragraph 2 of the Resolution should be deleted, together with paragraphs 4, 5 and 6.

The Delegate of the United Kingdom believed that it would be helpful to the Secretary-General to be able to approach particular experts on the question. He proposed as an alternative that paragraphs 5 and 6 should be deleted, but that paragraph 4 should be amended to read: "that the following 6 persons named below, or the substitutes for each, are, subject to the consent of the respective Governments, designated experts to be consulted by the Secretary-General in questions relating to the tasks entrusted to him in accordance with paragraph 2 above, and approve the manual before publication. Such consultation should be by correspondence".

The Delegate of the United States accepted that amendment in principle, but could not agree that the experts should be named in the Resolution. He suggested that paragraph 4 should be amended to provide that the Secretary-General should consult with Administrations which would be able to get in touch with the experts concerned.

The Delegate of the United Kingdom accepted that suggestion.

The Deputy Secretary of the Conference thought that it would be useful to include the names of the countries to be consulted.

The Chairman proposed that the countries listed in the Draft Resolution should be mentioned, with the addition of a Spanish-speaking country.

The meeting was suspended at 4.10 p.m. and resumed at 9.30 p.m.

Document No. 775 (page 23-19)

The Delegate of the Netherlands proposed the following amendment to page 23-19, in line with the discussions of the afternoon :

top of page : "after approval by the Administrations named in para. 4 below : " para. 3 unchanged, and para. 4 to read : "that these Administrations be consulted by the Secretary-General on questions relating to the tasks .... etc.. and such consultations should be by correspondence.". Delete paras. 5 and 6.

If this text were to be approved it would not rule out the possibility of Administrations sending experts to Geneva at their expense.

The Vice-Chairman requested the addition of the Argentine to the list of names.

The Delegate of New Zealand considered that if Administrations were named, and not experts, the distribution should be on a more even regional basis, and suggested that Australia and Japan be added to the list.

The Delegate of Italy explained that the small group had worked on the basis that meetings would be necessary, and proposed deletion of the phrase "consultations should be by correspondence."

The Delegate of Greece expressed his esteem of the experts previously chosen, but believed that if Administrations as such were to be represented those with a long maritime tradition should be listed.

The Delegate of the United States wished it to be made clear that his statement made that afternoon with respect to paragraph 4 must not be misconstrued. It was far from his intention to suggest that experts mentioned therein were not competent, as he had every confidence in them all. He merely referred to budgetary difficulties which might be experienced in the United States. In his view the major part of work on the Manual had already been done, and it was unnecessary to have the advice of a great many Administrations on this matter.

The Chairman of the Drafting Committee believed that a designation of experts was premature. He also believed that the work would involve a meeting, even if only for a few days, as it was a fairly complicated task to extract the pertinent Radio Regulations and to compile them into a handbook in a simple and concise form for the use of sailors and airmen. Upon a query by the Delegate of Greece he agreed that the Manual should ultimately be translated into the national languages of maritime nations.

At the request of the Chairman a small group issued a corrigendum sheet to cover the text beginning at the bottom of page 23 - 18 and continued on page 23 - 19.

The names of Argentina, Australia, Japan and Spain had been added to this list, but following an explanation by the Delegate of Italy that it would perhaps be desirable to keep the group as small as possible to expedite consultation, the delegates of those four countries agreed to withdraw their countries' names from the list, while expressing appreciation that they had been added, and stating that they would always be willing to give their cooperation if and when required.

The Delegate of Sweden suggested the addition of a footnote on page 20-01, referring to item 8, and proposed that this should read : "these documents may be replaced by the manual for use by the mobile services, which is to be published in accordance with Resolution No.....".

The Chairman of the Drafting Committee, seconded by the Delegates of Israel and Spain, believed that this would be an undesirable and even dangerous procedure, as ships' officers, for example, should be in possession of the complete Radio Regulations, and not merely the Manual.

Following this explanation the Delegate of Sweden withdrew his proposal.

After some discussion regarding at what stage the Administrations should be consulted, Mr. Stead, Deputy Secretary of the Conference, proposed that paragraph 4 be amended to include the word "may" before the words "be consulted".

It was so agreed.

The Resolution contained on pages 23-17 to 23-19 was approved, as modified by the yellow corrigendum sheet, with the deletion of the Administrations mentioned above.

#### Pages 23-20

The Delegate of the United Kingdom suggested that the words "radio frequency spectrum" after "considering" be changed to "bands".

It was so agreed, and page 23-20 was approved with that amendment.

Pages 23-21, 23-22 and 23-23 were approved without comment.

Page 23-24

The Delegate of the United Kingdom wished to change the words "economic consequences" in paragraph 3, to "economic aspects".

The Chairman of the Drafting Committee and the Delegate of the Argentine preferred the text to remain unchanged in French and Spanish respectively, and it was agreed to amend the English text only.

Page 23-24 was approved with that amendment.

Page 23-25 was approved without comment.

Page 23-26

The Chairman of the Drafting Committee wished to be informed whether the Recommendation given on that page was to be incorporated into the Regulations or annexed thereto.

The Chairman did not think that such a procedure would be either necessary or useful, and his opinion was shared by the Delegates of the U.S.S.R. and Yugoslavia.

The Delegate of Yugoslavia further drew attention to the fact that point 2 of the "invites" on the following page was under reservation of the approval of the Plenipotentiary Conference which was concerned with expenses, and suggested that discussion be postponed until the result of their decisions was known. He was seconded by the Delegate of Italy.

The Chairman pointed out that page 23-27 had already been approved in plenary meeting. The introduction by the Chairman of the ad hoc group had been published as a letter to the Chairman of the Plenipotentiary Conference from the Chairman of the Radio Conference.

Mr. Gracie, Vice-Chairman of the I.F.R.B. said that he had attended Committee H of the Plenipotentiary Conference, and also its Plenary Assembly, where questions of budget were being discussed, and that every new item, likely to increase the unit costs, was subject to a very critical scrutiny. The Recommendation in question had already given rise to some adverse comment, particularly as parallel activities in other fields had been assigned to C.C.I.R. Study Groups.

He firmly believed that in subsequent discussions of the Plenipotentiary Conference it would be most desirable for Administrations who found great merit in the Recommendation to be present, in order to explain the

importance they attached to it. A paper put forward by the Chairman of Committee 4 drew attention to the fact that unless something concrete was done, the spectrum was soon going to be relatively useless, not only to new and developing countries but to all present users.

Mr. Gracie explained that it would be useful for him to know that the Radio Conference attached considerable importance to this Recommendation, as he had had the job of defending other recommendations of that Conference.

The Delegate of South Africa considered that the last two paragraphs on page 23-27 should be deleted.

The Chairman did not think this would be necessary if the Recommendation were not to be included in the Regulations.

The Chairman of the Drafting Committee suggested deleting the expression "to the Plenipotentiary Conference" in the heading, and supported the suggestion of the Delegate of South Africa. It should be generally indicated that it was considered desirable to hold a meeting of experts in 1961 or 1962.

Following a suggestion by the Delegate of Mexico, the Chairman confirmed that a letter had already been sent to the Plenipotentiary Conference, who were considering the matter.

The Chairman proposed that the Recommendation on pages 23-26 and 23-27 be tentatively approved, pending a decision on the financial implications from the Plenipotentiary Conference.

It was so agreed, and pages 23-26 and 23-27 were approved.

Page 23-28 was approved without comment.

Pages 23-29 and 23-30 were approved without comment.

Before approval of the 23rd series of blue texts, the Delegate of the United States wished to return to page 23-07. In note 26, c he thought there should be a reference to wideband facsimile, which might be used by ship stations.

Mr. Petit, I.F.R.B. explained that up to present the I.F.R.B. had always considered that telegraphy was used for ship stations and coastal stations. A plan had been established in 1951 in coastal stations to enable facsimile transmissions to be made and recently a certain number of Administrations had been notifying the use of facsimile on stations allotted to telegraphy. He believed that a reference to facsimile should also be added under Note 267.

It was so agreed.

The Chairman of the Drafting Committee requested that the experts of the maritime mobile services bring to his attention any further cases where such reference was necessary.

Document 861, containing the 23rd and last series of blue documents, was approved, subject to drafting changes, and information to be given to the Chairman of the Drafting Committee.

Twentieth Series of texts submitted by the Drafting Committee  
Documents Nos. 822 and 794) (resumed)

The Chairman reminded the meeting that page 20-21 had been left in abeyance and requested that a decision now be taken on the Convening of a Special Regional Conference.

The Delegate of the Federal Republic of Germany had no objection to the Resolution contained on page 20-21, but would wish Document No. 794. submitted by his Administration to be taken into account.

The Chairman agreed and requested the I.F.R.B. and the General Secretariat to take the document into account when making preparations for the conference.

Mr. Gracie, Vice-Chairman, I.F.R.B. considered that the duration of the Conference should be clearly indicated, as this must be borne in mind when considering the ceiling of the consolidated budget.

Mr. Stead, Deputy Secretary of the Conference, wished for clear instructions in this matter.

Following a proposal by the Delegate of Yugoslavia it was decided to add a paragraph d) to the Resolution, stating that "the duration of the conference should not exceed three weeks", as proposed in Document No. 794.

The Delegate of France reminded the meeting that, on this same subject, point 180b of the Frequency Allocation Table showed a list of names of certain countries who would participate in the conference, and requested that the name of his country be added to this list.

The Delegates of the Netherlands, the United Kingdom, the Ukraine, Bielorussia and Tunisia also wished their countries to be included in the list.

The Delegates of Norway and Finland stated that they were not authorized to make a firm commitment, but would like their countries to be added to the list on a provisional basis.

The Delegate of Czechoslovakia considered that the Democratic Republic of Germany should also be invited to attend that Conference, as it was a neighbouring country of his own, and some others mentioned on the list, and its radio services must be taken into account.

The Delegate of Greece said that he was opposed to the convening of that conference. He had previously feared it would be on too wide a scale, and it was now apparent it was going to be on a European and not merely on a regional basis. Now it was proposed that countries who were not members of the Union be included, his fears would appear to be well grounded.

Mr. Stead, Deputy Secretary of the Conference, pointed out that the existing General Regulations would still be in force, and as the Conference would be convened by the General Secretariat at the seat of the Union, without an inviting Government, paragraph 5 of Chapter 1 of the General Regulations would be applicable (in view of paragraph 1 of Chapter 2), which read as follows : "The inviting Government, in agreement with or on proposal by the Administrative Council may invite non-contracting Governments to send observers to take part in the conference in an advisory capacity."

The Delegate of Czechoslovakia pointed out that the Administrative Council was due to hold a meeting during the present conferences.

The Chairman thought it was questionable whether the Council would have time in a short formal meeting to deal with this question. Should the Council not give a ruling the question might have to be submitted to the Plenipotentiary Conference.

Upon a query by the Delegate of Czechoslovakia as to whether the Radio Conference had any objections, the Delegate of the United Kingdom stated his Delegation could not accept a proposal for the Democratic Republic of Germany to attend in any other capacity than as an observer.

The Delegate of Bulgaria considered that as the conference would be a purely technical one it was essential that the Democratic Republic of Germany be invited, as otherwise it might use any frequency it considered suitable, with resulting harmful interference to all parties concerned.

The Delegate of Greece believed that as the country concerned had no diplomatic relations with many members of the Union it should not be invited except as an observer. Moreover he did not believe that the D.R. of Germany was using the bands in question for broadcasting.

In reply the Delegate of Bielorussia pointed out that there were not always diplomatic relations between all countries actually taking part in the present meeting. His delegation supported the proposal made by the Delegate of Czechoslovakia.



The Delegate of Poland also supported the proposal.

The Delegate of Czechoslovakia pointed out that the D.R. of Germany used the bands in question for the fixed and mobile services, and these services would have to be coordinated with the neighbouring countries.

The Delegate of the Federal Republic of Germany proposed that a similar solution be found as at the Conference in Gotheborg.

It was agreed to postpone discussion of the question pending a ~~decision~~ by the Administrative Council or the Plenipotentiary Conference.

6. Series 11 of Texts submitted by the Drafting Committee (Document No. 714)

Dr. Joachim, Chairman of Committee 5, explained that Sub-Group 5-B-2 had been requested to incorporate extensive amendments into Document No. 593, and that the result of their work had been unanimously approved by Committee 5.

The Chairman explained that Document No. 851 had in annex a letter received from the Delegation of the U.S.S.R., and that other countries had made similar requests, with regard to geographical boundaries, where certain changes were to be made and names of countries were to be inserted in the chart. Mr. Stead had informed him that as it would take practically one month before the final documents would be published, it should be possible during that time to have a new edition of the map prepared, using the same scale, but giving all the most up to date geographical information. It would slightly increase the cost of the final acts.

Mr. Stead, Deputy Secretary of the Conference, added that once this map had been prepared it would be distributed amongst the various holders of the E.A.R.C. Volume 7, which would also reply to the letter annexed to Document No. 851, and he hoped this would be a satisfactory solution to all concerned.

It was agreed that this procedure should be followed.

Dr. Lebel (United States), Chairman of Sub-Group 5-B-2 introduced Document No. 714. He wished to draw attention to five main items.

1. The texts adopted by the E.A.R.C. in 1951 contained two allocation plans which in Appendix 16 bis had now been considerably reduced by removing all historical data and all excessively detailed information.

2. The R band allotment plan had been amended to contain some significant changes, namely, to extend a family of frequencies from the European area into U.S.S.R. territory and from the Middle East area into the U.S.S.R. territory, as now substantial operations were being carried out by the U.S.S.R. over these routes.

3. The Conference had made no amendments in the frequency allocations in the OR bands, but the designation of countries and geographical boundaries must be amended.

4. He would point out that the plan now being examined was already in full operation, and seemed to be giving entire satisfaction.

5. The proposed Appendix 16 bis had come to the Plenary Session without the need for a single vote.

The Chairman congratulated Committee 5 and Sub-Group 5-B-2 and their Chairmen for their excellent work in reaching unanimous agreement. He suggested that any amendments to geographical boundaries or names of countries be handed into the Drafting Committee.

Mr. Gracie, Vice-Chairman of the I.F.R.B., wished to have it made quite clear as to what was meant by the second part of paragraph 5 on page 11-06, with regard to (R) Plan. He wished to have a guidance as to whether in fact the I.F.R.B. should interpret this last sentence to mean that protection with respect to assignment in the (R) plan should be 15 db. It was very important to the I.F.R.B. since this would determine the test given to the assignments in question.

Dr. Lebel, Chairman of Sub-Group 5-B-2 made the following statement :

"It is necessary to have an interpretation of this part of the paragraph put on record. It was the intent of the aeronautical group which wrote and proposed this text that a protection of at least 15 db would be necessary to meet the test required by the formula mentioned at the end of this paragraph."

It was so agreed.

Part I on pages 11-03 to 11-12 was approved without further comment.

Part II on pages 11-13 to 11-41 was approved without comment.

Part III, on pages 11-42 and 11-43 was approved without comment.

Part IV, pages 11-44 to 11-72 :

The Delegate of the Union of Burma made the following statement :

"The E.A.R.C. plans of 1951 for aeronautical mobile services for Region 3 did not contain the requirements of the Union of Burma. We now find that this Conference is considering the adoption of this same plan again without the requirements of the Union of Burma included in it. We are therefore constrained to take up the question of provision of appropriate allocations to Burma at a later date, and we do expect that the I.F.R.B. will do their utmost to help us establish such requirements appropriately covered on a technical basis.

" We request that the assembly take note of the situation in this regard."

The Delegate of Czechoslovakia drew attention to Note 81 on page 11-47, referring to Germany, which was no longer applicable.

Dr. Lebel, Chairman of Sub-Group 5-B-2, agreed that the reference should be amended in accordance with present-day facts, and read from a paper dated April 15, 1959, which was a directive by the United Nations to its staff when preparing its documentation, whereby the term "Eastern Germany" was advocated. He considered this solution should be the most satisfactory to all concerned, and made the following statement in conclusion :

"It was agreed that the use of the designation 'Eastern Germany' in the aeronautical mobile OR plan is not to be construed as implying any endorsement or other judgment by this Conference regarding the legal status of Eastern Germany, its authorities, or the delimitation of its boundaries."

The Delegate of Czechoslovakia agreed that the proposed reference would be acceptable.

It was so agreed.

The Delegate of Turkey made the following statement :

"Our country has not been included in the OR Plan for the bands comprising 2 850 kc/s to 27 500 kc/s, but we are confident that the I.F.R.B., in considering this situation, will take all necessary steps in the event that our country may make a request later for OR frequency assignments."

The Delegate of Israel had the same request to make concerning his country.

The Delegate of Ethiopia stated that in 1952, after the E.A.R.C., the territory of Eritrea was federated with Ethiopia. In the E.A.R.C. Plan Eritrea had not been included. During the present Radio Conference his delegation had approached the Chairman of the Working Group and requested that allocations to Ethiopia be used by Eritrea. Now he noticed that in the plan the words "except for Eritrea" were added in parentheses. This was a technical plan and frequencies had been allocated on a technical basis, and these frequencies must also be used by Eritrea. He would, therefore, request that the words "except for Eritrea" be deleted.

Dr. Lebel believed that this was a most important point, and suggested that the Delegate of Ethiopia consult with the neighbouring countries to make sure that the extension of the territory would not cause them harmful interference.

The Delegate of Ethiopia pointed out that the territory of Eritrea did not extend beyond 100 km, and was often indeed of a range of not more than 50 km.

