



Documents of the World Maritime Administrative Radio Conference (WMARC-74)

(Geneva, 1974)

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INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Corrigendum to
Addendum 1 to
Document No. 201-E
22 May 1974
Original : English

COMMITTEE 5

Korea

PROPOSALS FOR THE WORK OF THE CONFERENCE

In response to the appeal in Committee 5C on Tuesday, 21 May,
the Republic of Korea has reduced its requirements to the following totals :

Frequency Band (MHz)	4	6	8	12	16	22
No. of Existing Channels	1	-	1	-	-	-
No. of new requirements	1	2	1	2	2	2
Total	2	2	2	2	2	2



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Addendum No. 1 to
Document No. 201-E
20 May 1974
Original : English

COMMITTEE 5

Korea

PROPOSALS FOR THE WORK OF THE CONFERENCE

The additional HF frequency requirements of the Republic of Korea in the revised Frequency Allotment Plan for coast radiotelephone stations (Appendix 25 Mod. to the Radio Regulations) will be as follows :

Frequency Bands	4	6	8	12	16	22
No. of SSB channels required	6	2	6	5	5	5



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 201-E
25 April 1974
Original: English

COMMITTEE 5

Korea

PROPOSALS FOR THE WORK OF THE CONFERENCE

FREQUENCIES FOR HF RADIOTELEPHONY

The frequency requirements of the Republic of Korea to be taken into consideration in the revision of the Frequency Allotment Plan for Coast Radio-telephone Stations (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands (in MHz)	4	6	8	12	16	22
Number of single side band channels	2	2	2	1	1	1



MARITIME CONFERENCE

GENEVA, 1974

Document No. 202-E

25 April 1974

Original : English

COMMITTEE 5

Federal Republic of Germany

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item No. 1

The frequency requirements of the Federal Republic of Germany in the revised Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands between 4 000 and 23 000 kHz (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands in MHz	4	6	8	12	16	22
Number of SSB channels	5	1	5	5	5	5



MARITIME CONFERENCE

GENEVA, 1974

Document No. 203-E

25 April 1974

Original : French

Note by the Secretary-General

PROXY

(Group of Territories represented by the
French Overseas Post and Telecommunication Agency)

The Minister of Posts and Telecommunications, Paris, announces that the French Delegation to the Maritime Conference is duly accredited and has power to vote and sign on behalf of the "Group of Territories represented by the French Overseas Post and Telecommunication Agency" on the questions to be dealt with during the Conference.

M. MILI

Secretary-General



MARITIME CONFERENCE**GENEVA, 1974**Document No. 204-E

25 April 1974

Original : FrenchCOMMITTEE 5People's Republic of the Congo

PROPOSALS FOR THE WORK OF THE CONFERENCE

With the aim of improving its maritime radio service, the Congolese Administration herewith sets forth its frequency needs to be taken into account when the Frequency Allotment Plan for coast radiotelephone stations (Appendix 25 to the Radio Regulations) is revised.

Frequency bands (in MHz)	4	6	8	12	16	22
Number of single sideband channels	2	2	3	3	2	2



PLENARY MEETING

Memorandum by the Secretary-General

CHAIRMEN AND VICE-CHAIRMEN OF THE CONFERENCE

(adopted at the First Plenary Meeting)

Chairman of the Conference	United Kingdom of Great Britain and Northern Ireland (Mr. R.M. Billington, O.B.E., T.D., D.L.)
Vice-Chairman of the Conference	People's Republic of China (Mr. Liu Yun-chou)
Vice-Chairman of the Conference	United States of America (Mr. Robert E. Lee)
Vice-Chairman of the Conference	Union of Soviet Socialist Republics (Mr. A.L. Badalov)
Vice-Chairman of the Conference	Republic of the Senegal (Mr. A. M'Edji Dione)

Com. 1

Com. 2 (Credentials)

Chairman	Republic of Liberia (Mr. Samuel H. Butler)
Vice-Chairman	Malaysia (Mr. Mah Seck Wah)

Com. 3 (Budget control)

Chairman	Hungarian People's Republic (Mr. Janos Szekely)
Vice-Chairman	Federal Republic of Nigeria (Mr. G.C. Okoli)



Com. 4 (Radiotelegraphy)

Chairman.

Kingdom of the Netherlands
(Capt. V.R.Y. Winkelman)

Vice-Chairman

Kingdom of Saudi Arabia
(Mr. Ahmed Zaidan)

Com. 5 (Radiotelephony)

Chairman

Norway (Mr. O.J. Haga)

Vice-Chairman

Argentine Republic
(Mr. Cesar Trombetta)

Com. 6 (Operation)

Chairman

Canada (Mr. W.W. Scott)

Vice-Chairman

Federative Republic of Brazil
(Mr. A.C. de Araujo Ituassú)

Com. 7 (Editorial)

Chairman

France (Mr. P. Chaspoul)

Vice-Chairman

United Kingdom of Great Britain and
Northern Ireland
(Mr. Donald E. Baptiste)

Vice-Chairman

Spain (Mr. F. Molina Negro)

M. MILLI

Secretary-General

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 206-E
25 April 1974
Original : English

COMMITTEE 5

Libyan Arab Republic

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Libyan Arab Republic in the Revised Frequency Allotment Plan (Appendix 25 of the Radio Regulations) are as follows :

Frequency Band in MHz	4	6	8	13	16	22
Number of SSB channels	3	3	2	2	2	2



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 207-E(Rev.1)

29 May 1974

Original : French

COMMITTEE 5

Italy

FREQUENCIES FOR HF RADIOTELEPHONY

The table below gives the number of channels for Italian HF coast radiotelephone stations.

Frequency bands (in MHz)	Number of channels in service	Number of additional channels required
4	6	3
6	2	1
8	6	9
12	6	9
16	6	9
22	6	9



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 207-E
25 April 1974
Original : French

COMMITTEE 5

Italy

FREQUENCIES FOR HF RADIOTELEPHONY

The table below gives the number of channels for HF coast radiotelephone stations in service or planned :

Frequency Bands (in MHz)	Number of Single Sideband Channels
4	6
6	2
8	7
12	7
16	6
22	5



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 208-E
25 April 1974
Original : Spanish

PLENARY MEETING

Republic of Colombia

PROPOSALS FOR THE WORK OF THE CONFERENCE

Towards the middle of this year, the Colombian Communications Administration will put into operation its Barranquilla and Buenaventura coast stations, situated on the Atlantic and Pacific Oceans respectively, thus inaugurating a regular radiotelephone service, within the existing frequency assignments recorded for Colombia with the date 3 December 1951 in column 2a of the Master Register, in accordance with Appendix 25 MOD.

However, with a view to the expansion and improvement of these services, we consider it necessary to add one more frequency in the 16 MHz band, to ensure effective communications not only with the Administration's own ships, but also with those with which direct communications have to be maintained.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 209-E

26 April 1974

Original : FrenchCOMMITTEE 5Republic of Dahomey

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Republic of Dahomey for Cotonou coast station are :

MHz	4	6	8	13	16	22
Number of channels	1	1	1	1	1	1

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 210-E

26 April 1974

Original : English

COMMITTEE 5

Federal Republic of Nigeria

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Federal Republic of Nigeria in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 MOD to the Radio Regulations) published in Document No. 198 supersedes those published in Document No. 143.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 211-E

26 April 1974

Original : English

COMMITTEE 5

Federal Republic of Nigeria

PROPOSALS FOR THE WORK OF THE CONFERENCE

Listed below are the carrier frequencies which, being already recorded in the International Frequency List, Nigeria has a need to retain for its HF ship radiotelephone service.

4 MHz band	-	4 364.7 kHz
6 MHz band	-	6 271 kHz
6 MHz band	-	6 374 kHz
8 MHz band	-	8 360 kHz
8 MHz band	-	{ 8 783.2 kHz
		{ 8 799.2 kHz
13 MHz band	-	13 112.5 kHz



MARITIME CONFERENCE

GENEVA, 1974

Document No. 212-E

26 April 1974

Original : EnglishPLENARY MEETINGUnited Kingdom *)

PROPOSALS FOR THE WORK OF THE CONFERENCE

1. Prior to the 1971 Space Conference the band 14.0-14.3 GHz was allocated to Radionavigation as an exclusive primary service but the band is now shared with the Fixed-Satellite service (earth to space) on an equal primary basis. The Space W.A.R.C. also added footnote 408A which requires any use of the band by the Radionavigation service to be such as to provide sufficient protection to space stations of the Fixed-Satellite service.
2. In accordance with the provisions of Recommendation Spa2 - 15, paragraph 2.14, the C.C.I.R. has studied the criteria for frequency sharing between the radionavigation service and the fixed-satellite service (earth to space) in the band 14.0-14.3 GHz. The results of this study show that the level of protection required by the space service is such as to virtually rule out the use of this band for all but small numbers of very low-power radionavigation devices. There is therefore a need to select another band, preferably as near as possible to the 14.0-14.3 GHz band, to accommodate the maritime radionavigation devices which, prior to 1972, could have been assigned frequencies without power restriction in the 14.0-14.3 GHz band.
3. The provision of an alternative band is, of course, a matter which can be dealt with only by the "all service" World Administrative Radio Conference due to be held in 1979 or 1980. However, a possible solution in the meantime would be for the Maritime W.A.R.C. to adopt a Recommendation in the terms of the draft at annex, i.e. to recommend that Administrations should authorize the use of the sub-band 13.4-13.6 GHz, in the 13.4-14 GHz Radiolocation band, for maritime mobile radionavigation devices - of up to, and including, 5 kW effective radiated peak envelope power - where such devices cannot be accommodated in the 14.0-14.3 GHz Radionavigation band due to the power limitation imposed to protect the fixed-satellite service. A power limit of 5 kW has been proposed as the inclusion of radionavigation devices with higher powers in a radiolocation band could well prove unacceptable to the radiolocation service.

Annex : 1

*) See also Documents 57, 152 and 199.



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A N N E XRECOMMENDATION No. MAR D

G/212/290

Relating to the use of the 13.4-14.0 GHz Radiolocation
band by maritime mobile radionavigation devices

The World Maritime Administrative Radio Conference,
Geneva, 1974,

noting

that as a result of the C.C.I.R. studies carried out in accordance with Recommendation Spa2 - 15, paragraph 2.14, the criteria for frequency sharing between the radionavigation service and the fixed-satellite service (earth to space) in the frequency band 14.0-14.3 GHz is such as to preclude the use of this band by the radionavigation service, except for a minority of very low power devices;

recognizing

a) that there is a need to accommodate in this part of the spectrum - preferably between 13.0 and 17.0 GHz - maritime mobile radionavigation devices of up to, and including, 5 kW effective radiated peak envelope power, particularly radar navigation devices for small boats;

b) that an alternative allocation for the radionavigation service can be made only by the next World Administrative Radio Conference;

recommends

that until such time as an alternative allocation becomes available, maritime mobile radionavigation devices not exceeding 5 kW effective radiated peak envelope power which, due to the need to protect the fixed-satellite service, cannot be accommodated in the 14.0-14.3 GHz band should be authorized operate in the 13.4-14 GHz Radiolocation band between 13.4-13.6 GHz.

Reasons : To make provision for maritime mobile radionavigation devices, not exceeding 5 kW effective radiated peak envelope power (e.g. small boat radars) which cannot be accommodated in the 14.0-14.3 GHz band due to the need to protect space stations of the fixed-satellite service.

COMMITTEE 1

Argentina

PROPOSALS FOR THE WORK OF THE CONFERENCE

The Argentine Administration, after carefully analyzing the various proposals for the amendment of Appendices 17 and 25 MOD II, proposes the following measures:

1. To reduce the separation between telephony channels to 3 kHz.
2. To reduce the band assigned to telegraphy as far as possible to provide more channels for telephony.
3. To lay down a procedure for allotting the new frequencies obtained as a result of the measures referred to in 1) and 2) above in an equitable manner and in such a way that channels already allotted, in particular to developing countries, are not affected.
4. The C.C.I.R. should speed up the studies aimed at bringing up to date the technical criteria for receiver selectivity, the protection ratio, etc., in order to ensure a more rational use of the spectrum.
5. On the basis of these studies, the 1979 Conference should be given the task of revising the allocation of the spectrum bands in accordance with the requirements of the various services.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 214-E

26 April 1974

Original: EnglishCOMMITTEE 5Republic of Liberia

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Republic of Liberia in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 to the Radio Regulations) will be as follows:

MHz order	4	6	8	13	17	22
Number of SSB channels	4	-	2	2	2	2
Power, kW (p.e.p.)	5	-	5	5	5	5

MARITIME CONFERENCE

GENEVA, 1974

Document No. 215-E

26 April 1974

Original: English

PLENARY MEETING

COMMITTEES 4, 5
and 6

Memorandum by the I.F.R.B.

MASTER INTERNATIONAL FREQUENCY REGISTER

At the request of the Chairman of the Conference and with a view to assisting Delegations in their work, the International Frequency Registration Board has had prepared for distribution to each Delegation a list of all frequency assignments to coast stations (FC), port stations (FP), ship stations (MS), oceanographic data stations (OD) or oceanographic data interrogating stations (OE) recorded in the Master International Frequency Register on behalf of their respective administrations as of 22 April 1974.

2. In the case of the following frequency bands, entries concerning all assignments (i.e. to all classes of stations in the Maritime Mobile Service and in any other Service) have been included:

1605 - 4000 kHz	4063 - 4438 kHz
6200 - 6525 kHz	8195 - 8815 kHz
12,300 - 13,200 kHz	16,460 - 17,360 kHz
22,000 - 22,720 kHz	25,070 - 25,110 kHz

In each case where notices of frequency assignments in these bands and to a station in one of the five classes of station enumerated in the preceding paragraphs have been received recently by the I.F.R.B. and, as of 22 April 1974, had not been recorded in the Master Register, these have been listed separately for each Delegation concerned.



3. The above lists may be obtained in one copy only for each Delegation on the day of issue of the present document and on the following day, at the special distribution point established near the main entrance of the Conference Centre.

4. The explanation of those symbols or abbreviations which do not appear in the Radio Regulations is to be found in the Preface to the International Frequency List which is the published version of the Master Register. For ease of reference, the relevant parts of the Preface and of the Tables annexed thereto are reproduced in the Annex to the present Memorandum.

5. Additionally, the I.F.R.B. has had prepared one master copy which is available for consultation only, by any Delegation upon request at Office H123 (Mr. M. Frachet - preferably just outside meeting hours) and by any Committee or Working Group upon request to the Technical Secretary. This list contains all assignments to which reference is made above recorded in the Master Register as of 22 April 1974, but arranged in ascending order of frequency as they appear in the International Frequency List.

A.N. Gromov
Chairman
International Frequency Registration Board

Annex: 1

EXTRACT OF THE

PREFACE

TO THE

INTERNATIONAL FREQUENCY LIST

7th Edition

1 February 1973



International Telecommunication Union

Geneva

Printed in Switzerland

SPECIAL NOTICE

No frequency assignment notice concerning a station in a Space Radiocommunication Service or a Terrestrial Radiocommunication Service in a frequency band shared with a Space Radiocommunication Service, received after the entry into force of the decisions of the Space Conference, Geneva, 1971, on 1 January 1973, was entered into the Master Register as of 1 February 1973 the date of the present Edition of the International Frequency List.

A practical consequence of this is that in the present Edition of the Preface to the International Frequency List, references to specific paragraphs of the Radio Regulations are made using the numbers appearing in the 1968 Edition of the Radio Regulations prior to revision by the Space Conference, Geneva, 1971.

It follows that after any revision of the Master Register consequential to the decisions of the Space Conference, Geneva, 1971, revised texts based on the 1971 revision of the Radio Regulations will be published in a forthcoming Supplement to the present 7th Edition of the Preface.

PREFACE TO THE INTERNATIONAL FREQUENCY LIST

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PREFACE

1. General

- 1.1 The International Frequency List is a service document published by the International Telecommunication Union.
- 1.2 The International Frequency List is printed from information recorded in the Master International Frequency Register. This information was compiled in accordance with Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959, and is kept up to date by the International Frequency Registration Board in accordance with the provisions of the Radio Regulations. It is presented in the manner prescribed in Appendix 9 to the Radio Regulations.