Mr. Gracie, Vice-Chairman, I.F.R.B., agreed that in view of the small area involved any interference to services in the same channels would really be of negligible proportions.

With this understanding it was agreed to delete the words "except for Eritrea".

Document No. 714 was then approved with the proposed amendments, and the Chairman once more congratulated Dr. Lebell and his group on their excellent work.

The Chairman of the Drafting Committee proposed, in view of the great length of the document (74 pages) that as an exceptional case it be published immediately as a final white document, and not go through the intermediary pink stage, which would save both time and money.

Mr. Stead, Deputy Secretary of the Conference, suggested that under these circumstances Document No. 714 should be considered as having had two readings.

This was agreed.

The Chairman suggested that in future all pink texts issued would be discussed three hours after their distribution. This was agreed.

The meeting rose at 12.45 a.m.

Rapporteurs :

C. Mackenzie  
E. Hamilton  
J. Umberg  
S. Vittese

Deputy Secretary  
of the Conference :

C. Stead

Chairman :

C. J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 898-E  
18 December, 1959

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PLENARY MEETING

A G E N D A

Thirtieth Plenary Meeting

Friday, 18 December, 1959, at 9 p.m.

1. Texts submitted for second reading: Series F (Pink Document No. 882).
2. Texts submitted for second reading: Series G (Pink Document No. 886).
3. Memorandum by the Chairman (Document No. 769).
4. Any further statements for inclusion in the Final Protocol.
5. Approval of the Minutes of the Twenty-Fourth Plenary Meeting (Document No. 891).
6. Miscellaneous.

ADMINISTRATIVE  
RADIO CONFERENCE

Document No. 899-E  
18 December, 1959

GENEVA, 1959

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PLENARY MEETING

FINAL PROTOCOL

FOR JAPAN

The Japanese Delegation declares that it reserves the right of the Japanese Government to take any action it deems necessary to safeguard its interest, should Members or Associate Members in any way fail to comply with the requirements of the Radio Regulations of the Administrative Radio Conference (Geneva, 1959), or should reservation by other countries jeopardize its telecommunication services.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 900-E  
21 December, 1959

LIST OF DOCUMENTS PUBLISHEDBY THE CONFERENCE

Nos. 851 to 900

| No.              | Origin          | Destination      | Title  |
|------------------|-----------------|------------------|--|
| 851              | Presidence      | Plenary Meeting  | Letter from the Delegation of the U.S.S.R.                                   |
| 852<br>CORR.No.1 | Plenary Meeting | Plenary Meeting  | Minutes, 15th Plenary Meeting, 7 November, 1959, 9.00 hrs.                   |
| 853              | Plenary Meeting | Plenary Meeting  | Minutes, 16th Plenary Meeting, 8 December, 1959, 2.30 p.m.                   |
| 854              | Plenary Meeting | Plenary Meeting  | Minutes 17th Plenary Meeting 9 December, 1959, 11 a.m.                       |
| 855              | Committee 3     | Committee 3      | Summary Record 5th Meeting of Committee C/3, 9 December, 1959 3 p.m.         |
| 856              | Committee 8     | Plenary Assembly | Texts for the approval of the Plenary Assembly - Blue, 22nd series           |
| 857              | Plenary Meeting | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series A              |
| 858              | Plenary Meeting | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series B              |
| 859              | Presidence      | Plenary Meeting  | Agenda, 23rd Plenary Meeting, 12 December, 1959, 10 a.m.                     |
| 860              | Secretariat     | Plenary Meeting  | Composition of the new International Frequency Registration Board.           |
| 861              | Committee 8     | Plenary Assembly | Texts for the approval of the Plenary Assembly - Blue, 23rd and last series. |

| No.              | Origin          | Destination      | Title  |
|------------------|-----------------|------------------|--|
| 862              | Committee 4     | Committee 4      | Summary Record, 39th Meeting<br>10 December 1959, 9.30 a.m.                    |
| 863              | Italy           | Plenary Meeting  | Proposal No. 5576. Article 47<br>of the RR and Article 13 of<br>the A.R.R.     |
| 864              | Presidence      | Plenary Meeting  | Agenda, 24th Plenary Meeting<br>13 December 1959, 3 p.m.                       |
| 865              | Committee 3     | Plenary Meeting  | Final Report by Committee C3   |
| 866              | Plenary Meeting | Plenary Assembly | Texts for the approval of the<br>Plenary Assembly - Pink,<br>Series C          |
| 867              | Committee 5     | Committee 5      | Summary Record, 25th Meeting<br>of Committee 5, 10 December<br>1959, 3 p.m.    |
| 867<br>CORR.No.1 |                 |                  |  |
| 867<br>CORR.No.2 |                 |                  |  |
| 868              | Plenary Meeting | Plenary Meeting  | Minutes, 18th Plenary Meeting<br>9 December 1959, 8.30 p.m.                    |
| 869              | Plenary Meeting | Plenary Meeting  | Minutes, 19 Plenary Meeting<br>10 December 1959, 8.45 p.m.                     |
| 869<br>CORR.No.1 |                 |                  |  |
| 870              | Committee 8     | Plenary Assembly | Texts for the approval of the<br>Plenary Assembly - Blue, 22nd<br>Series (bis) |
| 871              | Committee 8     | Plenary Assembly | Texts for the approval of the<br>Plenary Assembly - Blue, 21st<br>Series (bis) |
| 872              | Plenary Meeting | Plenary Meeting  | Agenda, 25th Plenary Meeting<br>15 December 1959, 9 a.m.                       |
| 873              | Presidence      | Plenary Meeting  | Minutes, 20th Plenary Meeting<br>11 December 1959, 9.30 a.m.                   |



| No. | Origin           | Destination      | Title   |
|-----|------------------|------------------|---|
| 874 | Plenary Meeting  | Plenary Meeting  | Minutes, 21st Plenary Meeting, 11 December, 1959, 5 p.m.        |
| 875 | Sub-Committee 7B | Sub-Committee 7B | Summary Record, 31st Meeting, 10 December, 1959                 |
| 876 | Plenary Meeting  | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series D |
| 877 | Committee 5      | Committee 5      | Amendments to the Documents Nos. 699, 703 and 805               |
| 878 | Plenary Meeting  | Plenary Meeting  | Minutes, 22nd Plenary Meeting, 11 December, 1959, 9.00 p.m.     |
| 879 | Plenary Meeting  | Plenary Meeting  | Minutes, 23rd Plenary Meeting, 12 December, 1959, 10.10 a.m.    |
| 880 | Presidence       | Plenary Meeting  | Agenda, 26th Plenary Meeting, 16 December, 1959, 3 p.m.         |
| 881 | Plenary Meeting  | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series E |
| 882 | Plenary Meeting  | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series F |
| 883 |                  |                  | Cancelled   |
| 884 |                  |                  | Cancelled   |
| 885 | Presidence       | Plenary Meeting  | Final Protocol  |
| 886 | Plenary Meeting  | Plenary Assembly | Texts for the approval of the Plenary Assembly - Pink, Series G |
| 887 | Presidence       | Plenary Meeting  | Agenda, 27th Plenary Meeting, 17 December, 1959, 3 p.m.         |
| 888 | Committee 7      | Committee 7      | Summary Record, 28th and last Meeting, 14 December, 1959        |

| No.              | Origin           | Destination      | Title   |
|------------------|------------------|------------------|---|
| 889<br>Rev.      | Israel           | Plenary Meeting  | Final Protocol  |
| 890              | Sub-Committee 7A | Committee 7      | Note by Sub-Committee 7A  |
| 891              | Plenary Meeting  | Plenary Meeting  | Minutes, 24th Plenary Meeting, 13 December, 1959, 3 p.m.  |
| 892              | Committee 4      | Plenary Meeting  | Amendment to Document No. 862   |
| 893              | Presidence       | Plenary Meeting  | Letter from the Chairman of the Plenipotentiary Conference on a reduction of the credits requested for the I.F.R.B. |
| 894              | Committee 8      | Plenary Assembly | Amendments to the Blue documents Nos. 861 and 863   |
| 895              | Sub-Committee 7A | Sub-Committee 7A | Amendment to the Document No. 883   |
| 896              | Presidence       | Plenary Meeting  | Agenda, 29th Plenary Meeting, 18 December, 1959, 11 a.m.  |
| 897              | Plenary Meeting  | Plenary Meeting  | Minutes, 25th Plenary Meeting, 15 December, 1959, 9.20 a.m.   |
| 897<br>CORR.No.1 |                  |                  |   |
| 898              | Presidence       | Plenary Meeting  | Agenda, 30th Plenary Meeting, 18 December, 1959, 9 p.m.   |
| 899              | Japan            | Plenary Meeting  | Final protocol  |
| 900              | Secretariat      |                  | List of documents published by the Conference, Nos. 851 to 900  |

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 901-E  
18 December, 1959

## PLENARY MEETING

### FINAL PROTOCOL

#### FOR THE KINGDOM OF THE NETHERLANDS

The Delegation of the Kingdom of the Netherlands declares that it does not accept the statement of the Delegation of the Republic of Indonesia contained in its formal declaration insofar as this statement disputes the sovereignty of the Government of the Netherlands over the non-self-governing territory of Netherlands New Guinea.

As for the denomination "Netherlands New Guinea" it declares that this denomination is the constitutionally correct one and is formally recognised as such and applied by the Secretariat of the United Nations.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 902-E  
18 December, 1959

PLENARY MEETING

## FINAL PROTOCOL

### FOR THE REPUBLIC OF COLOMBIA :

1. The Republic of Colombia reserves the right to take such action as may be necessary to safeguard the services it operates in accordance with the Radio Regulations, and in particular the Frequency Allocation Table, should its services be affected by the services of other countries which, generally speaking, are operating in derogation from those Regulations.
2. The Republic of Colombia also reserves the right not to conform to the provisions of Article 11a of the Radio Regulations (Geneva, 1959), with regard to high-frequency broadcasting in the band 5 950 - 6 200 kc/s, should the procedure set forth therein be detrimental to Colombian broadcasting services in these bands, operated with a view to covering Colombian territory.



# ADMINISTRATIVE RADIO CONFERENCE

Document No. 903-E  
18 December 1959

GENEVA, 1959

PLENARY MEETING

## MINUTES

OF THE

### TWENTY-SIXTH PLENARY MEETING

Wednesday, 16 December 1959, at 3.15 p.m.

Chairman : Mr. Charles J. Acton  
Vice-Chairman : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)  
Deputy-Secretary  
of the Conference : Mr. Clifford Stead

#### Subjects discussed :

1. Series B of the Tests submitted by the Drafting Committee (Document No. 858)
2. Series A of the Texts submitted by the Drafting Committee (Document No. 857)
3. Final Report of Committee C3 (Document No. 865)
4. Minutes of the 13th Meeting (Document No. 817)
5. Minutes of the 15th Meeting (Document No. 852)
6. Minutes of the 16th Meeting (Document No. 853)
7. Minutes of the 17th Meeting (Document No. 854)
8. Minutes of the 18th Meeting (Document No. 868)
9. Minutes of the 19th Meeting (Document No. 869)
10. Minutes of the 20th Meeting (Document No. 873)
11. Minutes of the 21st Meeting (Document No. 874)



Present :

Members of the Union :

Afghanistan; Albania (People's Republic of); Saudi Arabia (Kingdom of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; The Bielorussian Soviet Socialist Republic; Brazil; Bulgaria (People's Republic of); Canada; Ceylon; China; Colombia (Republic of); Belgian Congo and Territory of Ruanda-Urundi; Korea (Republic of); Cuba; Denmark; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Guinea (Republic of); Hungarian People's Republic; India; Indonesia (Republic of); Iran; Iraq (Republic of); Ireland; Israel (State of); Italy; Japan; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Portuguese Oversea Provinces; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of Southwest Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

Private Operating Agencies :

British Broadcasting Corporation

International Organizations :

European Broadcasting Union

International Chamber of Shipping

International Broadcasting and Television Organization

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1. Series B of the Texts submitted by the Drafting Committee  
(Document No. 858)

ADD. R.R.

The Delegate of the United States of America stated that, as in the past, the signature of the United States to the Radio Regulations would not apply to the Additional Radio Regulations.

Series B of the pink sheets was approved subject to drafting changes proposed by the Delegates of the United Kingdom, Portugal, Israel and the United States, the Chairman of the Drafting Committee and the Chairman.

2. Series A of Texts submitted by the Drafting Committee (Document No. 857)

The Delegate of the United Kingdom proposed that the words "and the fixed and maritime mobile services are secondary services" be added after the words "primary service" in footnotes 111 and 113.

It was so agreed.

The Delegate of the United Kingdom proposed that 113a be amended to read as follows: "In the band 115 - 117.6 kc/s the radionavigation service is the primary service and the fixed and maritime mobile services are secondary services. In France and the F.R. of Germany, the fixed and maritime mobile services are the primary services and the radionavigation service is the secondary service."

It was so agreed.

The Delegate of France recalled his statement at the 13th Plenary Meeting that, in deciding to insert Note 113a, the meeting had indirectly modified the Plan adopted at the E.A.R.C. in 1951 for the Fixed and Mobile Services in that part of the spectrum.

The Delegate of the United States proposed that the following sentence be added at the end of Note 175b on page 8-27: "Conventional (F-2) long-distance fixed service used of the band 29.7-30 Mc/s is not excluded in Region 2."

After a short discussion in which the Chairman of the Drafting Committee, and the Delegates of South Africa, India and the United States took part, the Delegate of Mexico observed that it was difficult to gauge exactly the repercussions of the United States proposal. To make it acceptable, he proposed that the words "provided that such use be co-ordinated between the countries concerned" be added at the end of it.

The United States and Mexican proposals were adopted.

The Delegate of the Union of Soviet Socialist Republics proposed that the word "also" be deleted from Note 209a on page A-43.

The Delegates of Czechoslovakia and Poland supported the Soviet proposal.

The Delegates of Sweden, Greece, and the United States opposed it.

The Delegate of the U.S.S.R. could not understand why the Delegate of the United States had intervened with regard to a subject that did not concern his country. So far as Sweden and Greece were concerned, the objections of their Delegates might be met if there were two footnotes - one for Sweden and Greece in which the word "also" would remain, and one for the other countries mentioned in 209a, in which the word "also" would not appear.

After further discussion, in which the Delegates of Switzerland, Bielorussia, U.S.S.R., Greece, Sweden and Bulgaria took part, the Chairman proposed that Note 209a should be divided in two - it would be for the Drafting Committee to decide whether to insert an additional footnote or an additional sentence. The first note or sentence would refer to Albania, Burgaria, Hungary, Poland, Roumania, Czechoslovakia, U.S.S.R., and, provisionally, Yugoslavia. The second would refer to Sweden and Greece, with the possible addition of Yugoslavia.

It was so agreed.

The Delegate of Greece, drawing attention to Note 2110, observed that it had originally only applied to Bulgaria and U.S.S.R., and that the other five countries mentioned had been added at a subsequent night meeting.

In view of the fact that the allocation to the aeronautical radio-navigation service of the band 645-960 Mc/s in all those countries would create serious difficulties for broadcasting, he asked whether the other five countries, apart from Bulgaria and the U.S.S.R., would be prepared to accept the allocation on a secondary basis.

The Delegates of Czechoslovakia and Poland said that they would be unable to do so, and the Delegate of Bulgaria, representing Albania, said that Albania would be unable to do so.

After further discussion in which the Delegates of the Federal Republic of Germany, Greece, Norway, the U.S.S.R., Turkey, Denmark and Bielorussia took part, the Chairman ruled that, in view of the objections that had been made to the request by Greece, it would be necessary to leave Note 2110 as it stood.

The Delegates of Norway, Turkey, Austria, Sweden and Greece said that, in view of the Chairman's ruling, their Delegations would be obliged to enter reservations with regard to the application of Note 2110.

Series A of the pink Texts, as amended, and subject to drafting changes proposed by the Chairman of the Drafting Committee, and the Delegates of the United Kingdom, Brazil and Italy, was approved.

3. Final Report of Committee C3 (Document No. 865)

The Chairman drew attention to the figure of 2,826,000 Swiss francs given in paragraph 4 of Document No. 865 as the cost for Radio Conference, and proposed that the meeting approve it.

It was so agreed.

The Chairman drew attention to the suggestion by Committee C3 in paragraph 6 that one-quarter of the typesetting costs should be charged to



the Conferences. He proposed that that suggestion be approved so far as the Radio Conference was concerned.

It was so agreed.

The Chairman drew attention to the suggestion made by some members of Committee C3 in paragraph 7 that a roneoed "List of Participants" would be sufficient for future conferences. In his view, the Radio Conference was not competent to take any decision with regard to future conferences, and he therefore proposed that the Secretariat should take the suggestion into consideration when preparing for such conferences.

It was so agreed.

The Chairman drew attention to the estimate of the Secretariat given in paragraph 3 that, if the Radio Conference continued until 21 December, the additional cost would be approximately 100,000 Swiss francs.

The Delegate of the United Kingdom asked if it would be possible for the Secretariat to issue the List of Participants at the beginning of future conferences. It had been two weeks before the list had appeared at the present Conference.

The Deputy-Secretary of the Conference apologized for the delay in issuing the List at the present Conference, but pointed out that two days before it had begun, the Secretariat had received the names of less than one hundred delegates, and it had not been possible therefore to prepare the List until delegates had begun to register. He hoped that in the future Administrations would send in complete lists of their delegations at least two weeks before the start of conferences, which would enable a reasonably complete list to be available to delegates on arrival.

The Final Report of Committee C3 was approved.

4. Minutes of the Thirteenth Meeting (Document No. 817)

Approved, subject to corrections by the Delegates of Switzerland and Czechoslovakia.

5. Minutes of the Fifteenth Meeting (Document No. 852)

Approved, subject to corrections by the Delegates of the United Kingdom, Mexico, India and the Vice-Chairman of the I.F.R.B.

6. Minutes of the Sixteenth Meeting (Document No. 853)

Approved, subject to corrections by the Delegates of the United States, Ethiopia, Mexico and the United Kingdom.

7. Minutes of the Seventeenth Meeting (Document No. 854)

Approved, subject to corrections by the Vice-Chairman of the I.F.R.B. and the Delegate of Mexico.

8. Minutes of the Eighteenth Meeting (Document No. 868)

Approved, subject to corrections by the Delegate of Czechoslovakia.

9. Minutes of the Nineteenth Meeting (Document No. 869)

Approved, subject to corrections by the Delegates of India and Mexico.

10. Minutes of the Twentieth Meeting (Document No. 873)

Approved without comment.

11. Minutes of the Twenty-First Meeting (Document No. 874)

Approved subject to a correction by the Delegate of India.

The Meeting rose at 6.40 p.m.

Rapporteurs:

Deputy-Secretary of the  
Conference:

Chairman:

C. Mackenzie

Clifford Stead

Charles J. Acton

S. Vittèse

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 904-E  
18 December, 1959

## PLENARY MEETING

### MINUTES

of the

#### Twenty-Seventh Plenary Meeting

Thursday, 17 December, 1959 at 2.30 p.m.

Chairman: Mr. Charles J. Acton (Canada)

Vice-Chairmen: Mr. Juan A. Autelli (Argentine Republic)  
Dr. M. B. Sarwate (Republic of India)

Deputy Secretary  
of the Conference: Mr. Clifford Stead

#### Subjects discussed:

1. Postponement of coming into force of Master International Frequency Register.
2. Texts submitted for second reading: Series C (Pink Document No. 866)
3. Approval of the Minutes of the 22nd Plenary Meeting (Document No. 878)
4. Approval of the Minutes of the 23rd Plenary Meeting (Document No. 879)



The following Delegations were present:

Afghanistan; Saudi Arabia; Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussia (S.S.R.); Canada; China; Belgian Congo; Korea (Republic of); Spain; United States of America; Ethiopia; Finland; France; Greece; Hungarian People's Republic; India; Iran; Iraq; Ireland; Iceland; Israel; Italy; Japan; Morocco; Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Philippines; (Republic of the); People's Republic of Poland; Portugal; Portuguese Oversea Provinces; Federal Republic of Germany; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; Sudan (Republic of); Sweden; Confederation of Switzerland; Czechoslovakia; United States Territories; The Overseas Territories for the international relation of which the Government of the United Kingdom and Northern Ireland are responsible; Tunisia; Union of South Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

International Organizations:

E.B.U., I.B.T.O., C.I.N.

1. Postponement of coming into force of Master International Frequency Register

Mr. Gracie, Vice-Chairman, I.F.R.B., reminded the meeting that some of the tasks the Radio Conference had instructed the I.F.R.B., to perform would entail appreciable extra costs, both in extra staff and new machines. One of these tasks was the establishment of the Master International Frequency Register, which would necessitate technical examinations, research for additional data, and which would call for the re-punching of over half a million cards. Credits would have to be found for the purchase of new and larger machines for the latter purpose. The Plenipotentiary Conference had been reviewing these envisaged costs at the same time as others resulting from decisions of that conference; these additional costs would increase the ceiling of the consolidated budget and therefore the unit costs payable by Administrations.

It had become quite clear that for many countries the situation would be very difficult in 1960, as they had already submitted their financial estimates for that year. The I.F.R.B. had therefore agreed to reduce their estimate costs for 1960 by approximately 15 - 20%. It was pointed out to the Plenipotentiary Conference that in making these reductions the I.F.R.B. considered it necessary that the Radio Conference be informed that certain provisions of the new Radio Regulations could not be brought

into force by 1 January 1961. This concerned items related to Article 47, and in Resolution No. 1, relating to the establishment of the new Master International Frequency Register. As a result of the Plenipotentiary Conference's decision the I.F.R.B. now found it necessary to propose that Resolution No. 1 and the corresponding provisions of Article 47 be amended to read: "1st May 1961" instead of "1st January 1961". The I.F.R.B. did not consider it would be possible to do the work prior to the proposed dates.

Mr. Petit, I.F.R.B. bore out this statement, and gave more precise details of specific references in the texts where dates should be amended. The Chairman authorized him to examine the matter with the Chairman of the Drafting Committee, and make the changes where necessary.

The Delegate of Czechoslovakia, supported by the Delegate of Italy could not agree to accepting the proposal without prior study of some written text, which it had not yet proved possible to produce, due to lack of time.

The Chairman requested the Secretariat, together with the I.F.R.B. to prepare a document to be discussed at the evening meeting, and it was agreed to postpone a decision on the subject until that meeting.

2. Texts submitted for second reading: Series C (Pink Document No. 866)

Article 1: approved with minor amendment on page 10, proposed by the Delegate of Israel, and amendments concerning the Spanish text only on page 06, pointed out by the Delegate of the Argentine.

Article 2: approved without comment.

Article 8: approved without comment.

Article 9: The Delegate of the United States proposed that on pages 25 and 37 the figure 535 - 1 605 kc/s should be changed to 525. Following an explanation by Mr. Dellamulla, I.F.R.B. supported by the Delegate of Uruguay, that technical examinations were carried out in the 10 kc/s between 525 and 535 kc/s, and a reference by the Chairman to page A-09, which was part of the Frequency Allocation Table for Region 2, giving details of the services in the 525 - 535 kc/s band, the Delegate of the United States agreed to withdraw his proposal.

The Chairman of the Drafting Committee proposed some minor amendments on pages C-21, C-31 (English text only), C-33 and C-46 where the Article left blank should read: "Article 27". Those changes were agreed, and Article 9 was approved with those amendments.

Articles 10, 11 and 22 were approved without comment.

Article 23: The Delegate of the United States made the following statement with regard to page C-62:

"The United States Delegation approves and supports paragraph No. 23.56, calling attention to the fact that this paragraph is an exception to Nos. 23.52 through 23.56. So considered, it must be construed as permitting an Administration to fix the conditions in the matters covered therein, provided it makes reasonable efforts to see that the operators involved are adequately informed of radiotelephone operation and procedure - particularly as concerns distress, urgency and safety. It is on this basis that we concur in No. 23.56."

Page C-54 - minor amendment to Spanish text only.

Page C-61 - minor amendment to English text only.

Page C-63, Section IV: The Delegate of the United Kingdom proposed that the words "first-class operator" which were ambiguous, be changed to: "operator holding a first-class radiotelegraph certificate." It was so agreed, the relevant changes to be made to all texts referring to "first-class" or "second class" operators.

Article 23 was approved with these amendments.

Article 24 was approved with an amendment to the footnote, proposed by the Delegate of the United Kingdom.

Articles 25, 26 and 36 were approved with no comments.

Document No. 866 (Series C of the pink texts) was therefore adopted, with the agreed amendments, and the Chairman congratulated the Chairman of the Drafting Committee that so few changes were necessary.

3. Approval of the Minutes of the 22nd Plenary Meeting (Document No. 878)

The Minutes were approved with the amendment on page 4 to "the Delegate of the United States", instead of "the Delegate of New Zealand", and the addition of the words: "of Article 11" to the statement of the Delegate of Israel on page 6.

4. Approval of the Minutes of the 23rd Plenary Meeting (Document No. 879)

The Minutes were approved with the addition of the words "and Mexico" in the first paragraph of page 5.

The Meeting rose at 3.42 p.m.

Rapporteur:

J. Umberg

Deputy Secretary  
of the Conference:

C. Stead

Chairman:

C.J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 905-E  
19 December, 1959

## PLENARY MEETING

### THIRD REPORT

#### COMMITTEE 2 (CREDENTIALS COMMITTEE)

1. Committee 2 held its sixth meeting on 19 December, 1959.
2. Having examined credentials which had been submitted since the presentation of its Second Report (Document No. 466), the Committee reached the following conclusions:

i) In addition to those listed in para. 4 (1) of Document No. 261 and para. 2 of Document No. 466, the delegations of the following countries are duly accredited to exercise their right to vote and are furnished with the necessary powers for the signing of the Final Acts:

Afghanistan  
Colombia (Republic of)  
Spain  
Jordan (Hashemite Kingdom of)  
Lebanon  
Libya (United Kingdom of)  
Mexico  
Nepal  
Turkey.

ii) The delegation of the following country is duly accredited to exercise its right to vote but is not furnished with the necessary powers for the signing of the Final Acts:

El Salvador (Republic of).

3. The Committee therefore draws attention to the fact that the delegations of the following countries are not furnished with the necessary powers for the signing of the Final Acts:

Bolivia  
Costa Rica  
El Salvador (Republic of)  
Guatemala  
Territories of the United States of America.

The delegates of these countries were advised, in due time, of the situation.

F. Nicotera,  
Chairman.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 906-E(Rev.1)  
20 December, 1959

## PLENARY MEETING

### A G E N D A

#### Thirty-first Plenary Meeting

Monday, 21 December, 1959, at 2.30 p.m.

1. Third Report of Committee 2 (Document No. 905)
2. Peru - Final Protocol (Document No. 907)
3. Approval of the Minutes of the Twenty-fifth Plenary Meeting  
(Document No. 897)
4. Approval of the Minutes of the Twenty-sixth Plenary Meeting  
(Document No. 903)
5. Approval of the Minutes of the Twenty-seventh Plenary Meeting  
(Document No. 904)
6. Miscellaneous.





# ADMINISTRATIVE RADIO CONFERENCE

Document No. 906-E  
19 December, 1959

GENEVA, 1959

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PLENARY MEETING

## A G E N D A

### Thirty-first and Last Plenary Meeting

Monday, 21 December, 1959, at 2.30 p.m.

1. Third Report of Committee 2. (Document No. 905)
2. Approval of the Minutes of the Twenty-fifth Plenary Meeting  
(Document No. 897)
3. Approval of the Minutes of the Twenty-sixth Plenary Meeting  
(Document No. 903)
4. Approval of the Minutes of the Twenty-seventh Plenary Meeting  
(Document No. 904)
5. Miscellaneous.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document 907-E  
19 December, 1959

## PLENARY MEETING

### FINAL PROTOCOL

#### FOR PERU

Peru reserves the right to take all necessary action to safeguard its interests, should a Member or Associate Member fail to abide by the Radio Regulations of the Administrative Radio Conference (Geneva, 1959), or should reservations made by other countries jeopardize Peruvian telecommunication services.



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 908-E  
19 December 1959

## PLENARY MEETING

### MINUTES

of the

### TWENTY-EIGHTH PLENARY MEETING

Thursday, 17 December, 1959, at 9.45 p.m.

|  |   |
|--|---|
| <u>Chairman:</u>                               | Mr. Charles J. Acton (Canada)   |
| <u>Vice-Chairmen:</u>                          | Mr. Juan A. Autelli (Argentine Republic)<br>Dr. M. B. Sarwate (Republic of India) |
| <u>Deputy Secretary<br/>of the Conference:</u> | Mr. Clifford Stead  |

### Subjects discussed:

1. Document No. 893 (a letter from the Chairman of the Plenipotentiary Conference)
2. Amendments to Blue Documents No. 861 proposed by the Drafting Committee (Document No. 894)
3. D Series, Pink Sheets (Document No. 876)



The following countries were represented :

The Argentine Republic; Australia (Commonwealth of); Austria; Belgium; the Bielorussian Soviet Socialist Republic; Canada; the Republic of China; Vatican City; Colombia; the Belgian Congo, the Republic of Korea; Denmark; Spain; the United States of America; Ethiopia; Finland; France; Greece; the Republic of India; Iran; Ireland; Iceland; Israel; Italy; Japan; Morocco; Mexico; Norway; New Zealand; Pakistan; the Netherlands (Kingdom of); Peru; the Philippines (Republic of); the People's Republic of Poland; Portugal; Portuguese Overseas Provinces; Federal Republic of Germany; the Ukrainian Soviet Socialist Republic; the Roumanian People's Republic; the United Kingdom of Great Britain and Northern Ireland; Sweden; Switzerland; the Czechoslovak Republic; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland is responsible; Tunisia; Union of South Africa; the Union of Soviet Socialist Republics; Uruguay (Oriental Republic of).

International Organizations:

European Broadcasting Union; International Chamber of Shipping; International Broadcasting and Television Organization.

1. Document No. 893 (a letter from the Chairman of the Plenipotentiary Conference)

The Chairman read a letter received from the Chairman of the Plenipotentiary Conference.

The Conference took note of Document No. 893.

2. Amendments to Blue Documents No. 861 proposed by the Drafting Committee (Document No. 894)

Page 2 - Initial entries

The Delegate of Austria pointed out that in the English texts the date had erroneously been given as 13 April, 1961, instead of 30 April, 1961.

A number of minor corrections were made in this document, particularly regarding the dates mentioned therein.

With reference to the proposal that the effective date of the Master International Frequency Register should be **1 May, 1961**, the Delegate of Italy stated that the delay proposed in Document No. 894 was both unjustified and unacceptable. He pointed out that the I.F.R.B.'s budget of approximately 2,600,000 Swiss Francs plus an additional 945,000 francs had been reduced by the Plenipotentiary Conference by an amount of 145,000 francs or roughly four per cent and therefore his Delegation did not feel that this reduction of four per cent justified a delay of four months in the execution of the I.F.R.B.'s programme.

The Vice-Chairman of the International Frequency Registration Board thought that the Delegate of Italy had missed an important factor in the consideration of this problem. He pointed out that before the Master International Frequency Register could be made effective ~~thnc~~ the Board had to make a retrospective study of some 21,000 existing assignments plus about 11,000 new ones and re-punch half a million cards. In addition, new and larger machines, which were costly to rent, would be needed. To do all this in the course of 1960 would, he pointed out, imply that additional temporary staff would have to be engaged. He added that this work was additional to that which the I.F.R.B. had heretofore been carrying out and also additional to new tasks which would have to be performed prior to the introduction of the new Radio Regulations. For these reasons he could not accept the statement, but thought the work could be done in 1960 by a re-organisation of the Board's existing resources.

The Delegate of Portugal regretted that the Delegations of a given country to the two Conferences - Plenipotentiary and Radio - had not sufficiently co-ordinated their points of view and this lack of agreement among these delegations had resulted in the situation which had now arisen.

The members of his Delegation were perhaps not as prescient as other Delegates but they always took care to study problems under their different aspects and, in the concrete case under consideration, they took into consideration the financial implications of the new duties conferred upon the I.F.R.B.

In order to be consistent his Delegation regretted, once again, the situation created by delegations which want, or seem to want, that the work of the I.F.R.B. should be carried out while, at the same time, expect that such work should be executed without additional expenses.

The Delegate of the U.S.S.R. said that the statement of the Delegate of Italy was important in its contents and that he fully supported it. The Vice-Chairman of the I.F.R.B. had explained that a considerable amount of technical examinations would have to be undertaken and he

wondered what the I.F.R.B. had been doing during the past seven years since it now seemed necessary to do that work all over again. Turning to another section of the document under discussion, he wished to know why the information concerning the range in M/cs was required.

The Representative of the International Frequency Registration Board pointed out that this question had been answered many times and in short, that the information required enabled the Board to make a better adjustment.

The Delegate of the U.S.S.R. stated that he was quite satisfied with the answer given by the Representative of the I.F.R.B. He added that he was of the opinion that the provision in column 11, Annex I to the Radio Regulations to supply the date in M/cs order amounted to some kind of instruction to the I.F.R.B. not to provide the necessary protection for the new frequency assignments of the fixed services.

After some further discussion the suggestions of the Drafting Committee were accepted.

Document No. 894 was accepted.

3. D. Series Pink Sheets (Document No. 876)

The Chairman of the Drafting Committee introduced the Document and explained the reasons for the new presentation of Chapter VII.

Several minor changes and corrections were suggested by various Delegations and the Chairman of the Drafting Committee was asked to deal with them directly in view of the little time at the disposal of the Conference.

The meeting rose at 11.50 p.m.

G. Muzlera Mooney

Clifford J. Stead

Charles J. Acton

Rapporteur

Deputy Secretary of the  
Conference

Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 909-E  
19 December, 1959

PLENARY MEETING

MINUTES

of the

TWENTY-NINTH PLENARY MEETING

Friday, 18 December, 1959, at 11.45 a.m.