- 1.3 The International Frequency List is published in nine parts as follows:

Preface

- | | |
|-------------------|---|
| Volume I | — particulars of frequency assignments between 10 kHz and 4 063 kHz |
| Volume II | — particulars of frequency assignments between 4 063 kHz and 7 000 kHz |
| Volume III | — particulars of frequency assignments between 7 000 kHz and 11 700 kHz |
| Volume IV | — particulars of frequency assignments between 11 700 kHz and 28 000 kHz |
| Volume V, Part a) | — particulars of frequency assignments in the bands between 28 MHz and 50 MHz, excluding broadcasting stations |
| Volume V, Part b) | — particulars of frequency assignments in Region 1 in the bands between 50 MHz and 40 000 MHz, and of assignments to broadcasting stations in Region 1 in the bands between 28 MHz and 50 MHz |
| Volume V, Part c) | — particulars of frequency assignments in Region 2 in the bands between 50 MHz and 40 000 MHz |
| Volume V, Part d) | — particulars of frequency assignments in Region 3 in the bands between 50 MHz and 40 000 MHz and of assignments to broadcasting stations in Region 3 in the bands between 28 MHz and 50 MHz |

2. Mode of Preparation

In order to take maximum advantage of the mechanical-electronic system used for keeping up to date the Master International Frequency Register the International Frequency List is an "offset" reproduction of information printed by an electronic computer. The fact that each line of information is limited to 166 characters, together with the requirement for publication of the List in several languages, has necessitated recourse to the use of abbreviations, symbols and coded remarks. These are explained, either hereinafter, or in the following tables which are annexed to this Preface:

Table No. 1 — Country Symbols

Table No. 2 — Standard Abbreviations and Symbols

Table No. 3 — General Remarks (pink paper)

Table No. 4 — Special Remarks applying to specific countries (pink paper)

Table No. 5 — Administrations, operating agencies and postal and telegraphic addresses of the Administrations responsible for the stations (blue paper)

Table No. 6 — Symbols representing the Findings of the I.F.R.B. and related Remarks (yellow paper)

Table No. 7 — Frequencies prescribed by the Radio Regulations for common use by stations of a given service

3. Maintenance of the International Frequency List

The International Frequency List is kept up to date by quarterly recapitulative supplements. New editions will appear when considered necessary, but at intervals not exceeding two years.

4. Individual and collective entries

- 4.1 An individual entry appears in the List for each frequency assignment made to a fixed, land, broadcasting, earth, space, radionavigation land, radiolocation land or standard frequency station or to a ground-based station in the Meteorological Aids Service.

- 4.2 Individual entries also appear in the List for each frequency to be used for the reception of mobile, earth or space stations by a particular station or to be used for reception by a particular radio astronomy station.
- 4.3 In the frequency bands above 28 000 kHz, some entries (marked "RR490" in Column 13c) are presented in accordance with the principles explained in No. 490 of the Radio Regulations.
- 4.4 Except for standard frequency stations and frequencies specified in Appendix 18 to the Radio Regulations no entries for specific stations or countries have been included in the List in the case of frequencies prescribed by the Radio Regulations for common use by stations of a given service. These frequencies—amongst which are those specified in Appendices 15 and 17 to the Radio Regulations—are listed in Table No. 7 and shown in the International Frequency List as described in paragraph 11.3.2.
- 4.5 Amateur stations using a particular frequency or frequency band are shown collectively under the name of each country which has so notified them.
- 4.6 Article 9 of the Radio Regulations makes no provision for the notification to the I.F.R.B. of frequencies used by mobile stations to communicate between themselves. Hence neither the Master International Frequency Register nor the International Frequency List should contain entries relating to frequencies so used. However, Resolutions Nos. 1 and 15 of the Administrative Radio Conference, Geneva, 1959, make an exception for entries relating to frequencies assigned by the Extraordinary Administrative Radio Conference, Geneva, 1951, to particular countries for ship-to-ship communications in the regional bands, and for entries of a similar kind included subsequently in the Master Register. Furthermore, the allotments appearing in the plans adopted for the Radiotelephone Maritime Mobile Service and the Aeronautical Mobile Service (Appendices 25, 26 and 27 to the Radio Regulations) have also been included in the Master Register, in accordance with Resolution No. 1, paragraph 2.1c) of the Administrative Radio Conference, Geneva, 1959.

5. Remarks applicable to all columns of the International Frequency List

- 5.1 In order to assist the reader, dashed horizontal lines have been inserted between each successive group of three lines of information. As a consequence, in some instances a dashed horizontal line separates lines of information pertaining to the same entry.
- 5.2 It should be noted that information pertaining to the same entry and involving more than one line may be divided between the bottom of a page and the top of the following page.
- 5.3 As a general rule, an asterisk in a column means that all the information available cannot be included therein. In this case, the asterisk is repeated in the column "Other remarks" (Column 13c) where it is immediately followed by the additional information.
- 5.4 When there are two or more lines for any one entry, the data on the first line apply to the entire entry, unless otherwise indicated.

6. Column 1 — Assigned frequency (kHz or MHz)

- 6.1 All frequencies up to and including 28 000 kHz are expressed in kilohertz; all frequencies above that value are expressed in megahertz. A light vertical dashed line is used instead of a decimal point in this column.
- 6.2 When a frequency band has been notified, the lower limit only is shown in this column. The lower and upper limits of the band in question are shown in Column 5a.
- 6.3 Meaning of the symbols on the left of the frequency (Column 1):
 - 1 — A new entry, included in the Master International Frequency Register **since the publication of the last recapitulative supplement** (Supplement No. 7) to the sixth edition of the International Frequency List
 - 10 — Modification of an entry, included in the Master International Frequency Register **since the publication of the last recapitulative supplement** (Supplement No. 7) to the sixth edition of the International Frequency List.

7. Column 2c — Date of putting into use

The symbol "V", followed by "28" means that the notified date of putting into use was prior to 1 January 1928.

8. Column 2d — Date of receipt of the notice by the I.F.R.B. when Columns 2a or 2b are not to be used

The symbol *** means:

- either that the information concerning the assignment in question was first notified to the I.F.R.B. pursuant to the provisions of No. 272 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951
- or, if the frequency is above 27 500 kHz, that the I.F.R.B. first received the information concerning the assignment in question before 1 April 1952.

9. Column 3 — Call sign (Identification)

- 9.1 In this column, data representing identification signals which are not call signs from the international series are followed by two asterisks.
- 9.2 Other data, which are not call signs from the international series, are replaced by an asterisk showing that the information in question is given in Column 13c.

10. Column 4a — Name of the transmitting station

- 10.1 Table No. 2 gives the standard abbreviations and symbols used in this column, together with their meanings.
- 10.2 In certain instances, the name of the station is followed by the abbreviated name of the state or province in which the station is located.
- 10.3 The symbol "R" means that the entry concerns a reception frequency.
- 10.4 The symbol "RA" means that the entry concerns a frequency used for reception by a radio astronomy station.
- 10.5 The explanation of the symbols designating areas shown in this column in respect of allotments appearing in the plan adopted for the Aeronautical Mobile (R) Service is given in Part II of Appendix 27 to the Radio Regulations.

11. Column 4b — Country in which the transmitting station is located

- 11.1 The name of the country in which the transmitting station is located is represented by a symbol which is explained in Table No. 1. In the case where the entry concerns a reception frequency, this symbol indicates the country in which the receiving station is located. The presence of any given symbol designating a country with respect to a frequency assignment to a station is without prejudice to any question of territorial status which may be involved.
- 11.2 The country symbols have a geographical significance only. In each case where the administration responsible for a particular assignment cannot be readily inferred from the symbol, a suitable remark has been included in Column 13c against the assignment in question. In this case the name of the station in Column 4a is followed by an asterisk.
- 11.3
 - 11.3.1 Table No. 7 shows the frequencies (accompanied by their descriptive symbols) prescribed in the Radio Regulations for common use by the stations of a given service.
 - 11.3.2 The symbol "AAA" indicates that the frequency is for world-wide common use by the stations of a given service. The symbol "AAB" indicates that the frequency is for common use by the stations of a given service, but in an area less than world-wide in scope. Where appropriate, the symbol "AAA", or "AAB", is followed by a symbolized description of the common use, with a reference to the relevant number of the Radio Regulations; this description is given in Columns 4a and 5a.

12. Column 4c — Geographical co-ordinates of the transmitter site (longitude and latitude) in degrees and minutes

- 12.1 Geographical co-ordinates are given in degrees and minutes.
- 12.2 The appropriate symbol E, W, N or S, representing the four cardinal points, is placed between the number indicating the degrees and that indicating the minutes.
- 12.3 In the case where the entry concerns a reception frequency, these geographical co-ordinates are those of the site of the receiving station.

13. Column 5a — Locality(ies) or area(s) with which communication is established

- 13.1 In principle, the data in this column are of a geographical nature only. The abbreviations and symbols used are listed in Table No. 2.

- 13.2 When one or more entire countries have been designated as the reception area, the country symbols shown in Table No. 1 of the present Preface have been used.
- 13.3 In principle, the symbol representing the name of the country in which the reception station is located has been shown whenever this country is different from the country in which the transmitting station is located.
- 13.4 The explanation of the symbols designating areas shown in this column in respect of certain frequency assignments to aeronautical stations, in particular of those made in conformity with the plan adopted for the Aeronautical Mobile (R) Service, is given in Part II of Appendix 27 of the Radio Regulations.

14. Column 5b — Length of circuit (km)

In the case of a network where more than one distance has been notified, only the maximum distance is shown in this column.

15. Column 6 — Class of station and nature of service

The symbols used in this column are those specified in the Radio Regulations (Appendix 10).

16. Column 7 — Class of emission, necessary bandwidth and description of transmission

- 16.1 The bandwidth of emission is shown before the class of emission or group of classes of emission concerned. In the latter case, the bandwidth shown is that which applies to the class of emission having the widest bandwidth.
- 16.2 The symbol "S" is used in this column to designate the Hell-Schreiber system.
- 16.3 The other symbols used in this column are those specified in Section 1 of Article 2 of the Radio Regulations.
- 16.4 In the case where the entry concerns a frequency used for reception by a radio astronomy station, the number shown in this column represents the width of the frequency band observed.
- 16.5 Where the entry, notified after the 1st January 1973, concerns a space radiocommunication, this column may contain the assigned bandwidth, and where the entry also includes carriers in Column 13c, it contains the necessary bandwidth.

17. Column 8 — Power (kW)

- 17.1 In principle, the number shown in this column represents the value in kilowatts of the power specified in Appendix 1, or the Appendix 1A, to the Radio Regulations for the class of emission or type of transmission shown in Column 7.
- 17.2 In the following cases, however, the number shown in this column does not represent the value of the power in kilowatts:
 - 17.2.1 When the notified power is less than 10 watts, the number which appears in this column represents the value of the power in watts. In this case it is preceded by the symbol W.
 - 17.2.2 When the notified power is greater than 999.99 kilowatts, the number which appears in this column represents the value of the power in Megawatts. In this case it is preceded by the symbol M.
 - 17.2.3 When the notified power is less than 10 milliwatts, the number which appears in this column represents the value of the power in milliwatts. In this case it is preceded by the symbol MW.
- 17.3 The symbol "E" preceding or following the indication of the value of the power means that it is the effective radiated power.
- 17.4 The number has been rounded up, where necessary, to permit insertion in the space available. A light vertical dashed line is used instead of a decimal point in this column.
- 17.5 In the frequency bands allocated exclusively to the Aeronautical Mobile Service between 2 850 and kHz 18 030 kHz, the peak envelope power is indicated by the symbol "P" in this column. For mean power, no symbol is used in this column.

18. Column 9a — Azimuth of maximum radiation

The symbol "ND" indicates that positive information has been supplied that the antenna is non-directional.

19. Column 10 — Maximum hours of operation of the circuit to each locality or area (G.M.T.)

- 19.1 The hours of operation of the circuits are shown in this column by whole numbers, separated by a light vertical dashed line. In order to conserve space, fractions of hours, when notified, have been rounded off to the nearest whole number. This has been done in such a manner that the whole period notified by the administration concerned is included in the rounded figures. (For the indication of hours or periods of use of the frequency, see Table No. 3).
- 19.2 Symbols composed of one or two letters, used in this column, are those specified in Appendix 10 to the Radio Regulations.
- 19.3 In the frequency bands allocated exclusively to the Broadcasting Service between 5950 kHz and 26 100 kHz, the hours of operation of the broadcasting stations are indicated by the symbol "H" (in the case of a specific schedule) or by the symbol "H24", as appropriate.

20. Column 11 — Megahertz order of the other frequencies normally utilized for the same circuit

- 20.1 The numbers shown in this column represent the megahertz order of the other frequencies normally used for the circuit over the whole of the solar cycle. For this purpose, these megahertz orders are determined in Appendix 1 to the Radio Regulations.
- 20.2 The symbol X indicates that the frequency which appears in Column 1 is the only frequency used for the particular circuit.

21. Columns 12a and 12b — Operating Administration or Company

— Postal and telegraphic address of the Administration responsible for the station

- 21.1 The information in these columns has been indicated by numerical and letter codes respectively, there being a separate series for each country symbol.
- 21.2 The meaning ascribed to each letter and each number is to be found in Table No. 5 (blue paper).

22. Columns 13a and 13b — Results of examination and investigations by the I.F.R.B.

— Remarks related to the Finding by the I.F.R.B.

- 22.1 The symbols used in these columns represent the Findings of the I.F.R.B. and related remarks. The explanation is given in Table No. 6 (yellow paper).
- 22.2 Each Finding is represented by one or more symbols which are inserted in Column 13c and may be accompanied by one or more additional symbols representing related remarks which are entered in Column 13b. In the case of codings composed of more than one symbol, each component symbol retains its full meaning.

23. Column 13c — Other remarks

The types of remarks used in this column are:

- 23.1 An asterisk followed immediately by data which could not be inserted in the column to which the asterisk refers (see paragraph 5.3). If the asterisk refers to two or more columns, the data following it are placed in the numerical order of the corresponding columns in the International Frequency List.
- 23.2 General Remarks, represented by symbols of one or more letters or numbers of one or more digits; the explanation of these symbols and remark numbers is given in Table No. 3 (pink paper). The symbol or number representing a General Remark is sometimes followed by figures which supply information indicated by the text of that remark; in the case of a General Remark indicated by a number, these following figures are separated from the remark number by a stroke (/); a group of six digits immediately following a symbol or a remark number represents a date.
- 23.3 Special Remarks applying to a specific country, which are represented by the country symbol followed by one or more figures; the explanation is given in Table No. 4 (pink paper); these remarks are classified therein by alphabetical order of country symbols.