Chairman : Mr. Charles J. Acton (Canada)  
Vice-Chairman : Mr. Juan A. Autelli (Argentina)  
Secretary of the Conference : Mr. Clifford Stead

Subjects discussed :

1. Series E (Pink Document No. 881), second reading
2. Final Protocol (Documents Nos. 885 and 889 revised)
3. Any other business



Delegations from the following countries attended :

Afghanistan; Argentine Republic; Australia; Austria; Belgium; Bielorussian Soviet Socialist Republic; Brazil; Canada; Ceylon; Colombia; Belgian Congo and Territory of Ruanda-Urundi; Republic of Korea; Cuba; Czechoslovakia; Republic of China; Denmark; Spain; United States; United States Territories; Ethiopia; Finland; France; Ghana; Greece; Guinea; Hungarian People's Republic; India; Republic of Indonesia; Iran; Ireland; Iceland; Israel; Italy; Japan; Jordan; Morocco; Mexico; Norway; New Zealand; Netherlands; Pakistan; Paraguay; Peru; People's Republic of Poland; Portugal; Portuguese Overseas Provinces; United Kingdom of Great Britain and Northern Ireland; Federal Republic of Germany; Ukrainian Soviet Socialist Republic; Sweden; Switzerland; Overseas Territories for the International Relations of which Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of Soviet Socialist Republics; Union of South Africa and Territory of South-West Africa.

International Organizations:

European Broadcasting Union;  
International Chamber of Shipping;  
International Broadcasting and Television Organization.

The Chairman called the Meeting to order at 11.45 a.m.

1. Series E (Pink Document No. 881), second reading :

The Chairman recalled that at the night meeting page 1 had been adopted, with the change proposed by the Delegate of India in the English text, namely, replacement of "provided" by "prescribed" in the last line but one. Pages 4 to 6 of Appendix 12 were then discussed.

The Delegate of Mexico asked for "O" in the Spanish text to be replaced by "W", in the column "western limit".

The Delegate of Argentina supported. It was so decided.

The Delegate of Colombia observed that on page 5 of the French, in the column showing regions, the Central Pacific was mentioned, while in Spanish and English there appeared "central Indian Ocean".

It was agreed to bring the French into line with the Spanish and English.

Thus amended, Annex 12 was adopted

As regards Appendix 13 (pages 7 to 34), the Delegate of Czechoslovakia pointed to a difference between the reply to the abbreviation "QSA", on page 10, and the column showing signal strengths in the Sinpo and Sinpfemo codes, on pages 34 and 35 (Annex 14), and proposed that page 10 should be brought into line with the others.



There was a short debate, in which the Delegates of the United Kingdom of Great Britain and Northern Ireland, Mexico, Greece, the Union of South Africa and the Federal Republic of Germany spoke, and it was eventually decided to leave the texts as shown in the pink sheets, because they were of separate origin and unrelated.

Appendix 13 was adopted without discussion.

Referring to Appendix 14 (pages 34 to 36), the Delegate of Czechoslovakia observed that the I.B.T.O used the Sinpo and Sinpfemo codes to check the standard of broadcasting signals. Hence he proposed that the title be changed to read: "Codes which fixed services can use".

The Chairman of the Drafting Committee felt it was simpler to put just "Sinpo and Sinpfemo Codes".

This proposal was supported by the Delegate of Switzerland and it was so decided. Appendix 14 was approved without more ado.

Appendix 15 (pages 37 to 39): The Chairman of the Drafting Committee remembers that when the blue sheets were discussed, it had been proposed to include a note at the bottom of page 38 (Section A) to explain how it was made up and to clarify its various elements, but then it had been thought that it would be better to include the explanations in a cover page, page 37.

Appendix 15 was adopted with a change in the Spanish text, replacing 16,538 by 16.530 as the limit of band 16, as in the English.

The Delegate of Argentina observed that the title of Appendix 17, in Spanish, was "Senales radiotelefonicas bilaterales", and proposed that "bilateral" be replaced by "duplex", as defined in the appropriate table.

It was so decided.

The Delegate of the Federal Republic of Germany proposed that in the English title of the same Appendix 17 "between" be included between the figures.

It was so decided, and Appendix 17 was adopted.

Appendix 18 was also adopted, after some explanations by the Chairman of the Drafting Committee about the characters which would be used to distinguish the numbers in the final edition.

Appendices 19, 20, 21, 22 and 23 were adopted without discussion.

Appendix 24 : The Chairman of the Drafting Committee said that a delegation had pointed out that the chart of the regions was not exactly the same as the one in the Atlantic City Radio Regulations, original edition.

The Delegate of the Union of Soviet Socialist Republics said it was his Delegation which had pointed that out. In the chart on page 60, a part of the Union of Soviet Socialist Republics was shown in Region 3, which was not the case in the Atlantic City chart. In the blue documents the chart had not been published and hence the fact had escaped his Delegation's attention. The chart should be corrected so as to show the whole of the Soviet Union in Region 1.

The Delegate of Mexico wanted No. 252 c) of the Regulations to show that the tropical zone could be extended in Region 2 up to parallel 33. That had been the case in the Atlantic City Regulations. He would ask for the present chart to be amended.

The Delegate of Colombia said that the Atlantic City chart was wrong too, as his Delegation had repeatedly pointed out. The General Secretariat should correct the chart.

The Delegate of the United States said that No. 252 c) of the Atlantic City Regulations said that the tropical zone could be extended in Region 2 up to 33° north by agreement between the countries concerned in that Region. Hitherto there had been no such agreements.

The Delegate of Mexico deplored the fact that he had to take up so much of the Conference's time. But he just had to answer the previous speaker. It would be remembered that when the matter had been dealt with, he had asked for elimination of the words about the need for special agreements between the countries concerned, in No. 252, pointing out that if his proposal was not adopted (and it had not been adopted), he would make a reservation. He had not made such a reservation because the United States Delegation had assured him that agreements of that kind would be favourably received, and it now seemed to be insinuated that if such agreements existed they would not be implemented. That would mean that the tropical broadcasting area in Region 2 would not stretch up to 33° north. If that were so, then, despite the fact that the time-limit for reservations was past, he would have no choice but to make the reservation he had already announced.

The Chairman proposed that the Delegates of the Union of Soviet Socialist Republics, the United States and Mexico, with Mr. Stead, should ensure that the chart, when published, should be perfectly correct.

It was so decided; Appendix 24 was adopted.

In connection with Appendix 25, the Delegate of Iran made various comments. On page 62, in the "country-" column, appeared "Southern Asia", in brackets. When the Members of the Council and those of the I.F.R.B. were elected, the Union of Soviet Socialist Republics had classified itself in Northern Asia, and hence the document should say "Southern Part of the U.S.S.R. in Asia". That change would have to be made in other places too.

On page 69 "Persian Gulf" was included in the "country" column. That was an area and not a country, and it included territories belonging to several countries. He would propose that the title be changed to "zone" instead of "country", or that a note be added to "Persian Gulf", to that effect. Otherwise he would have to reserve his country's right to certain territories and islands in the Persian Gulf.

The Delegate of Norway said that on page 70, in connection with 8 760.8 kc/s, a note 2) had been included as requested at an earlier meeting, but he understood it would have to be supplemented by the words "for use in".

The Chairman of the Drafting Committee said that in the Soviet Union there were various zones shown in Column 2 and moreover they were shown in brackets in Column 4. But if further specification was needed, he had no objection.

The Delegate of Norway said that in Column 2 the area was shown in which the transmission took place, while the restriction in Column 4 referred to reception too. "Southern Asia" should be struck out in Column 4.

The Delegate of the Union of Soviet Socialist Republics saw no problem, but since his country was an interested party, it should have a say in the matter. The Chairman of the Drafting Committee had put the problem very aptly. The text could be left as it was, although he was not against the deletion in Column 4.

The Delegate of Iran called for the deletion of "Southern Asia" in Column 4.

Eventually it was decided to leave the text as it was.

In connection with what the Delegate of Iran had said about the "Persian Gulf", it was proposed by the Chairman of the Drafting Committee (supported by the Delegate of Spain) that the heading of the column should read: "country or zone".

The Chairman of the Drafting Committee said that on page 73, in connection with 8 792.8 kc/s, the words "Artic Ocean" should be included in Note 2 of Column 4.

It was thus decided and Appendix 25 was adopted.

Appendix A, page 92: Mr. F. Dellamula ( a member of the International Frequency Registration Board) said that in the Spanish text "Members" sometimes appeared, sometimes "Associate Members". "Members and Associate Members" should be substituted.

Thus amended, Appendix A was adopted.

The Chairman said that Document No. 881, Series E, was thus adopted.

2. Final Protocol (Documents Nos. 885 and 889 revised)

The Chairman said that a similar procedure to that adopted in Buenos Aires should be adopted.

The Deputy Secretary of the Conference recalled that after the Buenos Aires Protocol a text had been included in which the signatories declared that they had acquainted themselves with the contents of the Protocol. The same should be done again. Hence every delegation would sign in three places, in the Radio Regulations, in the Additional Radio Regulations, and in the Final Protocol.

It was so decided.

The Delegate of the Netherlands referred to page 15 of Document No. 885. He could not accept the statement by the Republic of Indonesia appearing therein, since the denomination "Netherlands New Guinea" or "Dutch New Guinea" in the documents of the Union was correct, and was used by the Secretariat of the United Nations.

The Delegate of Colombia observed that because of some of the statements appearing in Document No. 885, his Delegation would have to make certain reservations, which he would do immediately after the meeting.

The Delegate of Indonesia, referring to what the Delegate of the Netherlands had said, recalled that any Member of the Union was entitled to make statements. There was no point in discussing them.

The Delegate of China had some trifling amendments which he would bring to the notice of the Secretariat.

The Delegate of Ghana asked that Guinea be added to the reservation on page 13.

The Delegate of Austria said that in the joint statement by Austria, Sweden, and the Federal Republic of Germany, on page 28, on the last line but one in the Spanish and French texts, appeared the words "broadcasting services", which should read "radio services".

The Delegate of Indonesia asked that his country be included in the reservation made by Ceylon on page 6.

The Delegate of Czechoslovakia said that the English version of the statement on pages 32 and 33 contained a mistake towards the end. The English said "many others", while the Spanish, which was of course correct, said "y varios mas" (several others). Again, towards the end, the numbers of the articles referring to the previous text should be appropriately amended. Perhaps the Chairman of the Drafting Committee would take note.

The Delegate of India pointed to a little typing slip in the English text on page 14.

The Delegate of Israel would hand in a list of similar slips.

The Delegate of the Federal Republic of Germany said that at the end of page 30, the services using the bands referred to in the last paragraph should be shown.

The Delegate of the Union of Soviet Socialist Republics said that had been omitted by mistake in Spanish and English, while in the original Russian and in French it had been specified that the communications were of the forward-scatter type; he asked for an appropriate correction.

The Delegate of Japan:

"Our Delegation has much concern about the statement made by the Korean Delegation from the viewpoint of geographical proximity of both countries.

" So the Delegation of Japan is obliged to declare on behalf of the Japanese Administration that in such a case we must resort to the new paragraph of Article 47 to the effect that: 'should an Administration make reservations about the application of one or more provisions of these Regulations, no other Administration shall be obliged to observe that provision or those provision in its relations with that particular Administration.'

" And at the same time the Delegation of Japan reserves the right to make a counter-statement to the Korean statement at a later stage in accordance with the instructions from our Administration which my Delegation is now asking for.

" In that case my Delegation hands over our statement to the secretary to be included in the final protocol."

The Delegate of Turkey said that he would hand in a list of little errors. He was worried about the Soviet reservation, and would make a suitable counter-reservation in due course.

The Delegate of Mexico observed that on page 19 of the English, towards the end of the paragraph preceding the reservation, the words "proved successful" appeared. They should be "proved unsuccessful".

The Delegate of Ceylon said that his reservation on page 6 should be changed, the word "itself" being replaced by "Government of Ceylon". In the second part of the reservation, "Delegation of Ceylon" should read "Government of Ceylon".

The Deputy Secretary of the Conference said that as the Indonesian Delegation had associated itself with the reservation as well, Indonesia would have to be included in the corrections requested.

The Delegate of Colombia referred to the last paragraph of the Soviet reservation, asking for some explanation about the lower band limit of the bands shown in the last paragraph on page 31.

The Delegate of the Union of Soviet Socialist Republics said that the figures were correct. His Delegation had asked for extension of the tropical broadcasting zone up to 43° North. That request had not been acceded to, so that it had had to make a reservation about the band 3 950 to 5 950 kc/s, in which tropical broadcasting was conducted.

The Delegate of Ethiopia did not believe in reservations. The only one of any value was on page 13, signed by Ghana and Guinea. Any Members were entitled to make reservations to safeguard their interests when threatened by the attitudes of other Administrations or agencies. He did not want to make reservations but he did want what he had said to be recorded in the minutes.

The Delegate of Italy, referring to the reservation on page 13 to which the Delegate of Ethiopia had alluded, said that a clause had been included in Article 47 to cover such cases.

The Chairman reminded delegates how important it was that no time should be lost in handing in any amendments they might wish to make in Documents Nos. 885 and 889, as well as the further reservations announced, because the time limit was up and there was immense pressure on the printers. Hence all further statements would have to be handed in that same evening for publication as Conference documents, so that all delegations might acquaint themselves therewith before they were included in the Final Acts. In that manner they could be considered at the night meeting.

The meeting rose at 1.15 p.m.

Rapporteur      Deputy Secretary of the Conference

Chairman

F. Moreno

Clifford Stead

Charles J. Acton

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 910-E  
20 December, 1959

## PLENARY MEETING

### MINUTES

of the

### THIRTIETH PLENARY MEETING

Friday, 18 December, 1959, at 9 p.m.

Chairman : Mr. Charles J. Acton (Canada)  
Vice Chairman : Mr. Juan A. Autelli (Argentine Republic)  
Dr. M.B. Sarwate (Republic of India)  
Deputy Secretary of  
the Conference : Mr. Clifford Stead

### Subjects discussed :

1. Texts submitted for second reading : Series F (Pink Document No. 882)
2. Announcement by Mr. Gracie, Vice-Chairman, I.F.R.B., on decisions of Plenipotentiary Conference of interest to Radio Conference.
3. Texts submitted for second reading : Series G (Pink Document No. 886)
4. Memorandum by the Chairman (Document No. 769).
5. Any further statements for inclusion in the Final Protocol (Documents 899, 901 and 902)
6. Approval of the Minutes of the Twenty-Fourth Plenary Meeting.
7. Future programme of work.





The following delegations were present :

Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Brazil; Canada; China; Colombia (Republic of); Belgian Congo and Territory of Ruanda Urundi; Korea (Republic of); Denmark; Spain; United States of America; Ethiopia; Finland; France; Greece; India (Republic of); Ireland; Iceland; Israel (State of); Italy; Japan; Morocco (Kingdom of); Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of); Peru; Philippines (Republic of the); Poland (P.R. of); Portugal; Portuguese Oversea Provinces; Federal Republic of Germany; F.P.R. of Yugoslavia; Ukrainian S.S.R.; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Tunisia; Turkey; Union of South Africa and Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic).

International Organizations :

I.B.T.O.; C.I.N.

1. Texts submitted for second reading : Series F (Pink Document No. 882)

Articles 12 and 13 were approved without comment.

Article 14 was approved, subject to an amendment to the last paragraph (14-11), on a proposal of the Delegate of the United Kingdom, to read : "29-62, 29-63, 33-85, 33-86, 33-87".

Articles 15 and 16 were approved without comment.

Resolution No. 1 : On a proposal by the Chairman it was agreed to express the dates throughout in figures.

Following a query by the Delegate of Mexico, as to the need for the asterisk at the top of the table on page 17, a discussion ensued during which the Chairman of the I.F.R.B. and the Chairman of the Drafting Committee offered explanations of the footnotes. It was decided to delete the asterisk.

Resolution No. 1 was approved with those amendments.

Resolution No. 2 : The Chairman of the Drafting Committee pointed out that the date mentioned in the title should be changed to "30 April 1961". With that amendment, Resolution No. 2 was approved.

Resolution No. 3 : The Chairman suggested it might be useful to have a footnote referring to Recommendation No. 36 (Series G) as a cross reference. It was so agreed and Resolution No. 3 was approved with that amendment.

Resolutions Nos. 4 to 15 inclusive were approved without comment.

Recommendations Nos. 1 to 5 inclusive were approved without comment.

Recommendation No. 6 : On a proposal by the Delegate of the United Kingdom, the title was amended to read : "to the C.C.I.R. relating to Studies of the Technical Characteristics of Equipment." and Recommendation No. 6 was approved with that amendment.

Recommendations Nos. 7 to 16 inclusive were approved without comment, as was Annex 1 to Recommendation 16.

Annex 2: On a proposal of the Delegate of the United Kingdom, it was agreed to add the words "or other identification" after "Call-sign" in Column 2 of the table on page 69, and Annex 2 was approved with that amendment.

Annex 3 was approved without comment.

Recommendation No. 17 was approved without comment.

Subject to minor drafting changes Document No. 882 was adopted.

2. Announcement by Mr. Gracie, Vice-Chairman, I.F.R.B., on decisions of Plenipotentiary Conference of interest to Radio Conference.

Mr. Gracie, Vice-Chairman of I.F.R.B., announced that the Plenipotentiary Conference had recognized the need for and approved a budget ceiling which would provide for implementation of Resolution No. 3, involving the Panel of Experts, and had also allotted credits of 100,000 Swiss francs for each of the years 1961 and 1962 to cover meetings of that Panel.

Similarly, with regard to Resolution No. 13, relating to the preparation of revised allotment plans for the aeronautical mobile service, the Plenipotentiary Conference had approved a sum in the 1963 budget for a conference having a duration of four months, with a preparatory committee prior to that conference having a duration of one month. The actual dates for the conference would be set by the Administrative Council in light of any information received from Administrations, or organizations such as I.C.A.O.

The Plenipotentiary Conference had also noted that a special conference would be held in 1960, but since the costs would be payable only by those countries attending the conference, they had not been included in the ceiling of the consolidated budget.

3. Texts submitted for second reading : Series G (Pink Document No. 886)

Article 3, page G-02, paragraph 3-05 : The Delegate of Denmark considered that there was a contradiction existing in the wording of this paragraph in view of paragraphs 5-15 and 5-16 on page 7, and proposed that the words "(see however 5-15 and 5-16)" be included in the text.

The Delegate of Italy fully agreed and believed the same point applied to paragraph 3-02, where he suggested the words "except as otherwise specifically provided in these Regulations".

The Delegates of the United States and Norway supported the Danish proposal.

The Delegates of the United Kingdom and Czechoslovakia could not support the Italian proposal as they considered that nowhere in the Regulations was it stated that harmful interference could be caused.

A long discussion ensued, and the Chairman requested that a small group consult with the Chairman of the Drafting Committee during the coffee-break to reword paragraph 3-05. The result of the work of this group was to amend the paragraph as follows : "Where, in adjacent regions or sub-regions the band of frequencies is allocated to different services of the same category (see Section II of Article 5), the basic principle is the equality of right to operate. (Second sentence remains unchanged).

The revised paragraph was adopted.

The Delegate of Italy made the following statement :

"The Italian Delegation considers that number 3-02 of the new Radio Regulations, on page G-01 of Document No. 886, is in contradiction with certain parts of the Regulations, and in particular with number 5-15, on page G-07 and 9-123 on page C-41 of Document No. 866. The above-mentioned numbers envisage cases in which stations would have no right to international protection.

" The Italian Delegation does not insist on an amendment to the text of number 3-02 so as not to hold up the work of the Conference, but would request that in the Minutes of the present meeting it be indicated that the terms of 3-02 may only be applied in the case of non-confliction with the Radio Regulations of Geneva."

Article 4 was adopted without comment.

Article 5 : In reply to a query by the Delegate of the Netherlands, the Chairman of the Drafting Committee explained that the first page of the Table would bear the number 532.

Article 5 was approved, with some drafting changes, proposed by Mr. Gracie, on pages G-07 and G-08.

Article 6 : The Delegate of Ethiopia pointed out a discrepancy in the positions given in paragraphs 7-39 and 7-40 and it was agreed that the figures should be "40°N and 31°N".

On a proposal by the Delegate of the United Kingdom, further amended by Mr. Gracie, following an explanation by the Delegate of Canada, it was decided to reword paragraph 7-24 on page G-16 as follows :

"In Regions 2 and 3 ..... for common use in certain services. In Region 3 this frequency is protected by a guard-band between 2 634 and 2 642 kc/s."

Article 6 was approved, as amended.

Articles 17 and 18 were approved without comment.

Article 19 was approved with the addition of the word "complete" before "call-sign" in paragraph 19-35 on page G-23, to bring it into line with an I.C.A.O. Recommendation for survival craft, which amendment was proposed by the Delegate of the Argentine, and a drafting change in paragraph 19-52 on page G-35, proposed by the Delegate of the United Kingdom.

Articles 20 and 21 were approved without comment.

Article 45 : The Chairman of the Drafting Committee pointed out certain omissions in paragraphs 45-02 and 45-03, of a text which had been proposed by the Delegation of Italy, and approved by the Plenary Assembly. This text would be replaced in the white documents. With this understanding Article 45 was approved.

Recommendations 18, 19 and 20 were approved without comment.

Recommendation 21 was approved subject to a change in the title in Annex 1, proposed by the Chairman of the Drafting Committee, to read : "Basic Characteristics of International Radiotelephone Means of Expression for the Maritime Mobile Services." It was also agreed to leave the Swedish spelling of the word "Göteborg" in considering a), proposed by Mr. Stead, as had been done as a mark of respect for the country in which the conference had been held, in the Final Acts of the B.N.R.C. Minor drafting changes were pointed out in Annex 2, by the Delegates of India and the Argentine.

Recommendations 22 to 36 inclusive were approved, with the reminder that Recommendation No. 36 must bear a cross-reference to Resolution No. 3.

The Delegate of Italy made the following statement :

"The Italian Delegation believes that it is absolutely essential to add an agreed signal when using the International Radiotelephone Code for the Maritime Mobile Service, to indicate that the code in question is being used. Such a signal would be necessary to enable the correspondents during the preliminary contacts to know that the text of the following message would be composed of signals of the International Radiotelephone Code.

" As lack of time prevents this question from being solved during the present Conference, we consider it advisable to request the General Secretariat to put this question to the I.M.C.O. and the I.C.A.O. and to send these organizations a copy of Recommendation No. 21."

Series G of the pink texts (Document No. 886) was adopted, with the agreed amendments, and the Chairman, stating that this completed action on the pink texts, once more warmly congratulated Mr. Henry and the members of the Drafting Committee on their excellent work.

4. Memorandum by the Chairman (Document No. 769)

The Delegates of Ireland, Spain and the United Kingdom had amendments to the document which they would had in to the Secretariat.

In view of the many changes to be made it was decided that the document would be re-issued in revised form, and that, in accordance with a proposal made by the Delegate of Denmark, the General Secretariat of the I.T.U. would then distribute it to all countries within the European Broadcasting and Maritime area.

Note was taken of Document No. 769.

5. Any further statements for inclusion in the Final Protocol (Documents Nos. 899, 901 and 902)

The Chairman explained that these documents were statements by Japan, the Netherlands and the Republic of Colombia, which those countries desired to see included in the final Protocol.

The Delegate of Colombia pointed out that the English text of the English text of the document, should be in line with the original Spanish. The Chairman of the Drafting Committee agreed that the original should always be used as the reference text, and the original language should always be clearly indicated.

The Delegate of the United States wished clarification on a remark made earlier by the Deputy Secretary of the Conference, that there were to be three sets of signatures, one of which related to the statement in the final Protocol. He would like to know precisely what was intended by the third set of signatures which had not been made at Atlantic City and whether these would give any legal rights to the countries making reservations.

Mr. Stead, Deputy Secretary of the Conference, explained that the procedure proposed was exactly the same as that followed at Atlantic City in respect to the Convention and at Buenos Aires. There had of course been no final Protocol to the Atlantic City Radio Regulations, so the question had not arisen. At the E.A.R.C., the same procedure had also been followed. While hesitating to define the legal significance of the signatures he pointed out that according to the text they indicated that the signatories "took note" of the final Protocol.

The Delegate of the United States said no signatures in respect to the final Protocol were contained in the Final Acts of the E.A.R.C. Conference in 1951, and Mr. Stead explained that to save space they had not been included in the printed text but were effectively in the original text in the archives.

The Delegate of the United States expressed his satisfaction with this explanation, and deduced that signature would not imply an approval of or association with any of the statements contained in the Protocol.

It was agreed that the statements contained in Documents Nos. 899, 901 and 902 be added to the final Protocol.

6. Approval of the Minutes of the Twenty-Fourth Plenary Meeting (Document No. 891)

Mr. Gracie, Vice-Chairman of the I.F.R.B., stated that the remarks attributed to him in the second last paragraph on page 14 should be slightly amended to read : "If they did not do so, an explanatory clause should be inserted in the Agreement of that Conference accompanying the plan, since this, unfortunately, had not been done, for example by the E.A.R.C. .... it could be left to such future conferences."

The Delegate of Spain considered that the phrasing of the statement concerning Spain and Uruguay towards the bottom of page 10 was ambiguous. It should be reworded to the effect that the Delegates of Spain and Uruguay had no objection to sharing in the band 17 356.5 kc/s, provided that no harmful interference would result. The Delegate of Uruguay supported this proposed amendment. The Delegate of Spain added that on page 14 "primary service" (2nd paragraph on page) should be amended to "permitted service".

The Delegate of Greece drew attention to the fact that on page 6 the statement attributed to Bulgaria was, in fact, made by the Delegate of Poland, which was confirmed by the latter delegate. The Delegate of Greece then made the following statement :

"With regard to the use of the frequency 4 428.6 kc/s by Poland, which we had opposed at a previous session of the Plenary Assembly, please have it recorded in the Minutes of the present meeting that this opposition has now been withdrawn following the declaration by the Polish Delegation that it would undertake to produce no harmful interference to our emissions on that frequency."

The Delegate of Denmark referred to his statement on page 16, and requested the deletion of the last sentence, which gave an erroneous interpretation.

The Delegate of Belgium requested that his statement on page 7 be modified to read : "... in accordance with an agreement to share existing between the two countries."

The Delegate of the U.S.S.R. asked that Mr. Gracie's statement on page 16 be amended as it affected his own statement further down the page expressing agreement with the Vice-Chairman of the I.F.R.B. As the text stood at present it was incorrect, and the U.S.S.R. did not agree with it. He proposed an amendment along the following lines :

"In reply to the request of the Delegate of the U.S.S.R. the Vice-Chairman of the I.F.R.B. stated that if a fixed and a mobile service were allocated, one in a certain are and the other in a different part of the area or country on a primary basis, in accordance with Article 90 of the Radio Regulations these two services would have equal status."

Mr. Gracie, Vice-Chairman of the I.F.R.B., said that the remark represented his personal opinion, and not one of the I.F.R.B. Perhaps what was recorded did not fully cover what he had indeed said, but he thought that the addition of the words "to different parts of the same region" should satisfy the Delegate of the U.S.S.R., as it was his view that Article 90 would apply here. This addition would bring the text into line with what had been agreed in the modified paragraph 3-05.

The Delegate of the U.S.S.R. expressed his surprise that the Vice-Chairman should sit on the rostrum and express his own personal opinions, and not those of the Board, particularly when dealing with such important questions. Was it then to be understood that this was always the case? He would ask that the reply of the Vice-Chairman of the I.F.R.B. be recorded in the minutes, and also whether, when different services were allotted to different parts of a region, they would indeed enjoy equal status or not.

Mr. Gracie, Vice-Chairman of the I.F.R.B., said that his suggestion had been intended to give effect to what the Delegate of the U.S.S.R. had read out earlier, and that he had had no objection to the Minutes in Document No. 891 being amended to meet the case. Neither did he have any objection to playing back the recording of what had been said at that time. As nearly as he could remember it was : 'In my view, if you have two services which are both primary in character and one is in this part of a region and one in another part of the region, in my view they operate with equality of rights'. And when he said "in my view" he clearly meant his answers were indeed his own personal interpretation. He would remind the Delegate of the U.S.S.R. that some matters had been raised at very short notice, the I.F.R.B. was a board of 11 Members, and he did not have an opportunity to convene the Board during a meeting and request them to instruct him on the answers he was to make to such and such a query. Should the Delegate of the U.S.S.R. so require he could convene a meeting of the Board the following morning, and ask them whether they agreed with his interpretation. He had no reason to believe that they would not agree, but he could not commit the other members of the Board without prior consultation. Unless he answered "the I.F.R.B. states" any opinions he expressed were his own personal opinions.

The Chairman proposed that Mr. Gracie and the Delegate of the U.S.S.R. discuss the matter privately, and agree upon the correct wording. The result of that informal discussion was that it was agreed to amend the paragraph in question by the addition of the words "to different parts of" to replace the word "in" between "allocated" and "the same region".

The Minutes of the Twenty-fourth meeting, contained in Document No. 891, were thereupon approved.

7. Future programme of work

The Chairman said that there would be a short plenary meeting of the Radio Conference at 2.30 p.m. on Monday morning to deal with the final report of the Credentials Committee, which was to meet on Saturday morning, and also to approve any available Minutes. There was then the possibility of a dual signing ceremony at 4 p.m. on Monday afternoon.

Upon a query by the Delegate of South Africa, the Chairman of the Drafting Committee confirmed that the signing would be on white documents. Delegates were requested to bring all amendments they might have to the attention of the Drafting Committee, which was to meet immediately the present meeting ended, and the pink documents would be in the hands of the printers at latest by 7 a.m. on Saturday, thus enabling the final whites to be distributed on Monday.

At this point Mr. Stead, Deputy Secretary of the Conference, explained that the white documents would be distributed, in a light folder, in the same quantities as were the normal Conference documents. Delegations which had asked for extra large quantities were requested to be patient and await the printed versions which would be out very quickly,

The meeting rose at 12.20 a.m.

J. Umberg  
Rapporteur

C. Stead  
Deputy Secretary  
of the Conference

C.J. Acton  
Chairman



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 455-E (CP)  
Document No. 911-E (CAR)  
20 December, 1959

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PLENARY MEETING

A G E N D A

JOINT CLOSING PLENARY SESSION

Plenipotentiary Conference - 30th and last Plenary Meeting

Administrative Radio Conference - 32nd and last Plenary Meeting

Monday, 21 December, 1959, at 4 p.m.

1. Induction ceremony for the new Secretary-General of the Union
2. Induction ceremony for the new Deputy Secretary-General of the Union
3. Formal signing of the Final Acts of both conferences :  
Administrative Radio Conference and Plenipotentiary Conference
4. Closing statement by the Acting Secretary-General of the Union
5. Closing speech by the Chairman of the Administrative Radio Conference
6. Closing speech by the Chairman of the Plenipotentiary Conference
7. Reply speech by the Dean of the Conferences : Commissioner T.A.M. Craven
8. Formal closing of the Conferences' the Chairman of the Plenipotentiary Conference.

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 912-E  
22 December, 1959

## PLENARY MEETING

### MINUTES

#### OF THE

#### THIRTY-FIRST PLENARY MEETING

Monday, 21 December, 1959, at 2.30 p.m.

|  |   |
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| <u>Chairman:</u>                               | Mr. Charles J. Acton (Canada)   |
| <u>Vice-Chairmen:</u>                          | Mr. Juan A. Autelli (Argentine Republic)<br>Dr. M. B. Sarwate (Republic of India) |
| <u>Secretary of<br/>the Conference:</u>        | Mr. Gerald C. Gross   |
| <u>Deputy-Secretary<br/>of the Conference:</u> | Mr. Clifford Stead  |

#### Subjects discussed:

1. Third Report of Committee 2 (Document No. 905)
2. Peru - Final Protocol (Document No. 907)
3. Approval of the Minutes of the Twenty-fifth Plenary Meeting (Document No. 897)
4. Approval of the Minutes of the Twenty-sixth Plenary Meeting (Document No. 903)
5. Approval of the Minutes of the Twenty-seventh Plenary Meeting (Document No. 904)
6. Outstanding Minutes of the Conference
7. Statements by Delegates
8. Date of the next Administrative Radio Conference.



The following Delegations were present:

Afghanistan; Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian Soviet Socialist Republic; Burma; Canada; Ceylon; China; Vatican City State; Colombia (Republic of); Belgian Congo and Territory of Ruanda-Urundi; Korea (Republic of); Cuba; Denmark; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Guinea (Republic of); India; Indonesia (Republic of); Iran; Iraq (Republic of); Iceland; Israel (State of); Italy; Japan; Mexico; Monaco; Norway; New Zealand; Pakistan; Paraguay; Netherlands (Kingdom of the); Peru; Portugal; United Arab Republic; Federal Republic of Germany; Federal People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Turkey; Union of South Africa and Territory of Southwest Africa; Union of Soviet Socialist Republics.

International organizations:

European Broadcasting Union  
International Chamber of Shipping  
International Broadcasting and Television Organization

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1. Third Report of Committee 2 (Document No. 905)

The Delegate of the United States, referring to paragraph 3, recalled that the signature of the Delegate of the United States was also valid for the Territories of the United States of America.

The Chairman said that he was glad that the Territories of the United States would be covered by the Delegation of the United States of America for the signature of the Final Acts of the Conference.

Subject to the deletion of "Territories of the United States of America" in paragraph 3, Document No. 905 was approved.

2. Peru - Final Protocol (Document No. 907)

The Chairman explained that the reservation by Peru contained in Document No. 907 had not been received by the Secretariat in time for insertion in the Additional Protocol which had been distributed that morning with the text of the Final Acts.

There being no objection, it was decided that the reservation by Peru would be included in the final printed version of the Additional Protocol to the Final Acts.

3. Approval of the Minutes of the Twenty-fifth Plenary Meeting (Document No. 897)

The Delegate of Mexico referred to the sixth paragraph on page 9 where he had stated that he would enter a reservation with regard to No. 107c. Such a reservation would not be submitted since it was no longer necessary in view of friendly discussions he had had with the Delegate of the United States on the subject.

The Chairman congratulated the two Delegations concerned.

Subject to amendments proposed by the Delegates of Belgium, France, Czechoslovakia, China and the Bielorussian S.S.R. appearing in Corrigendum No. 1 to Document No. 897, the Minutes of the 25th Plenary Meeting were approved.

4. Approval of the Minutes of the Twenty-sixth Plenary Meeting (Document No. 903)

The Delegate of Czechoslovakia referred to corrections to Document No. 868 which had been considered under item 8. Subject to the publication of a Corrigendum containing those corrections to Document No. 868, the Minutes of the Twenty-sixth Plenary Meeting were approved.

5. Approval of the Minutes of the Twenty-seventh Plenary Meeting (Document No. 904)

Unanimously approved.

6. Outstanding Minutes of the Conference

It was decided to authorize the publication of any outstanding Minutes of the Conference, delegates having the right to submit corrections thereto in writing upon receipt of the documents by post. The Secretariat would issue Corrigenda where necessary, which would appear in the final documents published.