TABLE No. 1
COUNTRY SYMBOLS

Meanings of the symbols used in Columns 4b and 5a of the International Frequency List

N.B.: The country symbols have a geographical significance only

Symbol	Name of the country	Symbol	Name of the country
AAA	Shared throughout the world	CLM	Republic of Colombia
AAB	Shared by several countries, but in a restricted area of the world	CLN	Sri Lanka (Ceylon) (Republic of)
ADL	Adelie Land	CME	United Republic of Cameroon
AFG	Afghanistan	CNR	Canaries
AFI	French Territory of the Afars and Issas	COG	People's Republic of the Congo
AFS	Republic of South Africa ¹	COM	Comoro Islands
AGL	Angola	CPV	Cape Verde Islands
ALB	People's Republic of Albania	CTI	Republic of the Ivory Coast
ALG	Algeria (Algerian Democratic and Popular Republic)	CTR	Costa Rica
ALS	State of Alaska, United States of America	CUB	Cuba
AMS	New Amsterdam Island	CVA	Vatican City State
AND	Andorra	CYP	Republic of Cyprus
AOE	Spanish Province in West Africa	D ²	Germany
ARG	Argentine Republic	DAH	Republic of Dahomey
ARS	Kingdom of Saudi Arabia	DNK	Denmark
ASC	Ascension	DOM	Dominican Republic
ASO	South-West Africa	E	Spain
ATN	Netherlands Antilles	ECA	Communication-satellite space station(s) for use by the Administration or Administrations whose names appear in Column 12b
AUS	Commonwealth of Australia	ECB	
AUT	Austria	ECC	
AZR	Azores	ECD	
B	Brazil	ECE	
BAH	Bahamas	ECF	
BAS	Kingdom of Lesotho	ECG	
BCH	Republic of Botswana	ECH	
BDI	Republic of Burundi	ECI	
BEL	Belgium	ECJ	
BER	Bermuda	ECK	Egypt (Arab Republic of)
BIO	British Indian Ocean Territory	ECL	
BLR	Bielorussian Soviet Socialist Republic	EGY	
BOL	Bolivia	EHA	
BRB	Barbados	EHB	
BRM	Union of Burma	EHC	
BRU	Brunei	EHD	
BUL	People's Republic of Bulgaria	EHE	
CAF	Central African Republic	EHF	
CAN	Canada	EHG	Space research space station(s) for use by the Administration of Administrations whose names appear in Column 12b
CAR	Caroline Islands	EHH	
CBG	Khmer Republic	EHI	
CGO	Zaire (Republic of)	EHJ	
CHL	Chile (except Easter Island)	EHK	
CHN	China (People's Republic of)	EHL	
CHR	Christmas Island (Indian Ocean)	EHM	
CKH	Cook Islands	EHN	
CKN	Cook Islands (Northern Group)	EHO	
		EHP	
		EHQ	
		EHR	
		EHS	
		EHT	

¹ See I.T.U. Administrative Council Resolution No. 619 (22nd Session, 1967)

² New symbols to replace D and GLP are under consideration

Symbol	Name of the country	Symbol	Name of the country
EMA	Meteorological-satellite space station(s) for use by the Administration or Administrations whose names appear in Column 12b	IOB	British West Indies
EMB		IRL	Ireland
EMC		IRN	Iran
ENA		IRQ	Republic of Iraq
	Radionavigation-satellite space station(s) for use by the Administration or Administrations whose names appear in Column 12b	ISL	Iceland
EQA		ISR	State of Israel
ETH		IWA	Iwo Jima
		J	Japan
F	France	JAR	Jarvis Island
FJI	Fiji Islands	JMC	Jamaica
FLK	Falkland Islands and Dependencies ³	JON	Johnston Island
FNL	Finland	JOR	Hashemite Kingdom of Jordan
G	United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man	KEN	Kenya
GAB	Gabon Republic	KER	Kerguelen Islands
GCA	Territories and Colonies of the United Kingdom in Region 1	KOR	Republic of Korea
GCB	Territories and Colonies of the United Kingdom in Region 2	KRE	Democratic People's Republic of Korea
GCC	Territories and Colonies of the United Kingdom in Region 3	KWT	State of Kuwait
GDL	French Department of Guadeloupe	LAO	Kingdom of Laos
GHA	Ghana	LBN	Lebanon
GIB	Gibraltar	LBR	Republic of Liberia
GIL	Gilbert and Ellice Islands	LBY	Libyan Arab Republic
GLP ²	Persian Gulf	LUX	Luxembourg
GMB	Gambia (Bathurst)	MAC	Macao
GNE	Republic of Equatorial Guinea	MAU	Mauritius
GNP	Portuguese Guinea	MCO	Monaco
GRC	Greece	MCS	Marcus Island
GRL	Greenland	MDG	Malagasy Republic
GTM	Guatemala	MDR	Madeira
GUB	Guyana	MDW	Midway Islands
GUF	French Department of Guiana	MEX	Mexico
GUI	Republic of Guinea	MLA	Malaysia
GUM	Guam	MLD	Republic of Maldives
		MLI	Republic of Mali
HKG	Hongkong	MLT	Malta
HNB	British Honduras	MNG	Mongolian People's Republic
HND	Republic of Honduras	MOZ	Mozambique
HNG	Hungarian People's Republic	MRA	Mariana Islands
HOL	Kingdom of the Netherlands	MRC	Kingdom of Morocco
HTI	Republic of Haiti	MRL	Marshall Islands
HVO	Republic of Upper Volta	MRN	Marion Island
HWA	State of Hawaii, United States of America	MRT	French Department of Martinique
HWL	Howland Island	MTN	Islamic Republic of Mauritania
		MWI	Malawi
I	Italy	NCG	Nicaragua
ICO	Cocos Keeling Islands	NCL	New Caledonia and Dependencies
IND	Republic of India	NGR	Republic of the Niger
INP	Portuguese India	NGU	Territory of New Guinea
INS	Republic of Indonesia	NHB	New Hebrides (British-French Condominium)
		NIG	Federal Republic of Nigeria
		NIU	Niue Island
		NOR	Norway
		NPL	Nepal
		NRU	Nauru Island
		NZL	New Zealand
		OCE	French Polynesia
		ONC	Stations of the "United Nations Military Observer Group in India and Pakistan"

² New symbols to replace D and GLP are under consideration

³ As regards jurisdiction over the Falkland (Malvinas) Islands and certain other territories, see the statement by the Argentine Republic (paragraph V of the Final Protocol to the International Telecommunication Convention, Montreux, 1965) and that by the United Kingdom of Great Britain and Northern Ireland (paragraph L of that Protocol)

Symbol	Name of the country	Symbol	Name of the country
ONJ	Stations of the "United Nations Truce Supervision Organization in areas between the Armistice Demarcation Lines at Jerusalem"	STP	S. Thome and Principe
PAK	Pakistan	SUI	Confederation of Switzerland
PAP	Territory of Papua	SUR	Surinam
PAQ	Easter Island, Chile	SWN	Swan Island
PHL	Republic of the Philippines	SWZ	Kingdom of Swaziland
PHX	Phoenix Islands	SYR	Syrian Arab Republic
PLM	Palmyra Island	TCD	Republic of the Chad
PNR	Panama	TCH	Czechoslovak Socialist Republic
PNZ	Panama Canal Zone	TGK	United Republic of Tanzania (Tanganyika)
POL	People's Republic of Poland	TGO	Togolese Republic
POR	Portugal	THA	Thailand
PRG	Paraguay	TKL	Tokelau Islands
PRU	Peru	TMP	Portuguese Timor
PTC	Pitcairn Island	TON	Tonga (Kingdom of)
PTR	Puerto Rico	TRC	Tristan da Cunha (Station of the Republic of South Africa)
REU	French Department of Reunion	TRD	Trinidad and Tobago
RHS	Rhodesia ⁴	TUN	Tunisia
ROD	Rodriguez	TUR	Turkey
ROU	Socialist Republic of Roumania	UGA	Uganda
RRW	Republic of Rwanda	UKR	Ukrainian Soviet Socialist Republic
RYU	Ryu Kyu Islands	URG	Oriental Republic of Uruguay
S	Sweden	URS	Union of Soviet Socialist Republics
SDN	Democratic Republic of the Sudan	USA	The 48 contiguous States of the United States of America (excludes the States of Alaska and Hawaii)
SEN	Republic of the Senegal	VEN	Republic of Venezuela
SEY	Seychelles	VIR	Virgin Islands
SHN	S. Helena	VTN	Republic of Viet-Nam
SLM	Solomon Islands	WAK	Wake Island
SLV	Republic of El Salvador	WAL	Wallis and Futuna Islands
SMA	American Samoa	YEM	Yemen Arab Republic
SMO	Western Samoa	YMS	Yemen (People's Democratic Republic of)
SMR	Republic of San Marino	YUG	Socialist Federal Republic of Yugoslavia
SNG	Republic of Singapore	ZAN	United Republic of Tanzania (Zanzibar)
SOM	Somali Democratic Republic	ZMB	Republic of Zambia
SPM	S. Pierre and Miquelon		
SRL	Sierra Leone		

⁴ See Resolution No. 676, I.T.U. Administrative Council, 25th Session, 1970

See Supplement next page.

SUPPLEMENT**TABLE No. 1****COUNTRY SYMBOLS**

Meanings of the symbols used in Columns 4b and 5a of the International Frequency List

Note: The country symbols have a geographical significance only (see No. 837 of the Radio Regulations).

3.3 Pages 10 to 12**3.3.1 Delete the following symbols:**

"BAS	Kingdom of Lesotho"
"CGO	Zaire (Republic of)"
"D	Germany"
"GLP	Persian Gulf "
"NGU	Territory of New Guinea"
"PAP	Territory of Papua"

3.3.2 Add the following symbols, in alphabetical order:

"BGD	Bangladesh"
"BHR	State of Bahrain"
"D	Germany (Federal Republic of)"
"DDR	German Democratic Republic"
"LSO	Kingdom of Lesotho"
"OMA	Sultanate of Oman"
"PNG	Papua New Guinea"
"QAT	State of Qatar"
"UAE	United Arab Emirates"
"ZAI	Zaire (Republic of)"

3.3.3 Replace the indications appearing against symbols "AFG", "AOE", "AUS", "B", "BLR", "BOL", "BRM", "G", "HNB", "KEN", "PNR", "PRG" and "UGA" by the following:

"AFG	Afghanistan (Republic of)"
"AOE	Spanish Saharian Territory"
"AUS	Australia"
"B	Brazil (Federative Republic of)"
"BLR	Byelorussian Soviet Socialist Republic" (concerns the English text only)
"BOL	Bolivia (Republic of)"
"BRM	Burma (Socialist Republic of the Union of)"
"G	United Kingdom of Great Britain and Northern Ireland"
"HNB	Belize"
"KEN	Kenya (Republic of)"
"PNR	Panama (Republic of)"
"PRG	Paraguay (Republic of)"
"UGA	Uganda (Republic of)"

3.3.4 Delete foot-note 2) appearing on the bottom of pages 10 and 11.

TABLE No. 2

STANDARD ABBREVIATIONS AND SYMBOLS

Explanation of the abbreviations and symbols used in Columns 4a and 5a of the International Frequency List

NOTE — In certain instances, the name of the station is followed by the abbreviated name of the state or province in which the station is located.

The explanation of the symbols designating areas shown in respect of allotments appearing in the Plan adopted for the Aeronautical Mobile (R) Service is given in Part II of Appendix 27 to the Radio Regulations.

Abbreviation or symbol	Explanation
AC	Aéronefs, aircraft, aeronave
AFB	Air Force Base
ALL	This symbol, followed by the name of a country, means that the frequency in question has been notified for use throughout that country
B	Baie, Bay, Bukhta
BCH	Beach
BK	Bank
BM	Baggermolen
BO	Boundary
BRDG	Bridge
BT	Butte
BY	Buoy, Bouée, Boya
C	Cabo, Cap, Cape, Capo
CD	Ciudad
CHR	Church
CIRAF	This symbol, preceded or followed by one or more numerals, designates the geographical reception zone or zones determined in accordance with the map annexed to Appendix 1 to the Radio Regulations
CK	Creek
CL	Central
CLLG	College
CNT	Center, Centre
CO	Country
COL	Colonia
CP	Camp, Campo
CRY	Cannery
CTG	Cottage
CY	City
DEP	Depot
DM	Dam
DPT	Department, Département, Departamento, Bezirk
DTO	Destacamento
E	East, Eastern, Est, Este
EN	Estación
ES	Estancia
ESTO	Establecimiento
ET	Estate
EXC	Excepted, Excepté, Excepto
EXTR	This symbol means "external" and indicates that the reception area is outside the country shown in Column 4a
FAR	Farol
FDA	Fazenda
FDO	Fundo
FLD	Field
FLS	Falls
FT	Fort, Forte, Fuerte
FTR	Fire Tower

Abbreviation or symbol	Explanation
GOV	Gobernador, Gobernador
GR	Grand, Grande
GRAL	General
GRD	Guard
GT	Great
GVN	Gavan
HD	Head
HDA	Hacienda
HLL	Hill
HPTL	Hospital
HR	Harbour
HTS	Heights
HVN	Haven
HWAY	Highway
I	Ile, Ilha, Isla, Island, Isle (and plural)
INTR	This symbol means "interior" and indicates that the reception area is within the territory of the country shown in Column 4b
IS	Islands
JN	Junction
L	Lac, Lago, Lake (and plural)
LCL	This symbol means "local" and replaces indications such as "the vicinity of" or "area of" the transmitting station; it has also been used where the same location has been given for reception as for transmission
LD	Land
LDG	Landing
LFB	Lifeboat
LG	Lagoon
LH	Lighthouse
LKT	Lookout
LNG	Lodging
LR	Lower
LSH	Light ship
LSTN	Light station
MON	Monument
MT	Mont, Monte, Mount (and plural)
MTN	Mountain
MTNS	Mountains
MUN	Municipality
N	New, Nouveau, Nouvelle, Nova, Nove, Novo, Nueva, Nuevo
NMON	National Monument
NO	Nord, Norte, North, Northern
NPK	National Park
NRF	National Refuge
NTL	National
OCN STN V	Ocean Station Vessel, Navire-station océanique, Barco-estación oceánica
OFC	Oficina
OSTR	Ostrov
PK	Peak
PMPSTN	Pump station
PNT	Point, Pointe, Ponta, Punta
PR	Prince, Prins, Prinz
PRD	Presidencia, Presidente
PRJ	Project
PRK	Park
PRS	Princess, Princesse
PS	Pass
PT	Port, Porto, Puerto
PWR	Power

Abbreviation or symbol	Explanation
R	This symbol means that the entry concerns a reception frequency
RA	This symbol means that the entry concerns a frequency used for reception by a radio astronomy station
RCH	Ranch
RCK	Rock
RD	Road
RDS	Roads
RG	Range
RGR	Ranger
RK	Rudnik
RPS	Rapids
RPTR	Repeater
RSV	Reserve, Reservation
RV	River
RVSD	Riverside
S	Saint, Sainte, San, Sankt, Santa, Santo, Sao, Svata, Svaty, etc.
SD	Sound
SH	Ship, navire, barco
SHL	Shoal
SHLS	Shoals
SO	Sud, South, Southern, Sur
SPR	Springs
SQ	Square
STN	Station
STRM	Stream
SVZ	Sovkhoz
TP	Township
TR	Tower
TRP	Trap
UP	Upper
V	Vila, Villa, Ville
VLG	Village
VLV	Valley
W	West, Western, Oeste, Ouest
WSH	Weathership
ZN	This symbol means "network". The letter "A" following this symbol designates the first network operated in a particular country by an administration or private operating agency on the frequency shown in Column 1; the letter "B" designates the second network operated in a particular country on this frequency by this administration or private agency, and so on.
ZVD	Zavod

TABLE No. 3

GENERAL REMARKS

Explanation of the symbols and numbers of General Remarks
used in Column 13c of the International Frequency List

1. GENERAL REMARKS REPRESENTED BY SYMBOLS

See the special notice appearing on page 2 of the present edition of the Preface

AE (followed by one or more figures)	The number immediately following this symbol represents, in degrees, the beamwidth between the half power points (see Item 9, paragraph c, of Section B, Item 7, paragraph c, of Section C, Item 10, paragraph a, of Section D or Item 8, paragraph a, of Section E of Appendix 1A to the Radio Regulations, 1963 revision)	quencies to Broadcasting Stations in the African Broadcasting Area in the Bands 525-1605 kHz) for the assignment concerned. The explanation of this remark is given in Chapter 2, paragraph 3 of the said Annex 1 (pages 40 to 43 of the Final Acts of the African LF/MF Broadcasting Conference, Geneva, 1966)
AF66	This listing was notified to the I.F.R.B. in accordance with the provisions of Article 4 of the Regional Agreement for the African Broadcasting Area, Geneva, 1966. Is either in accordance with the Plan adopted by the African LF/MF Broadcasting Conference, Geneva, 1966, or one for which the procedure prescribed in Article 3 of the said Regional Agreement has been carried out successfully. When this symbol is followed by a stroke and a group of six digits, it indicates that the assignment concerned was recorded in the Master International Frequency Register before the date of entry into force of the Regional Agreement, with a date in Column 2a or Column 2b, represented by the digits following the stroke. It is solely in its relations with the other Administrations parties to the said Regional Agreement that, in accordance with Resolution No. 2 adopted by the African LF/MF Broadcasting Conference, Geneva, 1966, the Administration which is responsible for the present assignment has surrendered any right it might hold, according to the provisions of Article 9 of the Radio Regulations, as a result of the date formerly entered in Column 2a or Column 2b of the Master Register	AH (followed by one or more figures) The number immediately following this symbol represents in metres, the height of the antenna as defined in Item 9 (paragraph f) of Section B and in Item 7 (paragraph f) of Section C of Appendix 1A to the Radio Regulations (1963 revision)
		APG (followed by one or two groups of figures separated by a stroke) The first group of figures immediately following this symbol represents in kilometres the altitude of the apogee of the orbit of the space station. The second group of figures represents in kilometres the altitude of the perigee. If the symbol is followed only by one group of figures, these represent in kilometres the altitude of the space station in a circular orbit (see Item 6 of Section D or Item 4 of Section E of Appendix 1A to the Radio Regulations, 1963 revision)
		AP25/1 or AP25/2 This listing is an allotment appearing in Section I (AP25/1) or in Section II (AP25/2) of Appendix 25 MOD to the Radio Regulations (Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands between 4 000 and 23 000 kHz)
AF66X	By this symbol attention is directed to a remark to be found in Annex 1, Chapter 1 of the Regional Agreement for the African Broadcasting Area, Geneva, 1966 (Plan for the Assignment of Fre-	AP25/3 This listing appears in the distribution contained in Section III of Appendix 25 MOD to the Radio Regulations (distribution by the I.F.R.B. of the requirements submitted by Administra-