7. Statements by Delegates

The Delegate of Mexico made the following statement:

"Before our labours come to an end, the Mexican Administration would appeal to all Members of the Union, and above all, of course, to those which have taken part in this Conference. This is a cordial appeal designed to create a favourable atmosphere at the 1965 Conference, in connection with an aspect of our joint needs which it has not been possible to satisfy fully this time. I refer to the need to set up an international network of monitoring stations directed by the International Frequency Registration Board - an idea which led to a Mexican proposal on pages 825.4 and 825.8 of the yellow volume of proposals.

" This is not the place to describe in detail what the Mexican Delegation has done to obtain the implementation of this scheme, because this is the subject of Document No. 537, in which the various stages for a thorough study and implementation of the scheme were described and suggested. It would be better, I feel, for the future, to consider the question objectively, and I shall do so very briefly, to justify my appeal to the Member-countries of our Union.

" 1. When the Mexican Administration decided to submit its proposal it was prompted to do so by the conviction that only by the production of a frequency list reflecting realities in frequency usage would the legitimate needs of a series of countries (especially the 'new and developing' ones) be met. The stations of these latter countries cannot generally work in accordance with the characteristics notified, because of unfavourable findings reached by the Board, or are obliged to operate precariously. My Delegation has observed that the need to have a realistic frequency list was and still is a common ideal of the Conference and there can be no doubt but that most of the delegations have made considerable efforts to bring this about by indirect and exceedingly laborious means.

" On the contrary, the Mexican Administration is convinced that there is no more effective procedure than observance of transmissions directly, by monitoring, local measurements and identifications of origin in specific cases, as the result of definite pleas by the Board to the Administrations which wish to extend this kind of cooperation (for such a time as they may see fit), or by giving instructions to monitoring stations belonging to the I.T.U., supplementing the information supplied by Administrations or filling in the gaps at present existing in the distribution of monitoring stations.

" 2. More as an example of how the frequency notification and registration procedure might evolve than with the hope of putting it into force at once, since the proposed network could not give fruitful results for several years at least, the Mexican Administration also offered a new draft version of Article 11 of the Radio Regulations, designed to purify the List and provide automatic advice for all countries which might obtain unfavourable findings from the Board on submitting a notice, or in case of interference, or on demand by an Administration needing such advice, for example, the Administration of a 'new and developing' country.

" It is certainly true that the Conference largely embodied the Mexican proposal in connection with advice for such countries and did something to extract specific information from Administrations when asked for by the Board. It also acted on the proposal to give the Board greater resources, so that it will now be free to take initiatives in connection with investigations in cases where notified stations are not operating or are operating with characteristics other than those notified. But it was not decided to make a thorough examination of the proposal that the Board should be endowed with so valuable a tool in doing its work for the greater good of all Members of the Union, especially the 'new and developing' countries. Presumably these reasons explain the following :

" a) Although it is certain that the production of a list reflecting actual frequency usage is a common task, this seems to be merely a banner for certain powerful countries which wave it energetically although they think the goal is difficult or impossible to attain, but react unfavourably to a proposal capable of settling the problem, because that would reveal a series of assignments that can only be maintained with the present complicated procedure. On this assumption it would seem that these countries, in advocating a list to reflect the real state of frequency usage, are doing something contrary to what they really want.

" b) There can be no doubt but that the new tasks given to the Board by the Conference, and the adoption of United Nations salaries and allowances for I.T.U. staff (decided on by the Plenipotentiary Conference) - all of which will cause an increase of more than 40% in the I.T.U. budgets during the next few years - created a strong resistance in all delegations to the idea of heavy outlays, and it is obvious that, no matter what agreements the I.T.U. might make with Administrations, and no matter how few and humble were the monitoring stations set up and run by the I.T.U., the outlay would necessarily be relatively considerable.

" 3. This conservative frame of mind has nevertheless not prevented the Radio Conference (encouraged by the Plenipotentiary one) from adopting a recommendation about the setting-up of a panel of experts, or indeed from convening a new Extraordinary Administrative Radio Conference (a new E.A.R.C.) in 1963, with the aim of reducing the congestion now obtaining, and likely to increase still further, in the frequency spectrum between 4 and 27.5 Mc/s, a generous idea which promises to give good results in a different direction, which, of course, does not exclude the rôle which, the Mexican Administration still believes, will one day be performed by the proposed International Monitoring Network.

" This being so, the Mexican Administration, via its Delegation in this Conference, wishes to appeal to the other Administrations to give sober thought - should the panel of experts and the new E.A.R.C. not give the results expected - to the possibility of taking action at the next Administrative Radio Conference, in 1965, to set up the proposed network, which, in spite of all, should give the results expected, by eliminating the assignments of stations which are not operating or are not operating in accordance with the characteristics notified.

" As I have said above, it is certain that such a network would have to be set up and operated in stages, and could not be expected to bear fruit for a good many years to come, but this drawback is not got rid of by postponing the date on which the task would begin, and the Mexican Administration believes that although this could have begun immediately after the Geneva Conference, a fresh postponement in 1965 would be deplorable.

" It is to be hoped that by that time the political situation and the finances of the Union will be better than they now are."

The Chairman of the Drafting Committee pointed out some errors in the text of the Final Acts which had been distributed that morning, and would be corrected in the final version.

He then gave some statistics relating to the number of pages in each section of the Final Acts, totalling 672 pages, and pointed out that there were 1,642 Nos. to the Radio Regulations, and 256 footnotes. There was therefore an increase in the number of pages as compared to the Atlantic City Radio Regulations, due to the fact that the problems to be dealt with were more intricate than in the past. It would be wise to envisage a new presentation of the Radio Regulations at the following Administrative Radio Conference.

The Delegate of the United Kingdom made the following statement:

"I wish to refer briefly to the position in the High Frequency Broadcasting Bands. Since the Extraordinary Administrative Radio Conference, Geneva, 1951, my Administration has made every effort to get its High Frequency Broadcasting operations into band, and a considerable measure of success has been achieved. Completion of the task has not been possible, however, because of the confused and disturbed conditions in the bands, and, in the view of my Administration, until these conditions improve there will be great difficulty in making further progress. We must all hope that the new procedures adopted by this Conference, together with a cessation of deliberate disturbance, will help towards a more orderly use of the bands."

The Chairman requested any Delegates who discovered errors in the text of the Final Acts to submit them to the Chairman of the Drafting Committee or to the Secretariat.

The Delegate of Ethiopia congratulated the Chairman of the Drafting Committee on the excellent work he had performed. He also referred to the way in which the footnotes were numbered, and the Chairman of the Drafting Committee explained that if the numbering system had been changed, it would have been impossible to complete the work by 21 December 1959. In any case, the numbering system adopted had been approved by a Plenary Meeting.

The Delegate of India congratulated the Chairman of the Drafting Committee on the clear and excellent presentation of the texts.

The Delegate of China referred to an amendment to the Additional Protocol, which he would submit in writing to the Secretariat.

The Chairman made the following statement:

"I wish once again to express my thanks for the honour conferred on Canada by electing me as your Chairman.

" Four months ago the Administrative Radio Conference started its work in Geneva to revise the Radio Regulations and Additional Radio Regulations of Atlantic City, 1947, its task being complicated by the major developments which had taken place in the intervening period. On the opening of the Conference I had some misgivings as to the ultimate success of this Conference. The many problems which we had to face were in the main reflected in the proposals submitted by Administrations prior to the Conference which, together with those submitted by Delegations during the Conference, numbered over 6,000.

" At Atlantic City the main frequency allocation problems were in the band 4 - 27 Mc/s, whereas the higher part of the spectrum has now become extremely important. This is reflected in the allocation table adopted here, but unfortunately with over 250 footnotes. Included in the allocations we have agreed to at this Conference are those to two new radio services - Radio Astronomy, also Earth and Earth-Space. In the case of Radio Astronomy the provisions for the use of frequencies by this service will, for the first time, give some assurance to radio astronomers on having the necessary "windows" for scientific research purposes. The Conference devoted much time to the question of the provision of frequencies for space communications and decided to allocate within the allocation table, and by means of footnotes, frequencies for space research purposes only, pending reconsideration of the whole question of frequency allocations for outer space telecommunications at a Conference tentatively proposed to be held in 1963.

" While the C.C.I.R. already have under study technical questions relating to telecommunications with outer space, the C.C.I.R. has also been invited by this Conference to study the question of identification of radio emissions from satellites and other space vehicles, also the question of providing for the cessation, at appropriate times, of radio emissions from such vehicles.

" The problems of high frequency broadcasting in the main are still serious and the hope is that there will be considerable improvement as a result of the measures to be taken by Administrations and the I.F.R.B. under the new management procedure. Associated with this problem is the difficulty of relieving congestion on frequencies in the band 4 - 27.5 Mc/s which is to be the subject of a study by the I.F.R.B. and a panel of experts which it is planned will meet in Geneva for short periods during 1961 and 1962. I am sure that all delegations are desirous that their efforts will achieve the desired aim.

" The operational part of the Radio Regulations has been expanded considerably over that of Atlantic City and in addition to being more complete they include, for the first time, VHF plans for the maritime mobile service also the detailed aeronautical plans which have been developed since the Atlantic City Conference and slightly modified by this Conference.



" During the conference the members of the new I.F.R.B. were elected to take office on the 1st October 1960. A number of the existing members were re-elected which will provide for continuity. The qualifications of the newly elected Board indicates the Board is competent to carry out its additional functions.

" All delegations will, no doubt, wish to associate themselves with me in thanking the Chairmen of all Committees, sub-committees, working groups, sub-working groups and ad hoc groups for their contribution to the success of this Conference. It is difficult to single out any one Chairman for particular praise with so many competent ones. However, I do feel I would be failing in my duty if your attention were not drawn to the very special work carried out by the Drafting Committee under the very capable chairmanship of Mr. Henry. (Applause)

" The Drafting Committee has worked far longer hours than any of the rest of us during the last month in order to produce the blue, pink and finally the white texts, on the basis of which we are signing the new Regulations. I would like to stress that if we had not had the services of Mr. Henry as Chairman of the Drafting Committee I am certain that our Conference would have lasted longer.

" Of course, you all appreciate that the efficient functioning of any conference relies to a great extent on the Secretariat. Mr. Gross, the Secretary of the Conference, and Mr. Stead, Deputy Secretary of the Conference, deserve our special praise for their untiring efforts; (Applause); also behind the scenes, those responsible for the production of documents in mountainous quantities. If at this stage you are interested in statistics, it is my understanding that the average number of pages of documents distributed by the Secretariat each week during the course of the Conference has been approximately one million. Furthermore, the total of all categories of documents reached nearly two thousand.

" A further contribution to the success of this Conference has been the Rapporteurs and the persons whose voices we have heard over the head sets. The interpreter's task is an extremely difficult one as not all delegates speak in their mother tongue which presents difficulties for the interpreters who make every effort to give an accurate interpretation of what has been said.

" Looking forward to the future I am certain that all will agree that there will be an increase in tempo in the development and use of frequencies in the higher part of the radio spectrum. Some of these developments, for example, the use of telecommunications relating to outer space, could be of worldwide significance. I would suggest that all delegations draw the attention of their administrations to the desirability of arranging, as far as may be possible, for continuity in the attendance of experts who have had conference experience at the conferences foreseen in the future.

" In conclusion, although the objective of the Conference has been difficult to achieve, your Chairman considers that much greater success has been attained than appeared possible, even though at times there seemed to be insurmountable obstacles. This success is due to the cooperation of all delegates.

" It has been my privilege in the Chair to have had as First and Second Vice-Chairmen, Mr. Autelli (Argentine) and Dr. Sarwate (India). (Applause.) They have given me very valuable assistance throughout the course of the Conference, for which I am extremely grateful.

" I wish you all the Compliments of the Season and a Happy and Prosperous New Year." (Applause.)

The Delegate of the U.S.S.R. made the following statement:

"The Administrative Radio Conference here in Geneva has proved to be an important event in the history of the International Telecommunication Union. The Conference has finished its work by the adoption of a new set of Radio Regulations and a series of important decisions about the future use of the radio frequency spectrum.

" In view of the most important part played by radio and television in spreading culture and enlightenment, the decisions taken by the Conference will further the development of national and international communications and strengthen international cooperation in the interests of peace.

" Our conference will go down in history as the first conference of the International Telecommunication Union to have concerned itself with questions in connection with the great achievement of our age - the conquest of space.

" Particularity let it be observed that the Conference was held in an atmosphere of collaboration between the delegates of all countries, which contributed not a little to its success.

" The Conference helped delegates to get to know, and to respect, the requirements of countries both great and small.

" I would especially emphasize the important part played by our respected Chairman, Mr. Charles J. Acton, who showed remarkable organizational skill in directing the work of our Conference.

" Our indefatigable Chairman found ways of arriving at acceptable decisions no matter how complicated were the problems that arose, displaying the sharpness and humour that are characteristic of him.

" We likewise thank the Vice-Chairman, Messrs. Autelli and Sarwate, and the Chairmen of the Committees, Sub-Committees, Working Groups and Working Parties, who assisted the Chairman of the Conference in his arduous task. A special word of thanks to the Chairman of the Drafting Committee, Mr. Henry, without whose intense labours we could not have finished to-day and would have been here until the New Year.

" The Secretariat and permanent organs also did much to contribute to the success of our Conference. On behalf of us all may I thank the Secretariat of the Conference, especially Mr. Gerald C. Gross and Mr. C. Stead for the excellent way in which things have been organized. We thank all members of the Secretariat for the great efforts they have made.

" A separate word of thanks to all the interpreters, who by their labours contributed to the success of the Conference.

" We shall soon be returning home, Gentlemen. May I wish you a pleasant journey and wish you all the best, for yourselves and your families, in the New Year.

" We trust that the friendly contacts made here and the mutual understanding achieved at this Conference will increase and develop in the interests of peace throughout the world." (Applause.)

The Delegate of the United States of America said that he would reserve his statement, as Dean of the Conferences, until the Closing Session of both Conferences taking place later that afternoon.

The Delegate of Pakistan said that, as a colleague from the old Administrative Council, and having known him over many years, he had great pleasure in congratulating the Chairman on the excellent way in which he had, so ably, tactfully and vigourously steered the work of the International Radio Conference. All were aware of the charming qualities of his personality and those of Mrs. Acton, to whom he requested that his greetings be conveyed. He also thanked the two Vice-Chairmen, Mr. Autelli and Dr. Sarwate, and Messrs. Gross and Stead, all officials of the Secretariat, and the interpreters, and expressed his warmest wishes for the future. (Applause.)

The Delegate of Cuba made the following statement:

"At this time, the Cuban Delegation wishes to say that it feels honoured to have taken part in an event of such high significance for international understanding.

" We appreciate what has been achieved by so many hours of continuous work. People from every country have defended their interests in their own languages, while an ingenious system of interpretation has made their statements intelligible to all.

" Furthermore, beyond the written and spoken word, we have understood that every country has a right to exist, a legitimate right to a better life, but we have also learnt that there is such a thing as a duty to grant to others something that we have too much of, for the sake of justice, equity and better understanding.

" The Cuban Delegation trusts that in future conferences of this kind the needs of the developing countries will be considered, so that the reservations we have been obliged to make on this occasion will not be necessary on future occasions, at which we would, we hope, meet with better understanding on the part of the more highly-developed countries.

" This is a generally shared aspiration, that the rights and duties of a people are not measured by a country's size, nor by the richness of its soil, nor by the colour of its inhabitants' skins. In this brief life it would be better to distribute opportunities more equitably so that each country may progress uninterruptedly. Throughout this Conference, the Cuban Delegation has tenaciously insisted on these rights for a country such as ours, which is beginning a process of total restoration. We have been in favour of whatever has been done in the name of the ideology set forth above, and - it may not be amiss to recall the fact - we have promised our cooperation in the adjustment of international interests. We shall continue to cooperate to the maximum of our ability with the I.T.U., hoping that the experience that all have acquired in these labours will ensure that at future conferences all of us will improve our attitude towards a harmonious collectivism based on a striving for a frank and sincere brotherhood of man."

The Delegate of Colombia also expressed his gratitude for the way in which the Chairman had guided discussion throughout the Conference, which had been a difficult one due to the long period since the preceding Radio Conference, and also because there had been so many world events with which they had to keep apace. He praised the Chairman's impartiality and sense of humour, and said that he had all the basic qualities of a perfect Chairman. Without him, it would have been impossible for the Conference to accomplish its tasks so expeditiously and so successfully. The Delegate of the United States at the Plenipotentiary Conference had remarked that it was a pity there were no medals that could be awarded, as the Chairman certainly deserved a very high-ranking decoration. He proposed that the Chairman be given the gavel he had wielded at the Conference, together with a small plate expressing the gratitude of all delegates. (Applause.)

The Delegate of China associated himself with the remarks made by the previous speaker, and congratulated the Chairman most warmly on the successful conclusion of the Radio Conference. He also expressed deep gratitude to all the delegates who had shown confidence in his country by electing one of his countrymen to the International Frequency Registration Board. He thanked the Swiss Confederation authorities for their hospitality, and the Secretary-General, Directors and Vice-Director of the C.C.I.R. and C.C.I.T.T. and members of the I.F.R.B., as well as all the staff

of the Union, and particularly the document distribution clerks, for their cooperation. Finally he wished all present a Merry Christmas and a Happy New Year.

The Chairman of the I.F.R.B., Mr. P.S.M. Sundaran, made the following statement:

"On behalf of the I.F.R.B., I wish to express our grateful thanks to you and through you to all the delegations for your kind appreciation of our humble efforts to assist the Conference in its deliberations. During the last Atlantic City Conference and the subsequent E.A.R.C., the I.F.R.B. was entrusted with certain duties and we have to the best of our ability discharged these duties. This Conference has been further pleased to add certain additional duties, in particular to help the new and developing countries. This last task is not so simple as it would appear to be. You have also been pleased to appoint a panel of experts to help the Board in clearing the congested spectrum. We are fully aware of the heavy responsibilities entrusted to us and we assure you, Sir, that we will do our best to help every Member Country whether new and developing or old and well-equipped. Our assistance has necessarily to be of an advisory character and in the ultimate it is the willing and cooperative effort of all the Administrations that will succeed, the I.F.R.B. only acting as a catalytic agent in this respect.

" The additional duties delegated by you to the I.F.R.B. have no doubt meant increased financial commitments by the Member Countries. We are aware of the difficulties that this has entailed and we had wished that this Conference would make a suitable recommendation to the Plenipotentiary Conference. However, with great difficulty and hesitation this matter has finally ended amicably. On behalf of the Board, I can assure you, Sir, that we will be prudent, economical and efficient in the management of the funds to be placed at our disposal through the Administrative Council.

" In conclusion, whilst thanking you, Sir, and all the delegates of the Conference, I would be failing in my duty if I do not hereby acknowledge, on behalf of the Board, the unfailing devotion to duty and the hard work put in during day and night by the Secretary of our Board, the heads and deputy heads of Departments and many of our senior and junior Officials.

" Mr. Chairman, you have been so efficient, quick, impartial and thorough, and no doubt you have been able to bring this important Conference of the Union to a successful conclusion.

" Our best wishes and greetings go with you, Mr. Chairman, and all the delegates." (Applause.)

The Chairman said they all knew that they could rely on the Board to accomplish most useful work in the future.

The Chairman of the Drafting Committee, Delegate of France, thanked the Chairman and delegates for their flattering words. In his turn, he expressed gratitude to all those who had worked with him, in particular the English and Spanish-speaking delegates who had worked extremely hard in his Committee, and officials of the General Secretariat and I.F.R.B. The work of the Drafting Committee had sometimes been very difficult but all his colleagues had spared no effort so that the Final Acts could be signed that day.

When the Chairman of the Radio Conference had been elected, he had felt particularly confident because he was already aware of his great qualities and competence, and his even temper, from the days of the Extraordinary Administrative Radio Conference in 1951. On behalf of the French Delegation, and others, therefore, he expressed his sincerest and warmest thanks to the Chairman. (Applause.)

8. Date of the next Administrative Radio Conference

The Chairman referred to the terms of Article 7 of the Geneva Convention, and said that it was not possible at the present time for them to envisage a suitable date for the next Administrative Radio Conference. It was always possible for twenty Members or Associate Members of the Union to address individual requests to the Secretary-General for the convening of such a Conference. He suggested, however, that it be left to the Administrative Council to propose a suitable date and place for the next Administrative Radio Conference.

The Delegate of Colombia supported that proposal but felt that the period between Conferences should not be too long. He therefore proposed that the next Administrative Conference should not be held later than 1965.

The Delegate of Ceylon agreed, and thought that 1965 would be particularly convenient since it was also the date of the centenary of the Union. He also proposed that the next Conference consider a more suitable form of presentation for the Radio Regulations in view of their increased volume, and suggested that the Administrative Council take account of the comments made at the present meeting.

It was decided that the Secretary of the Conference, who would be Secretary-General of the Union on 1 January 1960, would arrange for the Administrative Council to be informed of the comments made at the present meeting regarding the next Administrative Radio Conference.

It was also decided that, since the new Convention would be effective after 1961, the Administrative Council should propose a suitable date and place for the next Administrative Radio Conference.

The Chairman wished all present a very Merry Christmas. (Applause.)

The meeting rose at 4.15 p.m.

|              |                                     |                  |
|--------------|-------------------------------------|------------------|
| Rapporteur : | Secretary of the Conference,        | Chairman,        |
| V. Bouladon  | Gerald C. Gross                     | Charles J. Acton |
|              | Deputy Secretary of the Conference, |                  |
|              | Clifford Stead                      |                  |

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 913-E  
21 December, 1959

COMMITTEE 2

## SUMMARY RECORD

of the

Sixth Meeting of the Credentials Committee  
(Committee 2)

Saturday, 19 December, 1959, at 11.30 a.m. - Room E

Chairman : Dr. F. Nicotera (Italy)

Vice-Chairmen : Mr. L.O. de Miranda (Brazil)  
Mr. I.M. Trifonov (People's Republic of Bulgaria) - absent

Agenda : Document No. DT 875 (18 December, 1959)

1. Adoption of the summary record of the fifth meeting (Document No. 482, dated 28 October, 1959)
2. Consideration of credentials submitted since Committee 2's second report (Document No. 466, dated 26 October, 1959)
3. Draft report to the Plenary Meeting.





The Chairman presented the agenda, which was adopted.

1. Adoption of the summary record of the fifth meeting (Document No. 482)

Adopted without comment.

2. Consideration of the credentials submitted since Committee 2's second report (Document No. 466):

The Committee considered the credentials submitted by the delegations of :

Afghanistan  
Bolivia  
Colombia  
Costa Rica  
El Salvador  
Spain  
Guatemala  
Jordan  
Lebanon  
United Kingdom of Libya  
Mexico  
Nepal  
United States Territories  
Turkey

The Committee concluded that by 19 December, 1959, the delegations of the following countries were not equipped with credentials enabling them to sign the Final Acts of the Administrative Radio Conference :

Bolivia  
Costa Rica  
El Salvador  
Guatemala  
United States Territories

In reply to a question from the Delegate of Spain, the Chairman said that the Delegation of El Salvador had been informed in good time that its credentials were not such as to enable it to sign the Final Acts.

Mr. Stead said that Dr. Ami was of the opinion that the credentials submitted enabled him to sign the Final Acts.

3. Draft Report by Committee 2 to the Plenary Meeting :

Mr. Stead read out the draft report.

It was adopted without comment.

The Chairman said that a last meeting would be held on Monday, 21 December, 1959, just before the Plenary Meeting, in Room E, if required.

The meeting rose at 12.15 p.m.

Rapporteur,

J. F. Martinez

Chairman,

F. Nicotera

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 457-E (CP)  
Document No. 914-E (CAR)  
22 December, 1959

## PLENARY MEETING

### MINUTES

of the

Thirtieth and Last Plenary Meeting of the Plenipotentiary Conference

and of the

Thirty-Second and Last Plenary Meeting of the Administrative Radio Conference

Monday, 21 December, 1959 at 5 p.m.

Chairman of Plenipotentiary Conference : Mr. J.D.H. van der Toorn (Netherlands)  
and of Combined Meeting

Chairman of Administrative Radio : Mr. C.J. Acton (Canada)  
Conference

Vice-Chairman of Plenipotentiary : Mr. L.O. de Miranda (Brazil)  
Conference Mr. Katsuzo Okamura (Japan)

Vice-Chairman of Administrative Radio : Mr. J. Autelli (Argentine Republic)  
Conference Dr. M.B. Sarwate (Republic of India)

Secretary of the Conference : Mr. Gerald C. Gross

Deputy Secretary of the Conference : Mr. Clifford Stead

1. Induction ceremony for the new Secretary-General of the Union
2. Induction ceremony for the new Deputy Secretary-General of the Union
3. Formal signing of the Final Acts of both Conferences :  
Administrative Radio Conference and Plenipotentiary Conference
4. Closing statement by the Acting Secretary-General of the Union
5. Closing speech by the Chairman of the Administrative Radio Conference
6. Closing speech by the Chairman of the Plenipotentiary Conference
7. Reply speech by the Dean of the Conferences : Commissioner T.A.M. Craven
8. Formal closing of the Conferences by the Chairman of the Plenipotentiary Conference



Before proceeding to the induction ceremonies, the Chairman regretted that he had a said announcement to make. He had just received a telegram informing him that Mr. de Vries, who had been the Head of the Delegation of the Union of South Africa at the beginning of the Conference, had died in his country the previous night.

The Chairman said, that although this news was not entirely unexpected, it nevertheless came as a great shock. The Assembly would certainly remember Mr. de Vries, as he had been among them just a few weeks before, as a man of great abilities, a charming personality and a very friendly presence, who had still had a splendid future before him. He asked the Assembly to observe a few moments silence in his memory.

The Assembly stood in silent homage to the memory of Mr. de Vries.

The Delegate of South Africa thanked the Assembly, on behalf of his Administration, for the tribute paid to Mr. de Vries.

1. Induction Ceremony for the new Secretary-General of the Union

The Chairman announced that a formal letter of appointment had been sent to Mr. Gross, who had been elected Secretary General to take office 1 January 1960, and Mr. Gross, in reply, had officially accepted that post. In accordance with the decision taken in plenary meeting, he would now request Mr. Gross to repeat the oath of office after him, and thereupon read it out.

The Assembly stood to attention, while Mr. Gerald C. Gross, Secretary General elect of the International Telecommunications Union, solemnly took oath of office, as follows :

"I, Gerald C. Gross, solemnly swear to exercise in all loyalty, discretion and conscience, the functions entrusted to me as an official of the International Telecommunication Union, to discharge these functions and to regulate my conduct with the interests of the Union only in view, without seeking or accepting instructions or assistance from any Government or other authority external to the Union with regard to the accomplishment of my duties."

(Prolonged applause)

The Chairman congratulated Mr. Gross on his appointment, and wished him every success in the execution of his duties, to the benefit of the Union and to his own satisfaction.

2. Induction ceremony for the new Deputy Secretary-General of the Union

The Chairman announced that a formal letter of appointment had been sent to Dr. Sarwate, who had been elected Deputy Secretary General as of 1st January 1960, and who, in his reply, had officially accepted that post.

The Assembly stood to attention while Dr. Sarwate (India) Deputy Secretary-General-elect of the International Telecommunication Union, solemnly repeated the oath of office:

"I, Manohar Banaji Sarwate, solemnly promise to exercise in all loyalty, discretion and conscience, the functions entrusted to me as an official of the International Telecommunication Union, to discharge these functions and to regulate my conduct with the interests of the Union only in view, without seeking or accepting instructions or assistance from any Government or other authority external to the Union with regard to the accomplishment of my duties."  
(Prolonged applause)

The Chairman congratulated Dr. Sarwate on his appointment, which would mean an important change in his career and in his life, and wished him every success in his new functions.

3. Formal signing of the Final Acts of both Conferences :  
Administrative Radio Conference and Plenipotentiary Conference

The Chairman announced that the Convention and the Radio Regulations would now be signed, and asked the delegates to approach the table. He explained that the Final Acts of the Radio Conference would require three sets of signatures, one for the Radio Regulations, one for the additional Radio Regulations, and one for the Final Protocol. Likewise, the Final Acts of the Plenipotentiary Conference required three sets of signatures, one for the Convention, one for the Final Protocol and one for the additional Protocol.

Signatures were successively appended. The first to sign was the Delegate of Afghanistan and the last the Delegate of Venezuela. One Associate Member signed. The Delegate of Liberia wished his presence to be recorded as an observer of the ceremony.

The complete list of countries signing the Final Acts is shown in tabular form as Annex to these Minutes.

The Secretary of the Conference, at the end of the ceremony, announced that 85 countries had signed the Final Acts of the Plenipotentiary Conference and 84 countries had signed the Final Acts of the Radio Conference. One country had not signed the additional Radio Regulations.

The Chairman considered this result to be very gratifying and congratulated all present on the successful outcome of their work.

4. Closing Statement by the Acting Secretary-General of the Union.

Mr. Gerald C. Gross, Acting Secretary General of the Union, made the following statement:

"Mr. Chairman, Ladies and Gentlemen:

At the end of four months of hard work at two conferences during which I am sure all of you have become very tired, If not worn out, it is not my intention to take up your time with a very long statement and may I re-assure you that this will be shorter than the one I made at the opening session of the Plenipotentiary Conference.

" At the 14th Plenary Session on 9 December 1959 in thanking your Conference for the honour it paid to me in electing me Secretary-General, I mentioned the fact that I thought we should look back to the traditions of the past and then look forward to the new and ever-widening vistas of the future.

" With this in mind we have strengthened our ties with the Swiss Government. We have confirmed the seat of the Union in Geneva for another six years. We have requested the Swiss Government to continue its traditional rôle of exercising a vigilant eye over our financial activities and to continue to serve as our bankers.

" With an eye to the future the Plenipotentiary Conference has streamlined the structure of the Union and the Radio Conference has given considerably increased duties and responsibilities to the permanent organs of the Union.

" As a result of these decisions, the original budget ceiling estimate which I presented to you at the opening Plenary Session of the Plenipotentiary Conference on 14 October, 1959 has been increased by your decisions from my original estimate of 8½ million francs to 9 million francs for 1960, going up to 12,200,000 francs for 1965. These increases reflect the importance of the additional work which you are calling upon the Union to do for you. Although our budget ceiling reflects the need for substantial additional contributions, when we consider the amount of time we have spent on outer space problems, it is helpful to get a proper perspective when we realize that the launching of just one single outer space satellite into orbit costs more than ten times the entire I.T.U. budget from its founding in 1865 until the present time.

" One of our financial experts has told me that the two Conferences, in terms of conference costs and delegate expenses alone, not including delegate salaries, amounts to well over 100,000 francs per day which, on the basis of an 8-hour day, means 12,500 francs an hour. Therefore I had better speed up my delivery somewhat.

" Since you have entrusted me with the responsibility for the management of "all the administrative and financial services of the Union" until the next Plenipotentiary Conference and, since the authority of the Secretary-General has been considerably strengthened by the new Geneva Convention, you may wish to have some idea as to what general policies I propose to follow during the next few years. First, may I state that I shall do my best to provide prudent, efficient and economical management. You may recall that I supported the proposal of the Delegation from the United Kingdom to reduce the 1965 consolidated budget figures by more than 400,000 francs by shortening the duration of the proposed Conferences during that year and operating them with a maximum of efficiency. For every conference day that can be eliminated material savings will accrue both to the Union as well as to the countries sending delegations.

" There are two kinds of economies which can be practised in this world, in my opinion, one the pro forma type more accurately described by the French phrase "économie de bouts de chandelle" which in English can be freely translated as penny-wise and pound foolish, and the other the more serious economies which result in real and important savings to the Members of the Union.

" Similarly, we shall do our best to propose an efficient plan of operation for the Administrative Council with a possibility of reducing the duration of their annual meetings.

" Following your authorization, I have already taken the preliminary steps to arrange for an administrative management study. Among the results that I expect to come from this study are the elimination of proliferation and duplication such as in our 3 mimeograph sections, 3 stenographic pools, 2 mail and shipping services as well as 4 offices dealing with finance and personnel questions.

" I propose to transfer those staff members who may not be indispensable in these offices to other and more useful work. I also feel that all of the purely mechanical operations including the machine systems should be grouped into a common services operation which would include related consequential daily work such as financial records, book-keeping and preparation of service documents. I do not promise you any large-scale economies in this direction but I do feel that we can achieve increased efficiency and hence turn out more useful work for the manpower involved.

" In accordance with the enlightened discussions and the decisions taken during this conference concerning public relations and public information, it is planned to incorporate a small but active section dealing with this problem in the General Secretariat. I will be to a considerable extent guided by the discussions which took place during the course of the meetings of Committee D (see Document No. 235) and by the impetus given to public information requirements by Dr. Sterky, and by the fine example given of what can be done by the distinguished head of public relations borrowed from I.C.A.O., Mr. Léon Boussard.

" I also believe that it will be possible to vitalize the "Telecommunication Journal" as part of this same operation. It is obvious that it is indispensable for an international organization like I.T.U. to be known, and also for it to make known to the Administrations concerned, and to the public at large, its aims, its plans, its deeds and its achievements.

" I feel that, with the ever-expanding character of the Union and its universal field, there should be more contact between the senior officials of the Union and the responsible heads of the Administrations concerned. I plan to visit as many national Administrations as possible during the five years of my incumbency, both with a view to increasing our technical assistance programmes as well as to strengthening our links with all Members of the Union.

" Finally, I believe that the decisive action taken by the Plenipotentiary Conference in approving full assimilation into the United Nations System of Salaries, Allowances and Pensions will have a most stimulating and healthy effect upon the morale of the staff. Mr. Chairman, I think it is important for all of us present to remember the source of our funds - they come from the ordinary taxpayer - and I think it is fair to say that both as international officials and as national officials it is important for us to provide the best possible service for the financial contributions made.

" In approaching my increased duties beginning on January 1 1960, I do so with a feeling of humility and deep responsibility to all of the governments Members of the Union.

" I am happy to say that in undertaking these new responsibilities I have made no commitments whatsoever of an individual or national character. My only commitment is a general one and that is to try to carry out to the best of my abilities, and as faithfully as possible, the duties which are prescribed for the Secretary-General in the International Telecommunication Convention.

" Thank you very much, Mr. Chairman" (Prolonged applause.)

5. Closing Speech by the Chairman of the Administrative Radio Conference

Mr. Charles J. Acton (Canada), Chairman of the Administrative Radio Conference, made the following speech :

"Four months ago the Radio Conference started its work in Geneva to revise the Radio Regulations and Additional Radio Regulations of Atlantic City, 1947. Its task was complicated by the major developments which had taken place in the intervening period. On the opening of the Conference I had some misgivings as to the ultimate possibility of its success. The many problems which we had to face in the Conference were in the main reflected in the proposals submitted by Administrations prior to the Conference which, together with those submitted by Delegations during the Conference, numbered over 6,000.