	<p>tions in accordance with Resolution No. Mar 15 of the World Administrative Maritime Radio Conference, Geneva, 1967, with a view to the use of the new HF channels made available for maritime radiotelephony as from 1 March 1970). From the point of view of the frequency notification and registration procedure to be applied, the channel defined by the frequency entered in Column 1 shall be regarded as an allotment to the country represented by the symbol appearing in Column 4b (see paragraphs 6 to 9 of Resolution No. Mar 15)</p>			<p>before the date of entry into force of the Regional Agreement for the African Broadcasting Area, Geneva, 1966, and which was deleted in accordance with the provisions of paragraph 2 of Resolution No. 2 adopted by the African LF/MF Broadcasting Conference, Geneva, 1966. It is solely in its relations with the other Administrations parties to the said Regional Agreement that, in accordance with that Resolution, the Administration which is responsible for the present assignment has surrendered any right it might hold, according to the provisions of Article 9 of the Radio Regulations, as a result of the date formerly recorded in Column 2a or Column 2b of the Master Register</p>
AP26/1	This listing is a primary allotment appearing in Part IV of Appendix 26 to the Radio Regulations (Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2 505 and 23 350 kHz)	AS	(followed by one or more figures)	The number immediately following this symbol represents in degrees the planned minimum operating angle of elevation of the antenna as defined in Item 9 (paragraph a) of Section B and Item 7 (paragraph a) of Section C of Appendix 1A to the Radio Regulations (1963 revision)
AP26/2	This listing is a secondary allotment appearing in Part IV of Appendix 26 to the Radio Regulations (Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2 505 and 23 350 kHz)	AZ	(followed by two groups of figures separated by a stroke)	The two numbers immediately following this symbol represent in degrees the planned range of azimuthal angles (see Item 9, paragraph b, of Section B or Item 7, paragraph b, of Section C of Appendix 1A to the Radio Regulations, 1963 revision)
AP26X	By this symbol attention is directed to a remark to be found in Appendix 26 to the Radio Regulations (Frequency Allotment Plan for the Aeronautical Mobile Service (OR) in the Bands between 2 505 and 23 350 kHz)	B	(followed by six digits representing a date)	The date represented by the digits immediately following the symbol is the date on which the I.F.R.B. received the advice that the assignment has been in use for at least sixty or one hundred and twenty days, as the case may be, without any complaint of harmful interference having been received by the notifying administration
AP27/1	This listing is an allotment appearing in Part II of Appendix 27 to the Radio Regulations (Frequency Allotment Plan for the Aeronautical Mobile (R) Service in its Exclusive Bands between 2 850 kHz and 17 970 kHz)	BP	(followed by one or more figures)	The number immediately following this symbol represents in kHz the overall receiver bandwidth as defined in Item 6 (paragraph a) of Section C and in Item 7 (paragraph a) of Section E of Appendix 1A to the Radio Regulations (1963 revision)
AP27X	By this symbol attention is directed to a remark to be found in Appendix 27 to the Radio Regulations (Frequency Allotment Plan for the Aeronautical Mobile (R) Service in its Exclusive Bands between 2 850 kHz and 17 970 kHz)	C	(followed by six digits representing a date)	A notice concerning a change in the basic characteristics of this assignment was received by the I.F.R.B. on the date represented by the digits immediately following the symbol
AR	(followed by six digits representing a date)			
	The date represented by the digits immediately following the symbol is the date which was recorded in Column 2a or Column 2b of the present entry	CPHG or CPHG1		This listing is either in accordance with the Plans adopted at Copenhagen

in 1948 for the Broadcasting Service in the European Broadcasting Area or the Maritime Mobile Service in the European Maritime Area, or one for which the procedure prescribed respectively in Article 8 of the Copenhagen European Broadcasting Convention or in Article 10 of the Copenhagen European Regional Convention for the Maritime Mobile Radio Service, has been carried out successfully. If the symbol is followed by the numeral 1, attention is directed to a remark to be found in the appropriate Copenhagen Plan for the listing concerned

D The notice concerning this entry is not in conformity with Nos. 491 or 639AL Spa of the Radio Regulations

DD According to Article 16 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951, the out-of-band operations represented by this entry should have ceased on the date set for the start of the final adjustment of all out-of-band operations in the block in which this frequency was situated according to No. 160 of that Agreement; however, this entry has not been deleted by the notifying Administration

E (followed by six digits representing a date) The re-submitted notice concerning this entry was received by the I.F.R.B. on the date represented by the digits immediately following the symbol

F (followed by six digits representing a date) The recorded frequency results from an adjustment made in accordance with Nos. 356 to 359 of the Radio Regulations, Atlantic City, 1947, as a result of a request received by the I.F.R.B. on the date represented by the digits immediately following the symbol

GA (followed by one or more figures) The number immediately following this symbol represents isotropic gain (dB) of the antenna in the direction of maximum radiation or in the direction of the main lobe as defined in Item 9 (paragraph d) of Section B, Item 7 (paragraph d) of Section C, Item 10 (paragraph b) of Section D and Item 8 (paragraph b) of Section E of Appendix

1A to the Radio Regulations (1963 revision)

GGG

In accordance with Resolution No. 4 of the Administrative Radio Conference, Geneva, 1959, this entry is considered as being to a permitted service, as defined in Article 5 of the Radio Regulations

GH (followed by one or more figures)

The number immediately following this symbol represents the maximum isotropic gain (dB) of the antenna in the horizontal plane at any angle of elevation above the minimum angle of elevation (see Item 9, paragraph e, of Section B or Item 7, paragraph e, of Section C of Appendix 1A to the Radio Regulations, 1963 revision)

H (followed by six digits representing a date)

This entry concerning intership communications was notified to the I.F.R.B. on the date represented by the digits immediately following the symbol. This entry is either on a frequency specified in a list adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, for ship-to-shore communications for the Administration concerned or for intership communications, or was notified to the I.F.R.B. before 1 May 1961 in a band specified by the Extraordinary Administrative Radio Conference, Geneva, 1951 (No. 40 of the E.A.R.C. Agreement for intership communications in Region 1). Since mobile stations are not mentioned in No. 486 of the Radio Regulations, harmful interference between ship stations should be cleared by direct negotiations between the Administrations concerned. From the point of view of the application of No. 502 of the Radio Regulations, this entry will be considered, as far as the area of operations is limited and defined clearly enough to permit the assessment of the probabilities of harmful interference, in the same way as if a date were inserted in Column 2a, subject to no harmful interference being caused in practice to stations of other classes of service to which the

		band is allocated, account being taken, in Region 1, of Nos. 193 or 205 and 442 of the Radio Regulations, where appropriate			
HH		This entry concerning intership communications was adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951. From the point of view of the application of No. 502 of the Radio Regulations, this entry will be considered, as far as the area of operations is limited and defined clearly enough to permit the assessment of the probabilities of harmful interference, in the same way as if a date were inserted in Column 2a			istrative Radio Conference, Geneva, 1951; and the date in Column 2c of the original entry was retained. The entry was transferred to the Master International Frequency Register in accordance with the provisions of Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959
	KS	(followed by one or more figures)			The number immediately following this symbol represents the overall receiving system operating noise temperature (°K). (See Item 11 of Section E or Item 7 of Section F of Appendix 1A to the Radio Regulations, 1963 revision)
HHH		This entry concerning intership communications was notified to the I.F.R.B. but is not on a frequency specified in a list adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, for ship-to-shore communications for the Administration concerned or for intership communications. Since mobile stations are not mentioned in No. 486 of the Radio Regulations, this entry has been entered in the Master International Frequency Register and published in the International Frequency List for information only	KT	(followed by one or more figures)	The number immediately following this symbol represents the overall receiving system operating noise temperature (°K) as defined in Item 10 of Section C of Appendix 1A to the Radio Regulations (1963 revision)
	LG	(followed by two or three figures and a letter E or W)			This entry relates to a space station on board a stationary satellite. The figures and the letter (E or W) immediately following this symbol represent, in degrees, the mean geographical longitude of the projection of the satellite's position on the surface of the earth (see Item 6 of Section D or Item 4 of Section E of Appendix 1A to the Radio Regulations, 1963 revision)
IA	(followed by one or more numerals)	This symbol indicates the number given to the circuit by the International Civil Aviation Organization (ICAO)			
IO	(followed by one or more figures)	The number immediately following this symbol represents, in degrees, the angle of inclination of the orbit of the satellite on board which the space station is located. Where the number is followed by the letter "R", it means that the satellite has a retrograde revolution	NS	(followed by one or more figures)	The number immediately following this symbol indicates the number of space stations which are covered by this entry (see Item 12 of Section D or Item 10 of Section E of Appendix 1A to the Radio Regulations, 1963 revision)
K	(followed by six digits representing a date)	This assignment was deleted on the date represented by the digits immediately following the symbol KK and was reinserted in the Master Radio Frequency Record as a result of a notice which was received by the I.F.R.B. on the date immediately following the symbol K and which stated that the notifying Administration had reverted to this assignment in accordance with Nos. 115 and 250 of the Agreement of the Extraordinary Admin-	P	(followed by six digits representing a date)	By a notice which was received by the I.F.R.B. on the date represented by the digits immediately following the symbol P, the notifying Administration requested the reinsertion of this entry.
KK	(followed by six digits representing a date)	Following the symbol K and which stated that the notifying Administration had reverted to this assignment in accordance with Nos. 115 and 250 of the Agreement of the Extraordinary Admin-	PP	(followed by six digits representing a date)	As there was no probability, or only a slight probability (as explained by the symbol A in Column 13b), that harmful interference would be caused to assignments operating in accordance with particulars recorded in the Master International Frequency Register since the date immediately following the symbol PP (date of deletion of the original entry), the entry has been

reinserted and the dates in Columns 2c and 2a, 2b or 2d, as the case may be, of the original entry have been retained

PROV

This is a provisional entry according to Nos. 537 or 570BE Spa or 639BX Spa of the Radio Regulations and the date which appears in Column 2c is the projected date of bringing into use notified by the Administration concerned

PS (followed by one or more figures)

The number immediately following this symbol represents in minutes the period of the object in space aboard which the space station is located. Where the number is followed by the symbol J, it represents in **days** the period of the object in space (see Item 6 of Section D or Item 4 of Section E of Appendix 1A to the Radio Regulations, 1963 revision)

R (followed by six digits representing a date)

The date represented by the digits immediately following the symbol is the date on which the I.F.R.B. has received the complete notice

RES MAR8

The frequency assignment used by a coast radiotelegraph station for the reception of transmissions from ship stations equipped with narrow-band direct-printing telegraph or data transmission systems was entered in the Master Register in accordance with the provisions of Resolution No. Mar 8 of the World Administrative Maritime Radio Conference, Geneva, 1967. This entry in no way prejudices any decisions which may be taken by the World Administrative Maritime Radio Conference scheduled for 1974

RES MAR15

The present frequency assignment used by a coast radiotelephone station, either for emission or for reception, as the case may be, has been entered in the Master Register in accordance with the interim procedure laid down in Resolution No. Mar 15 of the World Administrative Maritime Radio Conference, Geneva, 1967. This entry does not prejudice the decisions to be taken by the Radio Conference which will be responsible for preparing a new fre-

quency allotment plan for HF coast radiotelephone stations (see Recommendation No. Mar 6 of the World Administrative Maritime Radio Conference, Geneva, 1967)

RES MAR19

This frequency assignment used by a land station for the reception of oceanographic data transmissions (or for the transmission of interrogation signals to oceanographic stations) has been entered in the Master Register in accordance with the provisions of Resolution No. Mar 19 of the World Administrative Maritime Radio Conference, Geneva, 1967. Its use has been coordinated through the Intergovernmental Oceanographic Commission (IOC) and the World Meteorological Organization (WMO) in accordance with the recommendation of these organizations referred to in Resolution No. Mar 20 (see I.F.R.B. Circular-letter No. 217 dated 13 June 1969). This entry in no way prejudices any decisions which may be taken by the next Administrative Radio Conference competent to deal with the maritime mobile service

RR (followed by one or more numerals)

This symbol indicates a paragraph of the Radio Regulations

SD (followed by a first group of figures separated by a stroke from a second group of figures)

This entry relates to a space station on board a stationary satellite. The first group of figures represents, in degrees, the co-ordinates of the point on the earth's surface towards which the antenna is directed or the parallel of latitude towards which the equatorial surface of the antenna beam is directed, as the case may be. The second group of figures represents, in degrees, the value of the accuracy of maintaining this direction (plus or minus). (See Item 10, paragraph c, of Section D or Item 8, paragraph c, of Section E of Appendix 1A to the Radio Regulations, 1963 revision)

ST61X

By this symbol attention is directed to a remark to be found in Annex 2, Chapter 2 of the Regional Agreement for the European Broadcasting Area, Stockholm, 1961 (Plans for the Assignment of Very High Frequencies and

Ultra High Frequencies to Broadcasting Stations in the European Broadcasting Area) for the assignment concerned. The explanation of this remark is given in Chapter 3, paragraph 5 of the said Annex 2 (pages 290 to 294 of the Final Acts of the European) VHF UHF Broadcasting Conference

ST61X1

The corresponding assignment appears in the Frequency Assignment Plans for VHF and UHF broadcasting stations in the European Broadcasting Area, Stockholm, 1961. In these Plans it includes the indication "West Berlin" in the column entitled "Name of the transmitting station" and no entry appears in the column headed "Country designator". The symbol appearing in Column 4b of the present entry under the terms of the Radio Regulations is that denoting the geographical area within the limits of which the station is situated

ST61X2

The corresponding assignment appears in the Frequency Assignment Plans for VHF and UHF broadcasting stations in the European Broadcasting Area, Stockholm, 1961. In these Plans it includes the indication "East Berlin" in the column entitled "Name of the transmitting station" and no entry appears in the column headed "Country designator". The symbol appearing in Column 4b of the present entry under the terms of the Radio Regulations is that denoting the geographical area within the limits of which the station is situated

T (followed by six digits representing a date)

The notice containing the information which appears on this line has received an unfavourable Finding by the I.F.R.B. with respect to Nos. 502 or 503 of the Radio Regulations; the notifying Administration re-submitted the notice to the Board in insisting, in accordance with No. 515 of the Radio Regulations, upon reconsideration of the notice, and the Finding of the Board has remained unchanged. However:

— the notifying Administration, in re-submitting the notice, informed the

Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received, and consequently the assignment was recorded in the Master International Frequency Register; but the Board has subsequently received information according to which the use of the frequency concerned has given rise, during the period of sixty days concerned, to complaints of actual harmful interference caused to one or more assignments already recorded in the Master International Frequency Register

— or the notifying Administration, in re-submitting the notice, informed the Board that it was not in a position to state that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received and asked, nevertheless, that the notice be inserted in the Master International Frequency Register

In accordance with the provisions of Nos. 502 or 503 of the Radio Regulations, the Board, since the date represented by the figures immediately following the symbol, does not take into account the information which appears on this line in the examination prescribed for the recording of frequency assignments in Article 9 of the Radio Regulations

The retention or recording, as appropriate, of this information, which does not include any date in Column 2, in the Master International Frequency Register, and its publication in the International Frequency List are for information only and are not intended to ensure formal recognition as provided in No. 165 of the Convention

TS (followed by figures)

The figures following immediately this symbol represent the carrier frequency for the sound transmission of this television broadcast

TV (followed by figures)

The figures following immediately this symbol represent the carrier frequency for the vision transmission of this television broadcast

- | | | | |
|--|---|---|---|
| <p>X (followed by six digits representing a date)</p> | <p>The I.F.R.B. has conducted the investigation envisaged in No. 516 of the Radio Regulations and has found that the operations represented by this entry have given rise to complaints of harmful interference being caused to the operations of an assignment or assignments with which they appeared to the Board to be incompatible. Therefore, although the cancellation of this entry has not been notified, the I.F.R.B., in view of the provisions of Nos. 502 or 503 of the Radio Regulations, does not take it into account in the examination prescribed for the recording of frequency assignments in Article 9 of those Regulations. The date represented by the digits immediately following the symbol is that on which the Board ceased to take this assignment [entry] into account in these circumstances</p> | <p>Y (followed by six digits representing a date)</p> | <p>In connection with an enquiry by the I.F.R.B. under Nos. 516 or 620 of the Radio Regulations, the notifying Administration has failed to supply the Board within ninety days with the necessary or pertinent information or has stated that although the assignment [entry] is not representing actual operations, it wishes to maintain the entry in the Master International Frequency Register. In accordance with No. 621 of the Radio Regulations, therefore, the Board will disregard this assignment [entry] when acting upon any later notice, until such time as it has been informed that the assignment [entry] is being used as notified, or until it has received the information required. The date represented by the digits immediately following the symbol is that on which the Board ceased to take this assignment [entry] into account in the examination prescribed for the recording of frequency assignments in Article 9 of the Radio Regulations</p> |
| <p>XX (followed by six digits representing a date)</p> | <p>The date represented by the digits immediately following the symbol is the date on which the I.F.R.B. has found that the operations represented by this entry no longer give rise to complaints of harmful interference with respect to the operations of an assignment or assignments with which they appeared to the Board to be incompatible. As a consequence, the Board, in view of the provisions of Nos. 502 or 503 of the Radio Regulations, again takes this assignment into account in the examination prescribed for the recording of frequency assignments in Article 9 of those Regulations. The period between the date following the symbol X and that following this symbol is that during which the assignment [entry] was not taken into account by the Board in these circumstances</p> | <p>Z (followed by six digits representing a date)</p> | <p>The date represented by the digits immediately following the symbol is the date on which the I.F.R.B. received, in response to an enquiry under Nos. 516 or 620 of the Radio Regulations, the information that the assignment [entry] is being used as notified or the information required. The period between the date following the symbol Y and that following this symbol is that during which, according to No. 621 of the Radio Regulations, the assignment [entry] was not taken into account by the Board in the examination prescribed for the recording of frequency assignments in Article 9 of those Regulations</p> |

SYMBOLS INDICATING THE USE OF THE FREQUENCY

A combination of four figures separated in two groups of two by a stroke, sometimes followed by one, two or four letters, indicates hours, time, months or seasons or periods of solar activity of the frequency concerned. Their meaning is as follows:

Time

J day
N night
T transition

Four figures separated in two groups of two by a stroke indicate the hours of operation of the frequency (GMT)

Months

JA	January	JL	July
FE	February	AU	August
MR	March	SE	September
AR	April	OC	October
MA	May	NV	November
JN	June	DC	December

Seasons	ET	Summer
	HV	Winter
	EQ	Equinox

Solar Index	A	High
	L	Low
	M	Medium

Examples:

a) 20/04 EQ L M meaning:
frequency to be used from 2000 to 0400 GMT, during Equinox, at low or medium solar activity

b) J DC JN L meaning:
frequency to be used during day time, in December and June, at low solar activity

Note: In the frequency bands allocated exclusively to the Broadcasting Service between 5950 kHz and 26 100 kHz, no symbol is inserted against frequency assignments to broadcasting stations to indicate the seasonal use of the frequency (months or seasons and periods of solar activity)

2. GENERAL REMARKS REPRESENTED BY NUMERALS

The Remark numbers not appearing in this table are not used at present in the International Frequency List

See the special notice appearing on page 2 of the present edition of the Preface

1	Australian station(s)	37	On request by the aeronautical service
2/...	Offset: + kHz	38	United Nations Organization's station(s)
3/...	Offset: — kHz	39	Canadian station(s)
4	Maximum power in the antenna	40	Will be used only in case of extreme necessity
5	Station(s) of the Syrian Arab Republic	41	Primary use inter-ship; secondary use ship-to-shore
6	French station(s)	42	Swiss station(s)
7	United States of America station(s)	43	Station(s) of the State of Kuwait
8	United Kingdom station(s)	44	One or more portable stations
9	Austrian station(s)	45	River service
10	Station(s) of the Republic of the Sudan	46	Emergency
11	Assignment notified by the Republic of South Africa (if this assignment is to a station which is situated in South-West-Africa and therefore bears the symbol "ASO" in Column 4b, see I.T.U. Administrative Council Resolution No. 619 (22nd Session, 1967))	47	Police
12	Italian station(s)	48	Stand by circuit
13	Spanish station(s)	49	Time signals
14	Meteorological	50	Station(s) of the Socialist Republic of Roumania
15	Simplex	51	The present entry is the reproduction of an allotment for which no frequency has been nominally designated in the Frequency Allotment Plan for the Aeronautical Mobile (OR) Service (Appendix 26 to the Radio Regulations) because the frequency band in question is shared between the Aeronautical Mobile (OR) Service and one or more other services. Hence, this entry does not mean that the frequency mentioned in Column 1, which is the lower limit of the band concerned, is allotted to the country whose symbol appears in Column 4b. It is for each Administration concerned, in co-operation with the other Administrations whose names appear in the Plan in respect of each of the allotments concerned, to select the frequencies to be used for the Aeronautical Mobile (OR) Service in this shared band, taking into account the frequencies already used by the other primary services to which the band is also allocated
16	Duplex		
17	On request		
18	Station(s) of the Republic of Korea		
19	Surface control		
20	Marker beacon		
21	Primary flight control area		
22	Temporary		
23	Range over sea		
24	Area control		
25	Aerodrome control		
26	Approach control		
27	Finnish station(s)		
28	On request by ship stations		
29	Directivity of antenna is variable		
30/...	Offset: kHz		
31	Kenya station(s)		
32	Turkish station(s)		
33	Lighthouses		
34	Loran		
35	Inter-ship		
36	The carrier frequency of the single sideband emissions represented by this listing can also be used until 1 January 1972 for double sideband emissions (see Resolutions No. Mar 6, No. Mar 11 and No. Mar 15 of the World Administrative Maritime Radio Conference, Geneva, 1967)	52	Directional antenna is used at night only
		53	Directional antenna, different patterns day and night
		54	Netherlands station(s)
		55	Station(s) of the Federal German Republic

56	Belgian station(s)
57	Coastal area(s)
58	Calibration of direction finders
59/...	The present entry relating to single sideband emissions is in accordance with the provisions of Appendix 17 to the Radio Regulations. The frequency appearing in Column 1 is one of the assigned frequencies specified in Section B or Section C of the said Appendix. The figures following the Remark number represent the carrier frequency
60/...	The figures following the Remark number represent the carrier frequency or reference frequency of a single side band or independent side band emission
61	This frequency is assigned also within the same area, to other stations of the same class with technical characteristics comparable to those recorded for this assignment
62/...	This station is part of a network of which some of the other stations use the frequency or frequencies represented by the digits following the Remark number. Where several frequencies are involved, the digits representing them are separated by a stroke Example: 62/4785/4786.5 meaning: This station is part of a network of which some of the other stations use the frequencies 4785 kHz and 4786.5 kHz
63	Swedish station(s)
64	Time sharing
65	Search and rescue (SAR)
66	Broadcast or television relay
67	Decca
68	Press
69	Railways
70/...	This assignment was not in conformity with the Table of Frequency Allocations, Atlantic City, 1947, or with certain provisions of the Extraordinary Administrative Radio Conference, Ge-

neva, 1951, Agreement and was previously recorded in the Master Radio Frequency Record with the date represented by the digits immediately following the Remark number in Column 2b. The assignment has been examined by the I.F.R.B. in accordance with the provisions of Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959. The Finding was favourable with respect to No. 501 of the Geneva Radio Regulations, and the assignment now appears in the Master International Frequency Register, according to the result of the examination with respect to Nos. 502 or 503 of the Geneva Radio Regulations, with the date of entry into force of these Regulations in Column 2a or Column 2b

71/... This assignment was not in conformity with the provisions of No. 501 of the Radio Regulations, Geneva, 1959, and was previously recorded in the Master International Frequency Register with the date represented by the digits immediately following the Remark number in Column 2b. As a consequence of the revision of certain provisions of the Radio Regulations by the World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service, Geneva, 1967, this assignment has been re-examined by the I.F.R.B. The Finding was favourable with respect to No. 501 of the Radio Regulations, and the assignment now appears in the Master International Frequency Register, according to the result of the examination with respect to No. 502 or 503 of the Radio Regulations, with the date of entry into force of the revised provisions of these Regulations in Column 2a or Column 2b

72 Connected to the public telephone network

73 For testing purposes

74/.../.../... Within the sector ...° to ...°, the effective radiated power is reduced to ... kW

Example: 74/340/20/0.02 meaning:
Within the sector 340° to 20°, the effective radiated power is reduced to 0.02 kW

75/.../... In the direction of ...°, the effective radiated power is reduced to ... kW

Example: 75/360/10 meaning:

In the direction of 360°,
the effective radiated power
is reduced to 10 kW

76/...

The number immediately following the Remark number is the maximum effective height of the transmitting antenna in metres as defined,

- for the **European Broadcasting Area**, in Annex 2, Chapter 1, paragraph 6 of the Regional Agreement, Stockholm, 1961, and
- for the **African Broadcasting Area**, in Annex 2, Chapter 1, paragraph 6 of the Regional Agreement, Geneva, 1963

76T/.../...

The first group of figures immediately following the Remark number is the maximum effective height of the transmitting antenna in metres as defined,

- for the **European Broadcasting Area**, in Annex 3, Chapter 1, paragraph 6 of the Regional Agreement, Stockholm, 1961, and
- for the **African Broadcasting Area**, in Annex 2, Chapter 1, paragraph 6 of the Regional Agreement, Geneva, 1963

The second group of figures represents the effective height of the antenna which is temporarily in use at present

77/...

The symbol immediately following the Remark number represents the frequency offset of the carrier as a fraction of the line frequency for the television system concerned,

- for the **European Broadcasting Area**, in accordance with Annex 2, Chapter 1, paragraph 4 of the Regional Agreement, Stockholm, 1961, and
- for the **African Broadcasting Area**, in accordance with Annex 2, Chapter 1, paragraph 4 of the Regional Agreement, Geneva, 1963

77T/.../...

The symbol immediately following the Remark number represents the frequency offset of the carrier as a fraction of the line frequency for the television system concerned,

- for the **European Broadcasting Area**, in accordance with Annex 2,

Chapter 1, paragraph 4 of the Regional Agreement, Stockholm, 1961, and

- for the **African Broadcasting Area**, in accordance with Annex 2, Chapter 1 paragraph 4 of the Regional Agreement, Geneva, 1963
- The second symbol represents the frequency offset of the carrier as a fraction of the line frequency for the television system concerned which is temporarily in use at present

78

Harbour area

79

No specific power is indicated for this allotment in Appendix 26 to the Radio Regulations (Frequency Allotment Plan for the Aeronautical Mobile (OR) Service and Related Information). The Plan was developed, however, on the assumption that the peak power radiated by the aeronautical stations would be 1 kW for A1 emissions or 4 kW for A3 emissions, unless otherwise indicated

80

No specific power is indicated for this allotment in Appendix 26 to the Radio Regulations (Frequency Allotment Plan for the Aeronautical Mobile (OR) Service and Related Information). The Plan was developed, however, on the assumption that the peak power radiated by aircraft stations would be 50 W for A1 emissions or 200 W for A3 emissions, or would not exceed the power of the corresponding aeronautical stations when these are restricted, in the Plan, to a lower power

~~81~~

~~German Democratic Republic~~

82/.

The letter immediately following the Remark number indicates the television system,

- for the **European Broadcasting Area**, in accordance with Annex 2, Chapter 1, paragraph 2 of the Regional Agreement, Stockholm, 1961, or
- for the **African Broadcasting Area**, in accordance with Annex 3, Section 2, paragraph 2.2 (pages 321-325) of the Regional Agreement, Geneva, 1963

83	Station(s) of the Republic of Maldives	95/...	The figures following immediately the Remark number represent the value in watts or kilowatts of the power used at present
84	Utilized by the United Nations Organization	96	Foggy weather only
85/.../.../...	Within the sector ...° to ...°, the maximum effective height of the transmitting antenna is reduced to ... metres Example: 85/90/180/75 meaning: Within the sector 90° to 180°, the maximum effective height of the transmitting antenna is reduced to 75 metres	97	Broadcast of NOTAMS (Notices to airmen)
86/.../...	In the direction of ...°, the maximum effective height of the transmitting antenna is reduced to ... metres Example: 86/270/50 meaning: In the direction 270°, the maximum effective height of the transmitting antenna is reduced to 50 metres	98/.../...	The figures (or the groups of figures) following immediately the Remark number represent the azimuth (or the azimuths) of the directivity of the antenna which is in use at present
87	Utilized by the World Health Organization	99/.../...	The groups of figures following immediately the Remark number represent the limits of the sector in which the transmissions are made at present
88	Synchronized network	100	Common frequency for calling and safety purposes in the radiocommunication service for the navigation on the Danube
89/.	The letter immediately following the Remark number indicates the plane of polarization of radiation, H indicating horizontal polarization and V, vertical polarization	101	Consol
90	Customs	102/...	Doppler frequency shift: \pm kHz
91/...	The number immediately following the Remark number is the maximum effective height of the transmitting antenna in metres as defined in Annex 2, Chapter 1, paragraph 6 of the Regional Agreement for the European Broadcasting Area, Stockholm, 1961. In this particular case, the effective transmitting antenna height is below the mean level of the ground between 3 km and 15 km from the transmitter in the direction in which it is desired to determine the field strength. The number immediately following the Remark number, therefore, is a minus value	103	Occasionally
92	Programme transmission service	104	Multiple address press. The reception points appearing in Column 5a may be considered as representative points outlining the area(s) to be served
93	Notified for network; other stations unspecified	105	Supplementary channel for regional control
94	Guard and call frequency	106	Frequency assignment used for the navigation on the Rhine
		107	Coast Guard
		108	Lifeboats
		109/.	The letter immediately following the Remark number indicates the class of observations to be taken, as defined in Item 8 of Section F of Appendix 1A to the Radio Regulations (1963 revision)
		110	Passive reflector
		111	Frequency assignment used for the navigation on the Rhine and on the Scheldt
		112/.../.../...	For the time being, transmissions are made within the sector between ...° and ...° with an effective radiated power of ... kW