" At Atlantic City the main frequency allocation problems were in the band 4 - 27.5 Mc/s, whereas the higher part of the spectrum has now become extremely important. This is reflected in the allocation table adopted here in Geneva, but unfortunately with over 250 footnotes. Included in the allocations we have agreed to at the Radio Conference are those to two new radio services - Radio Astronomy, also Earth and Earth-Space. In the case of Radio Astronomy the provisions for the use of frequencies by this service will, for the first time, give some assurance to radio astronomers on having the necessary 'windows' for scientific research purposes. The Conference devoted much time to the question of the provision of frequencies for space communications and decided to allocate within the allocation table, and by means of footnotes, frequencies for space research purposes only, pending reconsideration of the whole question of frequency allocations for outer space telecommunications at a Conference tentatively proposed to be held in 1963.

" When I addressed the Radio Conference in plenary session earlier this afternoon I paid tribute to all those who had assisted me and who had worked so hard behind the screens. But I am sure that you appreciate that the efficient functioning of any conference relies to a great extent on the Secretariat. Mr. Gross, the Secretary of the Conference, and Mr. Stead, Deputy Secretary of the Conference, deserve our special praise for their untiring efforts during the past four months.

" Although the objective of the Radio Conference has been difficult to achieve, I am happy to say that much greater success has been attained than appeared possible, even though at times there seemed to be insurmountable obstacles. This success is due to the cooperation of all delegates.

" In conclusion, may I express my congratulations to my colleague, Mr. van der Toorn, Chairman of the Plenipotentiary Conference, on the work done by his Conference, and my thanks for his cooperation in my task.

" May I wish you all God speed and a safe return to your own countries and wherever you may be a Happy Christmas and a Good and Prosperous New Year !"

(Applause)

Mr. Van der Toorn thanked Mr. Acton for his very clear exposé of the tasks of the Radio Conference. That Conference had indeed had a most difficult task to perform, which had been terminated with very successful results and on behalf of the Plenipotentiary Conference he wished to congratulate him personally and also all the participants in the Radio Conference most warmly.

6. Closing speech by the Chairman of the Plenipotentiary Conference

Mr. J.D.H. van der Toorn (Netherlands), Chairman of the Plenipotentiary Conference, made the following speech :

"Our work is finished, our long labours have achieved the results we have just signed. My warm congratulations to all of you!

" The Plenipotentiary Conference has changed the structure of the Union, has given birth to a different and larger Administrative Council, has widened technical assistance and has taken decisions of great consequence in the field of personnel and finances. We have held important elections, made important appointments in the top posts of our Union and taken decisions on our new building. Together with the Telegraph and Telephone Regulations adopted last year, and the Radio Regulations and the additional Radio Regulations annexed to them, the new Convention, Geneva 1959, will for years to come form the basis for world communications.

" It has been mentioned several times in these conferences that we are living in a rapidly changing world. It is indeed changing with an astonishing and seemingly ever increasing speed and it is difficult to get as yet a picture of world of tomorrow based on these enormous scientific and technical developments, or of their influence on society and on man himself.

" One thing is sure, that telecommunication will be of increasing influence in the relations between men in every field of human activity.

" We may be proud to have contributed during these months of intense labour to the promotion of telecommunication, by improving the legal and structural basis and by laying down regulations which allow for future developments.

" Of course every achievement is dependant on how humanity will use it, and it is our very ardent hope that telecommunications nationally and internationally, on a world-wide - and even on a space-wide - scale will be handled by mankind in such a way that they will be to their blessing, to their benefit and not to their disaster.

" To achieve this, the moral and spiritual faculties of man should develop in step with the development of science and technique.

" There have already been opportunities for expressing our thanks for the work, the cooperation and the friendship encountered in this Conference, but I still want to say, in these closing moments, how grateful we are to the Secretary-General and his whole staff for the way these conferences have been organized and have been running, and also how much we appreciate the work of the Chairmen and Members of Committees, and how glad we have been for the help we got from the I.F.R.B. and the C.C.I.s.

" An excellent spirit of cooperation has existed between the delegations. It has been very marked in these Conferences that so many new countries have actively cooperated in our work. These new countries, and others soon to come, but also the younger generation in general, will change our Union in many respects, but I have no doubt that the new members and the new delegates and the younger generation will have the same purpose as the old generation, that of serving this great Union to the benefit of mankind.

" Last, but certainly not least, I want to express respectfully and warmly our feelings of gratitude to the Swiss Government and of course also to the Swiss P.T.T. Our appreciation also goes to the authorities of the Republic and Canton of Geneva and to the City of Geneva, who gave hospitality to our conferences, and I can assure them that their generous contribution and cooperation in providing the Union with suitable accommodation and new housing has been highly appreciated by these conferences.

" Personally, I have found it a great honour to preside over the Plenipotentiary Conference and I hold the happiest remembrance of all your help and your friendship. My very best wishes for the future prosperity of the I.T.U.! I will follow your development from a distance, but with the same keen interest I have always had for the International Telecommunication Union.

" May the spirit of peaceful and harmonious cooperation remain and prevail, not only in our field of telecommunication, but in all other fields, not the least also in the political field, in order that mankind can derive from that the fulfilment of their ardent hope and prayers for a world living together in harmony, in liberty and in peace !" (Prolonged applause)

7. Reply speech by the Dean of the Conferences : Commissioner T.A.M. Craven

Commissioner T.A.M. Craven (United States of America), Dean of the Conferences, made the following speech in reply :

"I speak on behalf of all the delegations to these two international radio conferences, when I say that we wish to express our appreciation to the Government of the Swiss Confederation and to the Council and the citizens of this beautiful city of Geneva, for their very warm hospitality throughout our four months of work here.

"All of the delegates to the Plenipotentiary and the Administrative Radio Conferences pay tribute to our Chairmen, Mr. J.D.H. van der Toorn and Mr. Charles J. Acton and to the Honorary Chairman of the Radio Conference, Dr. E. Weber, Director-General of the Swiss P.T.T. We are likewise grateful to our Vice-Chairmen of the Conferences : Mr. Libero de Miranda and Mr. Katsuzo Okamura for the Plenipotentiary Conference and Senor Juan Autelli and Dr. Sarwate for the Radio Conference.

"These eminent gentlemen have served these conferences in a most efficient, effective and diplomatic manner. They have worked arduously on our behalf in bringing these conferences to a successful conclusion.

" Under their leadership, the Conferences have achieved truly constructive results, in fact far better results than seemed possible when judging the vast number of differing proposals which confronted the delegations at the beginning of these Conferences.

" The complexity of our work has been tremendous. Nevertheless, the Conferences have managed successfully to reach acceptable solutions with respect to over 6,000 proposals to revise the International Radio Regulations which have been in force since 1947.

" There were nearly 90 nations represented at the Conferences. These nations sent highly trained delegates who were proficient in the administrative, operational and technical field of radio communications. Consequently, the atmosphere of the Conferences may be characterized generally as friendly but businesslike. That is to say, logic rather than sentiment has prevailed. The delegates conducted themselves as professionals dedicated to achieve results in the international coordination of radio communications. These results are designed for the benefit of the public in all of the nations of the world.

" Among the more important actions of the Plenipotentiary Conference was the recognition of the needs of the new and developing countries by providing technical assistance in establishing their communications systems. Likewise more extensive representation was provided for the Administrative Council which was increased from eighteen to twenty-five members. Moreover, the Conference reorganized the International Frequency Board to provide for the election of experts by name rather than by country. Finally, the Conferences wisely provided for the financing of the ever increasing work load of this most important International Telecommunication Union.

" The Administrative Radio Conference, as stated by its Chairman, has recognized the most recent developments in radio spectrum usage. The allocation of radio spectrum space was extended to 40,000 megacycles. The previous limit was 10,500 megacycles. This means the Conference decided that the useful radio spectrum should be increased by three times its present amount.

" Another important accomplishment of the Radio Conference is the agreement to accept new procedures to enhance the efficiency of operation of stations using frequencies within the radio spectrum space allocated to each service. One of the objectives of these new procedures is to accommodate the ever-increasing demands for additional radio service. Those portions of the radio spectrum which are most useful for long-distance international communications, including trans-oceanic telegraph and telephone service, overseas aeronautical service and maritime telephone and telegraph as well as international radio broadcasting are now already heavily overloaded.

"The new procedures should result in improved efficiency for these long-distance uses of radio.

" Another important provision designed to improve the efficiency of radio service is the agreement to use more modern techniques. This is accomplished by adopting stricter technical performance requirements for radio equipment. It is expected that the net result of these more modern requirements also will be of assistance in accommodating the ever increasing demands for radio spectrum usage.

" The existing Radio Regulations governing international operating procedures for establishing contact and handling messages between ship and shore, between ships, between aircraft and land stations, between aircraft themselves and between aircraft and ships have been extended and modernized. The radio communication procedures involving distress and rescue at sea have been improved. A new international standard pronunciation for various code words used in radio telephone communication by ships and aircraft has been agreed upon. This will facilitate exchange of information particularly in distress and rescue operations by ships and aircraft of various nationalities.

" Finally, the Radio Conference adopted the words "gigacycles per second" and "teracycles per second" to express frequencies above 3,000 megacycles per second. This is indeed an innovation which may plague those of us who are older than the proponents of this new language. For example, this is the fourth time I have been required to learn new terminology. I started with wave lengths, then kilocycles, then megacycles and now gigacycles and teracycles.

" Now, ladies and gentlemen, I know you will agree unanimously that the Chairmen of Committees, Sub-committees, Working Groups and Sub-Working Groups deserve the commendation of these Conferences for their able leadership. Likewise I know that all of us appreciate that these leaders spent hours upon hours of arduous and painstaking work on our behalf. Special commendation should be made to Mr. Henry, Chief of the Delegation of France, at the Radio Conference, for his superlative leadership and guidance of a most competent Drafting Committee.

" We likewise owe a debt of gratitude to the Secretary General, Mr. Gross, to the Deputy Secretary of the Conference, Mr. Stead, and to the entire Secretariat for the efficient manner in which the members of that staff have assisted the Conference in its administrative work and day to day operation. In particular, we appreciate the work done by the staff behind the scenes, the minute writers, also those at the reception desks and the ladies who served us at coffee breaks. Their's was a tremendous task exceedingly well done. In like manner, we are deeply appreciative of the assistance rendered this Conference by the C.C.I.s. and, in particular, the I.F.R.B. Because of their superior technical knowledge, this Conference has avoided many pitfalls.

" Last, but by no means least, we must honour the most efficient interpreters in the world to-day. They translate into the official languages of the Conference the most complex terms of radio technology. They have been constantly on duty day and night, Sundays, and holidays for the past four months without one word of complaint. I know the delegations of these Conferences will agree unanimously that these ladies and gentlemen deserve our hearty thanks for a task superbly done.

" In conclusion, the delegates again express our appreciation for the effective leadership of our respective Chairmen and Vice-Chairmen and we wish them a happy and safe voyage to their homelands."

Mr. Chairman, Mr. van der Toorn, thanked Mr. Craven for his reply speech, which had been very much appreciated.

8. Formal closing of the Conferences by the Chairman of the Plenipotentiary Conference

Mr. van der Toorn, Chairman of the Plenipotentiary Conference, in closing the Joint Plenary Session, said :

"Our work is finished. You can now go home with satisfaction and be proud of the results achieved. We all will spread out in the different directions in which the wind blows - we return to our homes all over the world. May you have a good return and may you find your families, from whom you have been so long separated, well and safe. I wish you a Happy Christmas and a Prosperous New Year.

" May our feelings of friendship and the spirit of cooperation which has existed here between us not be influenced by the distance which, from now on, will separate us again.

May God bless you all."

The 30th Plenary Meeting of the Plenipotentiary Conferences and the 32nd Plenary Meeting of the Radio Conference were formally declared closed, and the Meeting rose at 7.50 p.m.

Rapporteur :

J. Umberg

Secretary of  
the Conference :  
Gerald C. Gross

Chairman :

J.D.H. van der Toorn

A N N E X

The Representatives of the following countries signed the Final Acts of both the Plenipotentiary Conference and the Administrative Radio Conference, unless specific mention is made to the contrary.

|  |  |
|--|--|
| Afghanistan  | Cuba   |
| Albania (People's Republic of)   | Denmark  |
| Saudi Arabia (Kingdom of)  | Dominican Republic   |
| Argentine (Republic)   | El Salvador (Republic of)  |
| Australia (Commonwealth of)  | Spain  |
| Austria  | Overseas States of the<br>French Community and French<br>Overseas Territories  |
| Belgium  |  |
| Bielorussian Soviet<br>Socialist Republic  | United States of America (did not<br>sign the Additional Radio<br>Regulations) |
| Burma (Union of)   | Ethiopia   |
| Bolivia  | Finland  |
| Brazil   | France   |
| Bulgaria (People's Republic of)  | Greece   |
| Cambodia (Kingdom of)<br>(signed the Final Acts<br>of the Radio Conference only) | Guatemala  |
| Canada   | Hungarian People's Republic  |
| Ceylon   | India (Republic of)  |
| China  | Indonesia (Republic of)  |
| Vatican City (State of the)  | Iran   |
| Colombia (Republic of)   | Iraq (Republic of)   |
| Belgian Congo and Territory<br>of Ruanda-Urundi                                  | Ireland  |
| Korea (Republic of)  | Iceland  |
| Costa Rica   | Israel (State of)  |
|  | Italy  |

|  |  |
|--|--|
| Japan  | Federal Republic of Germany  |
| Jordan (Hashemite Kingdom of)  | Federal People's Republic<br>of Yugoslavia   |
| Kuwait   | Ukrainian Soviet Socialist<br>Republic   |
| Laos (Kingdom of)<br>(signed Final Acts of<br>Plenipotentiary Conference only) | Roumanian People's Republic  |
| Lebanon  | United Kingdom of Great Britain<br>and Northern Ireland  |
| Libya (United Kingdom of)  | Sudan (Republic of)  |
| Luxembourg   | Sweden   |
| Malaya (Federation of)   | Swiss (Confederation)  |
| Morocco (Kingdom of)   | Czechoslovakia   |
| Mexico   | Territories of the United States<br>of America   |
| Monaco   | Overseas Territories for the Inter-<br>national Relations of which the<br>Government of the United Kingdom of<br>Great Britain and Northern Ireland<br>are responsible |
| Nepal  | Thailand   |
| Nicaragua  | Tunisia  |
| Norway   | Turkey   |
| New Zealand  | Union of South Africa  |
| Pakistan   | Union of Soviet Socialist Republics  |
| Netherlands (Kingdom of the)   | Uruguay (Oriental Republic of)   |
| Peru   | Venezuela (Republic of)  |
| Philippines (Republic of)  | Vietnam (Republic of) (signed Final<br>Acts of Plenipotentiary Conference<br>only)   |
| Poland (People's Republic of)  | British East Africa  |
| Portugal   |  |
| Portuguese Oversea Provinces   |  |
| United Arab Republic   |  |



# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. 915-E  
22 December, 1959

## LIST OF DOCUMENTS PUBLISHED BY THE CONFERENCE Nos. 901 to 915

| No.           | Origin                     | Destination     | Title   |
|---------------|----------------------------|-----------------|---|
| 901           | Kingdom of the Netherlands | Plenary Meeting | Final Protocol  |
| 902           | Colombia                   | Plenary Meeting | Final Protocol  |
| 903           | Plenary Meeting            | Plenary Meeting | Minutes - 26th Plenary Meeting, 16 December 1959, 3.15 p.m.                                       |
| 904           | Plenary Meeting            | Plenary Meeting | Minutes - 27th Plenary Meeting, 17 December, 1959, 2.30 p.m.                                      |
| 905           | Committee 2                | Plenary Meeting | Third Report of the Credentials Committee   |
| 906<br>Rev. 1 | Presidence                 | Plenary Meeting | Agenda - Thirty-first Plenary Meeting, 21 December, 1959, 2.30 p.m.                               |
| 907           | Peru                       | Plenary Meeting | Final Protocol  |
| 908           | Plenary Meeting            | Plenary Meeting | Minutes - 28th Plenary Meeting, 19 December, 1959, 11.30 a.m.                                     |
| 909           | Plenary Meeting            | Plenary Meeting | Minutes - 29th Plenary Meeting, 18 December, 1959, 11.45 a.m.                                     |
| 910           | Plenary Meeting            | Plenary Meeting | Minutes - 30th Plenary Meeting, 21 December, 1959, 4 p.m.   |
| 911           | Presidence                 | Plenary Meeting | Agenda - Joint Closing Plenary Session, 32nd and last Plenary Meeting, 21 December, 1959, 4 p.m.  |
| 912           | Plenary Meeting            | Plenary Meeting | Minutes - 31st Plenary Meeting, 21 December, 1959, 2.30 p.m.                                      |
| 913           | Committee 2                | Committee 2     | Minutes - 6th Meeting, 19 December, 1959, 11.30 a.m.  |
| 914           | Plenary Meeting            | Plenary Meeting | Minutes - Joint Closing Plenary Session, 32nd and last Plenary Meeting, 21 December, 1959, 5 p.m. |
| 915           | Secretariat                |                 | Last List of Documents published by the Conference, Nos. 901-915                                  |