<p>Example: 112/340/20/0.01 meaning: For the time being, transmissions are made within the sector between 340° and 20° with an effective radiated power of 0.01 kW</p>		127	Precision Approach Radar
		128	Notices to mariners
		129	Geodetic survey operations
		130	Broadcast, television or remote pick up
		131	Power notified is less than 10 watts
		132	Power notified is less than 10 milliwatts
		134	Omnidirectional radio range (VOR, TVOR)
		135	Main beacon, SBA
		136	Localizer, ILS
		137	Glide path, ILS
		138	Distance measuring equipment (DME)
		139	Ground controlled approach (GCA)
		140	Radar astronomy
		141	Research spacecraft(s)
		142	Deep Space Probe(s)
		143	Radiosonde
		144	Control circuit
		145	Relay
		146/...	The present entry concerns an earth transmitting station which has been recorded in the Master International Frequency Register consequential to the application of the provisions of No. 639AI of the Radio Regulations (1963 revision) as regards the Administration of the country designated by the symbol which follows the Remark number
		147	Radar
		148	Telemetry
		149	Vertical dipole antenna
		150/...	This entry concerns a station of the Fixed Service or of the Mobile Service located within the coordination distance of an earth transmitting station recorded in the Master International Frequency Register on behalf of the Administration of the country designated by the symbol following the Remark number and the necessary bandwidth
113/.../...	For the time being, the azimuth of the directivity of the antenna in use is ...° and the effective radiated power is ... kW		
		<p>Example: 113/360/5 meaning: For the time being, the azimuth of the directivity of the antenna in use is 360° and the effective radiated power is 5 kW</p>	
114	Oil drilling rig(s) (Col. 4a or 5a)		
115/...	The figures immediately following the Remark number represent the electric height of the antenna expressed in fractions of wavelength (for example: 115/0.625λ)		
116	International exchange of police information		
117	Geophysical research		
118	Reserved		
119/...	The figures immediately following the Remark number represent the value of the root mean square fluctuation of the operating noise temperature		
120	"Semaphone" selective calling service		
121	The notifying Administration has stated that the power flux density limits prescribed in Nos. 470O and 470P of the Radio Regulations (1963 revision) will not be exceeded. Consequently the Board has considered that this frequency assignment is in conformity with the provisions of No. 639AS of the said Regulations		
122	National defence		
123	This frequency assignment is made for the use of the Embassy of a foreign country which has allocated the call sign		
124	Fire		
125	Medical advice		
126	Surveillance Radar		

	notified is separated by less than 6 MHz from that of the earth station concerned (No. 492A of the Radio Regulations, 1963 revision). The frequency assignment to the earth station concerned has been recorded in the Master International Frequency Register consequential to the application of the provisions of No. 639AI of the Radio Regulations (1963 revision) as regards the Administration which notified the present entry. However, this earth transmitting station is unlikely to be affected by the emissions of the station of the Fixed Service or of the Mobile Service and the present entry has therefore been made in the Master International Frequency Register in application of the provisions of No. 570AM of the Radio Regulations (1963 revision)		
151	Eureka beacon		
152	BABS beacon		
153	Repeater station(s)		
154	Remote control		
155/...	This entry relates to a frequency assignment to an earth receiving station. The notifying Administration did not seek to co-ordinate the use of this frequency assignment under No. 639AD of the Radio Regulations (1963 revision) with the Administration of any other country designated by the symbol following the Remark number and which, according to the Board's calculations, should normally have been concerned in application of the said provision. Since it relates to a frequency assignment to an earth receiving station, the Board, at the request of the notifying Administration, has nevertheless recorded it in the Master International Frequency Register, on the understanding that the service provided by this station may be subject to harmful interference caused by stations in the Fixed or Mobile Services situated within the co-ordination distance of this earth station and coming under the jurisdiction of any country designated by a symbol following the Remark number		
156	Maximum peak envelope power supplied to the antenna transmission line for approach and aerodrome control, under the terms of paragraph 2		of the Remark appearing in Column 3 of the Frequency Allotment Plan for the Aeronautical Mobile (R) Service which appears in Appendix 27 to the Radio Regulations (page 46 or 50 as the case may be). See also Resolution No. Aer 1 of the Aeronautical E.A.R.C., Geneva, 1966
		157	Maximum peak envelope power supplied to the antenna transmission line
		158	Use by stations in classes FA, FB, FC, FL, MA, ML, MS and MO for co-ordinated search and rescue operations, under the terms of paragraph 4 of the Remark appearing in Column 3 of the Frequency Allotment Plan for the Aeronautical Mobile (R) Service which appears in Appendix 27 to the Radio Regulations (page 46 or 50 as the case may be). See also Resolution No. Aer 1 of the Aeronautical E.A.R.C., Geneva, 1966, and, as the case may be, Nos. 1326C or 1353B of the Radio Regulations
		159	Compass locator station
		160	Guard frequency
		161	Highway Control
		162	For scientific work
		163	Frequency assignment used for the navigation on the Danube
		164	Subject to non-interference basis to other services
		165	Sea areas in Region 3
		166	The purpose of this Remark number is to draw attention to the classes of emission specified in Part I, Section IIC, of Appendix 27 to the Radio Regulations— Frequency Allotment Plan for the Aeronautical Mobile (R) Service in its exclusive bands between 2 850 kHz and 17 970 kHz, Geneva, 1966
		167	Broadcasting of URSIGRAMS
		168	Vertical incidence (Col. 9a)
		169	Replacement frequency intended to be used when, due to a partial or total failure, a space station cannot use any more the other frequencies assigned to it
		184	The country symbol is that which is appropriate to the country notified by the notifying Administration as indi-

	cating the territories within the limits of which the station is located (see No. 837 of the Radio Regulations)		horizontal plane. The electric height of the antenna is 0.2λ (Col. 9a)
199	Call sign not allocated or variable for security reasons, or other means of identification used (Col. 3)	255	Vertical radiation aerial (C.C.I.R. Diagram No. 38 C) (Col. 9a)
202	The call sign consists of the name of place appearing in Column 4a	256	Anti-fading antenna (Col. 9a)
203	The call sign consists of the indication appearing in Column 3, abbreviated if necessary, followed or preceded by the name of place as shown in Column 4a	257	Vertical radiation aerial (C.C.I.R. Diagram No. 38A) (Col. 9a)
218	Will be used only in exceptional circumstances	258	Vertical radiation aerial (C.C.I.R. Diagram No. 16) (Col. 9a)
219	A link between a studio and its corresponding broadcasting transmitter (STL)	259	Rotating Antenna (Col. 9a)
230	Ionospheric height measurements	260	Vertical radiation aerial (C.C.I.R. Diagram No. 38) (Col. 9a)
235	Ionospheric scattering observation	261	Vertical radiation aerial (C.C.I.R. Diagram No. 17) (Col. 9a)
251	Vertical radiation aerial (C.C.I.R. Diagram No. 22) (Col. 9a)	262	Transmission of alarm signals
252/...	The figures immediately following the Remark number represent the physical direction of the dipoles expressed in degrees (clockwise) from True North	263	Vertical radiation aerial (C.C.I.R. Diagram No. 39) (Col. 9a)
253	Log-periodic antenna (Col. 9a)	264	The notifying Administration has stated, on behalf of the countries listed in Column 12b that the rights and obligations resulting from this recording accrue to the countries (or the Administrations representing such countries) which are or will become parties to the Interim Agreement signed at Washington D.C. on 20 August 1964, and for such time as they remain parties to that Agreement
254	Eight elements vertical radiation aerial comprising four rows of two dipoles in each row which lie in the same	265	Associated transmitting earth station(s)

See Supplement next page.

SUPPLEMENT

TABLE No. 3

GENERAL REMARKS

Explanation of the numbers of General Remarks used in Column 13c of the International Frequency List.

2. GENERAL REMARKS REPRESENTED BY NUMERALS

3.4 Pages 25 to 31

3.4.1 Add the following General Remarks:

- | | |
|--------------|---|
| "133 | Used by the International Committee of the Red Cross (Recommendation No. 34 of the Administrative Radio Conference, Geneva, 1959)" |
| "170 | The I.F.R.B. has no reason to conclude that this station, situated on the territory of the Bangladesh, is still under the jurisdiction of the Administration of Pakistan or that the present assignment is being used by this Administration. Pending an agreement between the Administrations of the Bangladesh and Pakistan on the transfer of responsibility, the I.F.R.B., in accordance with Section VI of Article 9 of the Radio Regulations, has ceased to take the present assignment into consideration in the examination which it carries out under Article 9 of the Radio Regulations with a view to recording frequency assignments in the Master Register" |
| "171 | The Administration of the Bangladesh stated in a letter of 16 March 1972 that the station in question is under its jurisdiction and that at that date it was using the present assignment in accordance with the basic characteristics recorded in the Master International Frequency Register and derived from notices received from the Administration of Pakistan. Following the admission of the Bangladesh as a Member of the Union and pending an agreement between the two Administrations on the transfer of responsibility, the I.F.R.B. has recorded this assignment in the Master Register, on the understanding that it will be reviewed after the aforementioned agreement has been communicated to the Board" |
| "302/... | The group of figures following the number of this remark gives in dBW the maximum power density per Hz supplied to the antenna as defined in items 8b (section B) and 9b (section D) of Appendix 1A to the Radio Regulations. When this power density is less than 1 watt per Hz its value in decibels is preceded by the sign (-)" |
| "304/.../... | The value entered in Column 9a indicates, in degrees, clockwise from true North, the azimuth (rounded off to the nearest degree) of the direction of maximum radiations of the antenna of the earth station assumed to be pointing towards the satellite in its nominal position on the geostationary satellite orbit. The two groups of figures following this symbol give in degrees and decimal fractions of degrees the limits within which the azimuth of the direction of maximum radiation of the antenna of the earth station may vary during operations" |
| "307/... | The figure immediately following this symbol represents in degrees from the horizontal plane the planned minimum operating angle of elevation of the antenna in the direction of maximum radiation as defined in item 9 (paragraph e)) in section B and in item 8 (paragraph e)) in section C of Appendix 1A to the Radio Regulations" |
| "317/... | The figure following this symbol represents in Kelvins the total receiving system noise temperature at the receiver in-put of a space station or of an earth station" |
| "318/.../... | The figure immediately following this symbol represents in Kelvins the noise temperature of the satellite link between the earth station with which this entry is concerned and the earth station whose name is represented in abridged form after the figure. When the figure is not followed by any name, it represents a noise temperature representative of any satellite link using the space station designated in Column 4a or 5a" |
| "319/... | The number immediately following this symbol represents in metres, the altitude of the antenna above mean sea level" |
| "324/... | The figures following the Remark number represent, in dBW, the notified equivalent isotropically radiated power in the direction of maximum radiation of the antenna" |

3.4.2 Delete the General Remark "81 German Democratic Republic".

TABLE No. 4

SPECIAL REMARKS APPLYING TO SPECIFIC COUNTRIES

Explanation of the symbols used in Column 13c of the International Frequency List

The Remark numbers not appearing in this table are not used at present in the International Frequency List

See the special notice appearing on page 2 of the present edition of the Preface

ALG	Algeria (Algerian Democratic and Popular Republic)	AUS7	Relay service to Great Britain
ALG1	Beacon-placement ships (Col. 4a or 5a)	AUS8	Antenna type and dimensions: One 64 metres and one 18.3 metres diameter steerable paraboloid arranged as a variable spacing, variable orientation interferometer Effective area and angular coverage in azimuth and elevation: 1920 square metres; all azimuths; the angle of elevation is between 30° and 90°
ARS	Kingdom of Saudi Arabia	AUS10	Antenna type and dimensions: 64 metres diameter steerable paraboloid Effective area and angular coverage in azimuth and elevation: 1510 square metres; all azimuths; the angle of elevation is between 30° and 90°
ARS1	Transmissions every hour, from H+00 to H+10 and from H+35 to H+45 (Col. 10)	AUS11	Antenna type and dimensions: 64 metres diameter steerable paraboloid Effective area and angular coverage in azimuth and elevation: 1160 square metres; all azimuths; the angle of elevation is between 30° and 90°
AUS	Commonwealth of Australia	AUS12	Antenna type and dimensions: Cross, each arm 1600 metres × 12 metres Effective area and angular coverage in azimuth and elevation: 17 000 square metres; meridian transit only; +18° to -90° declination
AUS1	Antenna type and dimensions: Circular filled in array, diameter 1097.3 metres Effective area and angular coverage in azimuth and elevation: Beam 8 degrees diameter adjustable in North-Zenith-South plane	AUS13	Antenna type and dimensions: 96 paraboloids, 13.5 metres in diameter, equatorially mounted, arranged in a ring of 3 kilometres diameter
AUS2	Antenna type and dimensions: 64 metres diameter steerable paraboloid Effective area and angular coverage in azimuth and elevation: 1770 square metres; all azimuths; the angle of elevation is between 30° and 90°		
AUS3	Transmission of oceanographic data from Nomad Buoy station (150° 00' E 40° 00' S)		
AUS4	Antenna type and dimensions: Three 13.5 metres diameter paraboloids arranged as an interferometer Effective area and angular coverage in azimuth and elevation: 120 square metres; the azimuth is between 300° and 60° and the angle of elevation between 20° and 90°		
AUS5	Antenna type and dimensions: Cross, each arm 1600 metres × 12 metres Effective area and angular coverage in azimuth and elevation: 25 000 square metres; meridian transit only +18° to -90° declination		
AUS6	Postmaster General Monitoring centres (Col. 4a)		

AUS

Effective area and angular coverage in azimuth and elevation:

6000 square metres; the azimuth is between 300° and 60° and the angle of elevation between 0° and 90°

AUS14 Antenna type and dimensions:

Cross, each arm 400 metres with 32 steerable paraboloids 9 metres diameter

Effective area and angular coverage in azimuth and elevation:

1000 square metres; all azimuths, the angle of elevation is between 15° and 90°

AUS15 Antenna type and dimensions:

6 metres diameter steerable paraboloid

Effective area and angular coverage in azimuth and elevation:

20 square metres; all azimuths; the angle of elevation is between 15° and 90°

AUS16 Antenna type and dimensions:

Rectangular filled in array, 110×16.4 metres

Effective area and angular coverage in azimuth and elevation:

180 square metres; meridian transit only; fixed declination at -34°

AUS17 Antenna type and dimensions:

Rectangular filled in array, 7.5×12 metres

Effective area and angular coverage in azimuth and elevation:

90 square metres; meridian transit only; fixed declination at -34°

AUS18 Antenna type and dimensions:

Rectangular filled in array, 5×8 metres

Effective area and angular coverage in azimuth and elevation:

40 square metres; meridian transit only; fixed declination at -34°

AUS19 Antenna type and dimensions:

Cross, each arm 914.4×10 metres

Effective area and angular coverage in azimuth and elevation:

10 000 square metres; meridian transit only; azimuth fixed at $0^\circ (\pm 0.5^\circ)$; $+10^\circ$ to -80° declination

AUS20 Antenna type and dimensions:

Two rhombics, each leg 20 metres, arranged as an interferometer

Effective area and angular coverage in azimuth and elevation:

300 square metres; meridian transit only; azimuth coverage $\pm 45^\circ$ about meridian; fixed declination at $+40^\circ$

AUS21 Antenna type and dimensions:

Rectangular filled in array, 3.1×5.2 metres

Effective area and angular coverage in azimuth and elevation:

15 square metres; meridian transit only; fixed declination at -34°

AUS22 Antenna type and dimensions:

Rectangular filled in array, 1.8×2.8 metres

Effective area and angular coverage in azimuth and elevation:

5 square metres; meridian transit only; fixed declination at -34°

AUS23 Antenna type and dimensions:

Crossed compound interferometer, each arm 800 metres with 32 steerable paraboloids 9 metres diameter and two steerable paraboloids 14 metres diameter

Effective area and angular coverage in azimuth and elevation:

1200 square metres; all azimuths; the angle of elevation is between 15° and 90°

AUS24 This transmitter is located at Belconnen and is used for official correspondence with naval vessels under the call sign VHP and for the transmission of radiotelegrams addressed to ships of the British Commonwealth of Nations when the call sign VIX is employed. For the former (VHP) service the transmitter is keyed locally but in the case of the latter (VIX) it is keyed over landlines from Sydney. The radiotelegram service is part of the British Commonwealth area scheme and, as published in the I.T.U. List of Coast Stations, the service is regarded as being provided by Sydney Radio

AUT-CAN

AUT	Austria		
AUT1	from +22.5° to -35° (Col. 9b)		
AUT2	from +35° to -22.5° (Col. 9b)		
AUT3	from -40° to +80° (Col. 9b)		
AUT4	The values of reduced effective radiated power refer to the horizontal plane		
AUT5	from +40° to -60° (Col. 9b)		
AUT6	from +20° to -40° (Col. 9b)		
AUT7	from +35° to -60° (Col. 9b)		
AUT8	from +40° to -30° (Col. 9b)		
B	Brazil		
B1	Passive repeater in the direction of Livramento		
B2	Passive repeater in the direction of Tangua		
B3	Passive repeater in the direction of Vitoria		
B4	Passive repeater in the direction of Guarapari		
BEL	Belgium		
BEL1	Antenna type and dimensions: Radiotelescope; dipole at the focus of a 6-metre paraboloid Effective area and angular coverage in azimuth and elevation: 17 square metres; full sky		
BEL2	Antenna type and dimensions: Multi-antenna interferometer, capable of working simultaneously on lobe sweeping and drift a) East-West baseline: 32 four-metre parabolic antennas, 20 metres spacing b) North-South baseline: 16 four-metre parabolic antennas, 20 metres spacing Effective area and angular coverage in azimuth and elevation: 10 square metres; coverage from 45° to 315° in azimuth and from 0° to 70° in elevation (up to 110° in azimuth 180°)		
BEL3	Antenna type and dimensions: Polarimeter; dipole at the focus of a 6-metre paraboloid Effective area and angular coverage in azimuth and elevation: 20 square metres; coverage from 90° to 270° in azimuth and from 0° to 70° in elevation (up to 180° in azimuth 180°)		
BEL4	Transmissions from coast station Ostend (OSU) to packet-boats on the cross-Channel service between Ostend and Dover		
BEL5	Antenna type and dimensions: Radiotelescope; slot disc-dipole at the focus of a 7.5-metre paraboloid Effective area and angular coverage in azimuth and elevation: 27 square metres; full sky		
BEL6	Emission from Marche or Houdeng, depending on schedule and areas to be covered		
BEL37	Transmissions every hour, from H+55 to H+60 (Col. 10)		
BOL	Bolivia		
BOL1	On condition that no harmful interference is caused to Chile on 2 551.5 kHz		
BRM	Union of Burma		
BRM2	Notified by India (Col. 4a)		
CAN	Canada		
CAN1	During season of navigation (Col. 10)		
CAN3	During the season of navigation in the Hudson Strait (Col. 10)		
CAN5	Ships and pilot boats (Col. 4a)		
CAN6	Antenna type and dimensions: Half-wave dipole, with screen Effective area and angular coverage in azimuth and elevation: 70 square metres; fixed pointing of beam; azimuth due south; angle of elevation: 45°		
CAN7	Antenna type and dimensions: Half-wave dipole, with screen Effective area and angular coverage in azimuth and elevation: 30 square metres; fixed pointing of beam; azimuth due south; angle of elevation: 45°		
CAN8	Antenna type and dimensions: Half-wave dipole, with screen Effective area and angular coverage in azimuth and elevation: 8 square metres; fixed pointing of beam; azimuth due south; angle of elevation: 45°		
CAN9	Antenna type and dimensions: Crossed six-element Yagis Effective area and angular coverage in azimuth and elevation: 20 square metres; azimuth coverage $\pm 135^\circ$ from south; the angle of elevation is between 30° and 70°		
CAN10	Antenna type and dimensions: 1.6 metre diameter steerable paraboloid Effective area and angular coverage in azimuth and elevation: 1 square metre; azimuth coverage $\pm 135^\circ$ from south; the angle of elevation is between 30° and 70°		
CAN11	Antenna type and dimensions: 46 metres diameter steerable paraboloid Effective area and angular coverage in azimuth and elevation: 880 square metres; full sky		

CAN-D

- CAN12 Type et dimensions de l'antenne:**
Paraboloïde de 25,6 mètres de diamètre
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
515 mètres carrés; ciel complet
- CAN13 Type et dimensions de l'antenne:**
Paraboloïde de 1,8 mètre de diamètre
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
2,5 mètres carrés; montage polaire; l'azimut peut varier de 60° à 300° et l'angle de site de 0° à 90°
- CAN14** Antenne à réflecteur parabolique
- CAN15** Antenne de type Yagi
- CAN16 Type et dimensions de l'antenne:**
Deux réflecteurs paraboliques de 8,5 mètres de diamètre, à espacement maximum de 1 km, utilisés comme interféromètre supersynthétiseur
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
2 × 57 mètres carrés; ciel complet
- CAN83** Le Canada et les Etats-Unis d'Amérique utilisent cette fréquence principalement pour les communications entre navires sur les Grands Lacs
- CAN84** Navires (remorqueurs) (colonne 4a)
- CAN131** Le Canada n'utilisera cette fréquence qu'à condition de ne pas causer de brouillages nuisibles aux stations situées aux Etats-Unis d'Amérique utilisant cette même fréquence
- CAN135** Relais à destination du Royaume-Uni
- CAN145** Diffusion des bulletins de la Patrouille internationale des glaces
- CAN200** Le guidage en direction est assuré par une onde porteuse émise continuellement et modulée à la fréquence 1 020 Hz au taux maximum de 30%; un diagramme de rayonnement périodiquement modifié est obtenu par entrecroisement de deux diagrammes en 8 alternés et manipulés respectivement de façon à former les lettres « A » et « N ». Une transmission radiotéléphonique est obtenue en modulant la même onde porteuse par la parole (6A3), au taux maximum de 65%
- CHL** **Chili**
- CHL1** A condition de ne pas causer de brouillages nuisibles aux émissions de l'Argentine (Córdoba) sur 2 445,5 kHz et 2 448,5 kHz
- CHL2** A condition de ne pas causer de brouillages nuisibles aux émissions de l'Argentine sur 2 302,5 kHz

CHN **Chine (République Populaire de)**

- CHN1** La puissance sera réduite à 10 kW à partir du coucher du soleil à Nanking. La puissance rayonnée dans l'azimut 135° ne dépassera pas 10 kW
- CHN2** Normalement, l'angle d'ouverture du lobe principal de rayonnement est 12 degrés et le gain de l'antenne 13 dB; occasionnellement, ces valeurs peuvent être respectivement 25 degrés et 7,5 dB (colonnes 9b et 9c)
- CHN3** Si un brouillage nuisible est causé à l'Inde, la puissance sera réduite à un minimum de 1 kW
- CHN4** A condition de ne pas brouiller la station de Rangoon
- CHN5** A condition de ne pas brouiller la station de Delhi
- CHN7** A condition de ne pas brouiller la station de Kandy (Sri Lanka (Ceylan))
- CHN8** Si un brouillage nuisible est causé à la réception de la station de Imphal (Inde), la puissance sera réduite à 1 kW
- CHN9** A condition de ne pas brouiller la station de Karwar (Inde)
- CHN10** Canton termine ses émissions à 1500 TMG. Bombay travaille normalement jusqu'après 1500 TMG. Selon un accord entre l'Inde et la Chine, la Chine accepte d'utiliser une puissance de 20 kW entre 1330 et 1500 TMG à condition que, pendant cette durée, elle ne subisse pas de brouillage nuisible de la part de la station de Bombay. L'Inde accepte d'arrêter des émissions entre 1330 et 1500 TMG ou de réduire sa puissance au cas où elle causerait des brouillages nuisibles à la Chine
- CHN14** Emissions aux heures suivantes: 0110 et 0710 (colonne 10)
- CHN17** Emissions aux heures suivantes: 0030, 0630 et 1230 (colonne 10)

CLN **République de Sri Lanka (Ceylan)**

- CLN8** Emissions aux heures suivantes: 0105, 0120, 0405, 0705, 0720 et 1005 (colonne 10)
- CLN9** Emissions aux heures suivantes: 0405, 0705, 0720 et 1005 (colonne 10)

CVA **Etat de la Cité du Vatican**

- CVA7** 300°, 315°, 270°, 260°, 250°, 235° (colonne 9a)
- CVA8** 65°, 70°, 80°, 85° (colonne 9a)

D **Allemagne**

- D1** Dans le secteur compris entre 28° et 108°, le gain (Gv) de l'antenne d'émission est -4,5 dB; dans les secteurs compris entre 5° et 25°, et entre 111° et 131°, il est -25 dB

D-F

D2	The gain (Gv) of the transmitting antenna in the sectors 108° to 132° and 321° to 345° is —5dB in the sectors 235° to 245° and 43° to 53°, —12 dB	and 70°, at a maximum altitude of 12 000 metres (Col. 4a or 5a)
D3	Transmission of television signals from a helicopter for the purpose of road traffic control	F8 Beacon-placement ships (Col. 4a or 5a)
D4	The overall bandwidth at which the receiver response is 60 dB below maximum, is 100 kHz	F9 Antenna type and dimensions: 40 × 200 metres semi-directional radiotelescope Effective area and angular coverage in azimuth and elevation: 5000 square metres; hour angle: 1 hour; the angle of elevation is between 0° and 120°
D5	The experiments will last about 30 days. The transmitter is brought into operation during one orbit out of three	F10 Antenna type and dimensions: 40 × 200 metres semi-directional radiotelescope Effective area and angular coverage in azimuth and elevation: 3000 square metres; hour angle: 1 hour; the angle of elevation is between 0° and 120°
DNK	Denmark	F11 Paris and all Prefectures in France
DNK1	10°, 70°, 84°, 130°, 180°, 190°, 250°, 264°, 310° (Col. 9a)	F12 Antenna type and dimensions: 40 × 200 metres semi-directional radiotelescope Effective area and angular coverage in azimuth and elevation: 1000 square metres; hour angle: 1 hour; the angle of elevation is between 0° and 120°
EGY	Egypt (Arab Republic of)	F13 Antenna type and dimensions: 40 × 200 metres radiotelescope Effective area and angular coverage in azimuth and elevation: 150 square metres; hour angle: 1 hour; the angle of elevation is between 0° and 120°
EGY3	Transmissions, every Wednesday from 0800 to 0835; every Friday from 1215 to 1245 (Col. 10)	F14 Antenna type and dimensions: Network of 8 paraboloids, 10 metres in diameter, distributed over 800 metres, North to South Effective area and angular coverage in azimuth and elevation: 500 square metres; azimuth: 360°; the angle of elevation is between 0° and 110°
EGY4	Huna Alkahira (Col. 3)	F15 Antenna type and dimensions: Network of 16 paraboloids, 5 metres in diameter, distributed over 1.5 kilometre, East to West Effective area and angular coverage in azimuth and elevation: 250 square metres; azimuth: 360°; the angle of elevation is between 0° and 110°
F	France	F16 The characteristics are those of television system L except for the number of lines, which is 819
F1	In case of harmful interference to 2 206 kHz (Puerto Rico), mutual agreement will be reached covering the use of this frequency	
F2	In case of harmful interference to 2 252 kHz (Puerto Rico), or 2 258 kHz (Puerto Rico), mutual agreement will be reached covering the use of these frequencies	
F3	In case of harmful interference to 2 830 kHz (Puerto Rico), mutual agreement will be reached covering the use of this frequency	
F4	In case of harmful interference to 3 205 kHz (Puerto Rico), mutual agreement will be reached covering the use of this frequency	
F5	Antenna type and dimensions: 7 metres diameter paraboloid Effective area and angular coverage in azimuth and elevation: 25 square metres; coverage from 260° to 100° in azimuth and from 0° to 110° in elevation	
F6	Antenna type and dimensions: Network of 16 paraboloids, 5 metres in diameter, distributed over 1.5 kilometre, East to West Effective area and angular coverage in azimuth and elevation: 120 square metres; azimuth: 360°; the angle of elevation is between 0° and 110°	
F7	Earth stations aboard balloons moving over the southern hemisphere, between the parallels 20°	

F-G

- F17 La puissance apparente rayonnée sera réduite dans l'azimut 10° si cette réduction se révèle nécessaire à la suite de mesures faites dans la zone de service de la station de Haardtkopf
- F18 Relais passif vers Nice
- F19 Relais passif vers La Gaude
- F20 Ballons stratosphériques dont l'altitude est comprise entre 30 et 40 kilomètres se déplaçant dans la région sud de la France
- F21 **Caractéristiques de l'antenne d'émission:**
Polarisation verticale:
a) couverture en azimut: 0° à 360°
b) couverture en site: $+10^\circ$ à -45°
Le gain isotrope de l'antenne dans la direction du rayonnement maximal est de $+4$ dB
Polarisation horizontale:
a) couverture en azimut: 0° à 360°
b) couverture en site: -90° à -45°
Le gain isotrope de l'antenne dans la direction du rayonnement maximal est de -1 dB
- F54 TLX5; TLD20 à 28; TLY20 à 32 (colonne 3)
- F359 Excepté dans la région de Paris (colonne 4a ou 5a)
- F479 Cette station assure les émissions des signaux horaires du Bureau International de l'Heure et des URSIGRAMMES, à 0900 et 2100
- F480 Cette station assure les émissions des signaux horaires du Bureau International de l'Heure et des URSIGRAMMES, à 0800, 1200 et 2000
- F481 Cette station assure les émissions des signaux horaires du Bureau International de l'Heure et des URSIGRAMMES, à 0930, 1300 et 2230
- F498 Rochambeau Airport (colonne 3)
- F499 Tahiti Radio (colonne 3)
- FJI **Iles Fidji**
- FJI1 Cette assignation concerne un système de navigation Hi-Fix composé d'une station directrice faisant des émissions F9 et de deux stations asservies faisant des émissions A0, fonctionnant toutes dans la zone comprise entre les longitudes $176^\circ 30'$ E et $178^\circ 00'$ W et les latitudes $15^\circ 30'$ S et $21^\circ 00'$ S
- G **Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, les Iles Anglo-Normandes et l'Ile de Man**
- G1 Pour le moment, les navires britanniques n'utilisent pas en fait cette fréquence dans la zone de service du système Loran autorisé, à titre temporaire, à utiliser la fréquence 1 950 kHz dans l'Atlantique nord-est aux termes du numéro 195 du Règlement des radiocommunications. Cependant, l'administration notificatrice se réserve le droit d'utiliser à plein temps cette fréquence pour des émissions de stations de navire à destination de stations côtières en cas de cessation du fonctionnement du système Loran utilisant la fréquence 1 950 kHz; en conséquence, elle tient à ce que cette inscription soit maintenue au Fichier de référence
- G2 La présentation de cette inscription a été modifiée de manière à la rendre conforme aux prescriptions de la section B de l'appendice 1 au Règlement des radiocommunications. L'administration notificatrice déclare qu'il ne faut pas en conclure qu'il y ait eu une modification quelconque dans l'utilisation réelle de l'assignation; celle-ci continuera à être utilisée exclusivement par des navires britanniques pour communiquer avec des stations côtières du Royaume-Uni et d'autres pays de la Région 1, conformément aux dispositions du numéro 1348A du Règlement des radiocommunications
- G3 N'est pas utilisée dans les eaux du Canada et des Etats-Unis d'Amérique
- G4 Cette fréquence est utilisée par des radiophares sans effet directif placés à bord de plates-formes destinées au forage de puits de pétrole, dans la région de la Mer du Nord située à l'ouest du méridien 03° est et entre les parallèles 54° et 58° nord
- G5 Cette fréquence est utilisée par des radiophares sans effet directif placés à bord de plates-formes destinées au forage de puits de pétrole, dans la région de la Mer du Nord située à l'ouest du méridien 03° est et entre les parallèles 51° et 58° nord
- G6 Dans les secteurs compris entre 70° et 190° et entre 250° et 360° , la puissance est réduite à 0,2 kW; dans le secteur compris entre 20° et 50° , elle est réduite à 1 kW (colonnes 8 et 9a)
- G7 **Type et dimensions de l'antenne:**
Interféromètre dipôle
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
100 mètres carrés; ciel complet
- G8 **Type et dimensions de l'antenne:**
Trois paraboloïdes orientables de 18,3 mètres constituant un interféromètre
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
2 000 000 mètres carrés; ciel complet
- G9 **Type et dimensions de l'antenne:**
Réflecteur parabolique orientable de 25 mètres
Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne:
300 mètres carrés; ciel complet
- G10 **Type et dimensions de l'antenne:**
Deux paraboloïdes orientables de 25 mètres de diamètre

G

	Effective area and angular coverage in azimuth and elevation: 250 square metres; full sky		Effective area and angular coverage in azimuth and elevation: 3000 square metres; full sky
G11	Antenna type and dimensions: 1.8 metre diameter front fed steerable paraboloid Effective area and angular coverage in azimuth and elevation: 0.83 square metre; full sky	G21	Antenna type and dimensions: One Mark II 38 × 25.9 metres steerable paraboloid Effective area and angular coverage in azimuth and elevation: 3000 square metres; full sky
G12	On non-interference basis to Tokyo on 2 225 kHz	G22	Antenna type and dimensions: One Mark II 38 × 25.9 metres steerable paraboloid Effective area and angular coverage in azimuth and elevation: 520 square metres; full sky
G13	On non-interference basis to Samar on 2 230 kHz; not used in New Zealand or Eastern Australian waters		
G14	Not used in Eastern Australian waters	G23	Antenna type and dimensions: One Mark I 76 metres diameter steerable paraboloid and one Mark II 38 × 25.9 metres steerable paraboloid. The two antennas may be used either separately or together as an interferometer Effective area and angular coverage in azimuth and elevation: 3000 square metres; full sky
G15	Not used in New Zealand waters	G24	This frequency is used by non-directional radio beacons on board oil drilling rigs, in the North Sea Area west of 03° East and between 51° and 61° North
G16	Antenna type and dimensions: One Mark I 76 metres diameter steerable paraboloid and one Mark II 38 × 25.9 metres steerable paraboloid. The two antennas may be used either separately or together as an interferometer. The Mark I antenna may be used as interferometer with the antenna at Wardle Effective area and angular coverage in azimuth and elevation: 3000 square metres; full sky	G25	Belize Radio (Col. 3)
G17	Antenna type and dimensions: One Mark III 38 × 25.9 metres steerable paraboloid. This antenna will normally operate in conjunction with the Mark I antenna at Jodrell Bank as interferometer for measuring angular diameter of Radio Sources Effective area and angular coverage in azimuth and elevation: 520 square metres; full sky	G26	This frequency is also used for communications between helicopters and ships in United Kingdom waters (RDARA 1B)
G18	Lifeboats, lighthouses and lightships (Col. 4a or 5a)	G27	Labcom, Katima Mulilo (Col. 3)
G19	Lightships, lighthouses (Col. 4a or 5a)	G28	Linear polarization inclined at an angle of 45°
G20	Antenna type and dimensions: One Mark I 76 metres diameter steerable paraboloid and one Mark II 38 × 25.9 metres steerable paraboloid	G29	This circuit is used for liaison when testing between Loran stations. Transmissions of approximately one minute every twelve hours and as required for technical liaison
		G30	Antenna type and dimensions: Dipole array 100 × 450 metres Effective area and angular coverage in azimuth and elevation: 20 000 square metres; azimuth 180°; the angle of elevation is between 20° and 90°

G

G31	Type et dimensions de l'antenne: Huit paraboloïdes orientables de 13 mètres de diamètre constituant un interféromètre multiple Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 300 000 mètres carrés; ciel complet	G41	47°, 58°, 97°, 121°, 180° (colonne 9a)
G32	Type et dimensions de l'antenne: Trois paraboloïdes orientables de 20 mètres de diamètre constituant un interféromètre multiple Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 100 000 mètres carrés; ciel complet	G42	34°, 58°, 82°, 110°, 133°, 174° (colonne 9a)
G33	Type et dimensions de l'antenne: Antenne à réflecteur cylindrique de 20 × 450 mètres Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 10 000 mètres carrés; l'azimut peut varier de 0° à 180° et l'angle de site de 30° à 90°	G43	224°, 260°, 294° (colonne 9a)
G34	Type et dimensions de l'antenne: Paraboloïde de 0,9 mètres de diamètre, alimentation par l'avant, montage équatorial Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 0,32 mètre carré; ciel complet	G44	47°, 80°, 110°, 126°, 180° (colonne 9a)
G35	Type et dimensions de l'antenne: Paraboloïde de 0,9 mètre de diamètre, double faisceau, alimentation par l'avant, montage équatorial Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 0,32 mètre carré; ciel complet	G45	47°, 58°, 70°, 100°, 121°, 180° (colonne 9a)
G36	Type et dimensions de l'antenne: Paraboloïde de 1,2 mètre de diamètre, alimentation par l'avant, montage équatorial Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 0,56 mètre carré; ciel complet	G46	47°, 58°, 70°, 90°, 110°, 121°, 133°, 160°, 196° (colonne 9a)
G37	Type et dimensions de l'antenne: Paraboloïde de 0,5 mètre de diamètre, double faisceau, alimentation par l'avant, montage équatorial Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 0,1 mètre carré; ciel complet	G47	227°, 250°, 289°, 318° (colonne 9a)
G38	44°, 58°, 80°, 98°, 114°, 318°, 126°, 306°, 138°, 294°, 160°, 190°, 224°, 260°, (colonne 9a)	G48	47°, 58°, 70°, 90°, 110°, 150°, 196° (colonne 9a)
G39	34°, 47°, 58°, 70°, 90°, 105°, 133°, 160°, 184° (colonne 9a)	G49	227°, 260°, 294° (colonne 9a)
G40	227°, 238°, 250°, 294°, 326° (colonne 9a)	G50	47°, 58°, 97°, 105°, 133°, 180° (colonne 9a)
		G51	224°, 80°, 260°, 294° (colonne 9a)
		G52	47°, 90°, 110°, 150°, 165° (colonne 9a)
		G53	Type et dimensions de l'antenne: Réflecteur parabolique orientable de 25 mètres Surface effective et limites entre lesquelles peuvent varier l'azimut et l'angle de site de l'antenne: 200 mètres carrés; ciel complet
		G54	47°, 82°, 114°, 133°, 172° (colonne 9a)
		G55	34°, 58°, 82°, 114° (colonne 9a)
		G56	160°, 172°, 196°, 210° (colonne 9a)
		G57	90°, 109°, 121°, 133°, 160° (colonne 9a)
		G58	34°, 58°, 80°, 260°, 114°, 126°, 160° (colonne 9a)
		G59	184°, 196°, 210° (colonne 9a)
		G60	34°, 47°, 58°, 70° (colonne 9a)
		G61	34°, 47°, 58°, 70°, 160°, 174°, 190° (colonne 9a)
		G62	34°, 47°, 70°, 97°, 121°, 133°, 160° (colonne 9a)
		G63	172°, 184°, 196°, 215° (colonne 9a)
		G64	47°, 34°, 58°, 80°, 260°, 114°, 126°, 160°, 196°, 210°, 326° (colonne 9a)
		G65	58°, 70°, 100°, 126°, 172° (colonne 9a)
		G66	58°, 70°, 114°, 150° (colonne 9a)
		G67	47°, 58°, 110°, 146°, 165° (colonne 9a)
		G68	34°, 58°, 47°, 82°, 114° (colonne 9a)
		G69	44°, 58°, 70°, 110°, 165° (colonne 9a)
		G70	34°, 47°, 70°, 97°, 110°, 126°, 133°, 146°, 174°, 196° (colonne 9a)
		G71	224°, 250°, 289° (colonne 9a)
		G72	44°, 82°, 126°, 138°, 150°, 165°, 184° (colonne 9a)
		G73	224°, 250°, 294°, 306° (colonne 9a)

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G74	294°, 306°, 326° (Col. 9a)	G108	227°, 80°, 260°, 294°, 306° (Col. 9a)
G75	This frequency is used by non-directional radio beacons on board drilling rigs, in the North Sea area West of 02° East and North of 59° North	G109	44°, 78°, 98°, 135°, 172° (Col. 9a)
G76	44°, 80°, 98°, 126°, 138°, 174°, 196° (Col. 9a)	G110	34°, 47°, 58°, 82°, 114°, 126°, 184° (Col. 9a)
G77	224°, 260°, 294°, 326° (Col. 9a)	G111	224°, 260° (Col. 9a)
G78	44°, 70°, 109°, 121°, 133°, 160° (Col. 9a)	G112	47°, 100°, 82°, 114°, 150°, 165°, 190° (Col. 9a)
G79	47°, 82°, 190° (Col. 9a)	G113	227°, 250°, 294° (Col. 9a)
G80	58°, 80°, 260°, 114°, 160° (Col. 9a)	G114	44°, 80°, 126°, 160° (Col. 9a)
G81	34°, 70°, 100°, 150°, 184° (Col. 9a)	G115	47°, 80°, 160° (Col. 9a)
G82	44°, 80°, 114°, 126°, 174° (Col. 9a)	G116	227°, 260°, 294°, 330°, (Col. 9a)
G83	44°, 80°, 114°, 174° (Col. 9a)	G117	34°, 80°, 126°, 160° (Col. 9a)
G84	34°, 58°, 90°, 126°, 160°, 184° (Col. 9a)	G118	227°, 260°, 294°, 310° (Col. 9a)
G85	227°, 250°, 294°, 324° (Col. 9a)	G119	44°, 80°, 160°, 184° (Col. 9a)
G86	44°, 80°, 133°, 160° (Col. 9a)	G120	47°, 80°, 126°, 160° (Col. 9a)
G87	294°, 330° (Col. 9a)	G121	227°, 262°, 294° (Col. 9a)
G88	34°, 47°, 70°, 90°, 110°, 160°, 184° (Col. 9a)	G122	44°, 80°, 110° (Col. 9a)
G89	224°, 250°, 294°, 326° (Col. 9a)	G123	47°, 70°, 126° (Col. 9a)
G90	44°, 80°, 260°, 100°, 121°, 133°, 174°, 196° (Col. 9a)	G124	70°, 90°, 126°, 160°, 184° (Col. 9a)
G91	227°, 238°, 289°, 326° (Col. 9a)	G125	227°, 250°, 294°, 326° (Col. 9a)
G92	47°, 58°, 100°, 121°, 133°, 174° (Col. 9a)	G126	44°, 224°, 80°, 260°, 160° (Col. 9a)
G93	227°, 250°, 289° (Col. 9a)	G127	44°, 224°, 80°, 260° (Col. 9a)
G94	34°, 58°, 80°, 114°, 126°, 160°, 190° (Col. 9a)	G128	227°, 260°, 294°, 306° (Col. 9a)
G95	227°, 260°, 294°, 326° (Col. 9a)	G129	34°, 80°, 126°, 160°, 184° (Col. 9a)
G96	47°, 70°, 82°, 109°, 121°, 133°, 170° (Col. 9a)	G130	80°, 260°, 227°, 294° (Col. 9a)
G97	58°, 82°, 100°, 114°, 160° (Col. 9a)	G131	47°, 80°, 97°, 135°, 160° (Col. 9a)
G98	44°, 70°, 97°, 135°, 160° (Col. 9a)	G132	58°, 80°, 126°, 160° (Col. 9a)
G99	44°, 82°, 109°, 121°, 150° (Col. 9a)	G133	47°, 80°, 100°, 126°, 160° (Col. 9a)
G100	250°, 294°, 326° (Col. 9a)	G134	34°, 80°, 100°, 125°, 160° (Col. 9a)
G101	34°, 58°, 70°, 90°, 110°, 121°, 150°, 174°, 196° (Col. 9a)	G135	326°, 294°, 260°, 227° (Col. 9a)
G102	30°, 47°, 70°, 100°, 114° (Col. 9a)	G136	70°, 109°, 133°, 160° (Col. 9a)
G103	58°, 70°, 97°, 121°, 150°, 174°, 196° (Col. 9a)	G137	227°, 260°, 289° (Col. 9a)
G104	44°, 68°, 272°, 80°, 260°, 114°, 318°, 126°, 306° 160° (Col. 9a)	G138	34°, 70°, 100°, 135°, 172°, 224°, 260°, 294° (Col. 9a)
G105	44°, 80°, 114°, 126°, 160° (Col. 9a)	G139	Circular polarization of radiation
G106	34°, 47°, 109°, 58°, 121°, 150°, 180° (Col. 9a)	G140	47°, 80°, 160°, 196° (Col. 9a)
G107	34°, 58°, 80°, 97°, 126°, 160°, 184° (Col. 9a)	G141	34°, 109°, 133° (Col. 9a)
		G143	58°, 80°, 160°, 184° (Col. 9a)
		G144	34°, 82°, 124°, 160°, 184° (Col. 9a)
		G145	58°, 82°, 100°, 126°, 160° (Col. 9a)
		G146	70°, 126°, 160° (Col. 9a)
		G147	34°, 58°, 82°, 126°, 160°, 184° (Col. 9a)

G-I

G148	44°, 70°, 100°, 126°, 160° (Col. 9a)
G149	100°, 160°, 184° (Col. 9a)
G150	58°, 80°, 100°, 124°, 160° (Col. 9a)
G151	224°, 250°, 294° (Col. 9a)
G152	82°, 124°, 160° (Col. 9a)
G153	44°, 82°, 100°, 126°, 160°, 184° (Col. 9a)
G154	80°, 100°, 126°, 160° (Col. 9a)
G155	47°, 70°, 110°, 160° (Col. 9a)
G156	58°, 80°, 124°, 160° (Col. 9a)
G162	80°, 160°, 238°, 260°, 294° (Col. 9a)
G163	2°, 13°, 25°, 37°, 135°, 170°, 303°, 315°, 327°, 338°, 350° (Col. 9a)
G164	25°, 135°, 205°, 217°, 315°, 350° (Col. 9a)
G165	2°, 25°, 135°, 170°, 315°, 327°, 350° (Col. 9a)
G166	2°, 25°, 37°, 135°, 170°, 315°, 327°, 350° (Col. 9a)
G167	2°, 25°, 37°, 135°, 170°, 315°, 350° (Col. 9a)
G168	13°, 250°, 205°, 217°, 315°, 350° (Col. 9a)
G169	13°, 25°, 315°, 327°, 350° (Col. 9a)
G170	2°, 25°, 135°, 170°, 315°, 338°, 350° (Col. 9a)
G171	25°, 37°, 135°, 170°, 205°, 217° (Col. 9a)
G172	2°, 13°, 25°, 135°, 170°, 303°, 315°, 327°, 350° (Col. 9a)
G173	360°, 13°, 25°, 135°, 180°, 303°, 315°, 338°, 350°, (Col. 9a)
G174	2°, 25°, 37°, 140°, 170°, 315°, 327°, 350° (Col. 9a)
G175	2°, 13°, 25°, 140°, 180°, 303°, 315°, 338°, 350° (Col. 9a)
G177	360°, 140°, 170°, 320°, 350° (Col. 9a)
G178	2°, 140°, 180°, 320°, 350° (Col. 9a)
G179	360°, 25°, 37°, 135°, 170°, 315°, 327°, 350° (Col. 9a)
G188	Kingston Aeradio (Col. 3)
G220	Scottish Airways (Col. 3)
G239	Coolidge Tower (Col. 3)
G240	Belize Aeradio (Col. 3)
G245	Transmissions for approximately 20 minutes, at 0000, 0300, 0600, 0900, 1200, 1500, 1800 and 2100 (Col. 10)
G259	Hongkong Radio (Col. 3)
GRC	Greece
GRC1	Voice of America (Col. 3)

GRL**Greenland**

GRL1 This network includes all Greenland, i.e. inside the geographical triangle:

68 49 30 W 76 34 00 N

46 02 56 W 60 42 50 N

20 13 18 W 74 18 19 N

GRL3 If harmful interference is caused to Canadian assignments on this frequency, the Danish Administration will be prepared to discuss the matter with the Canadian Administration with a view to the elimination of the interference

HOL**Kingdom of the Netherlands**

HOL1 Transmissions each hour, from H+00 to H+15 (Col. 10)

HOL4 Lighthouses, vessels (Col. 4a)

HOL5 Lightships, lighthouses (Col. 4a)

HOL9 Scheveningen Radio (Col. 3)

HOL18 Station PCI carries out the service when station PCH, using the same frequency, is unable to do so

HOL21 Curaçao Aeradio (Col. 3)

HOL29 Amsterdam Control (Col. 3)

HOL41 Amsterdam Information (Col. 3)

HOL44 Groningen Tower (Col. 3)

HOL51 Beek Radio (Col. 3)

HOL52 Beek Radio; Beek Gonio (Col. 3)

HOL54 Amsterdam Control; Vlissingen Gonio (Col. 3)

HOL56 The Netherlands Administration reserves the right to increase the power up to 200 kW (Col. 8)

HOL58 Paramaribo Radio (Col. 3)

HOL64 Groningen Homer or Groningen Tower and Groningen Radio (Col. 3)

HOL68 Transmissions from 2200 to 0300 on weekdays, from 0900 to 0300 on Sundays (Col. 10)

HOL69 **Antenna type and dimensions:**

10 metres diameter steerable paraboloid

Effective area and angular coverage in azimuth and elevation:

40 square metres; full sky

HOL70 **Antenna type and dimensions:**

25 metres diameter steerable paraboloid

Effective area and angular coverage in azimuth and elevation:

600 square metres; full sky

HOL71 **Antenna type and dimensions:**

7.5 metres diameter steerable paraboloid

Effective area and angular coverage in azimuth and elevation:

25 square metres; full sky

I**Italy**

II The gain (Gv) of the transmitting antenna in the sector 135° to 165° is -4 dB; it is +4 dB in the sector 280° to 25°, -14 dB in the sectors

I-J

- 60° to 70°, 110° to 120°, 195° to 210° and 245° to 250°, -6 dB in the sectors 80° to 95° and 220° to 235°
- I2** **Antenna type and dimensions:**
Two antennas formed by curtains of dipoles arranged orthogonally in a Mills cross, 1200 metres × 30 metres each
Effective area and angular coverage in azimuth and elevation:
35 000 square metres; fixed azimuth in the meridian plane; the angle of elevation is between 15° and 90°
- I15** Transmissions each hour from H+10 to H+15 and from H+40 to H+45 (Col. 10). Meteorological
- IND** **Republic of India**
- IND1** **Antenna type and dimensions:**
32 paraboloids, 1.8 metre in diameter
Effective area and angular coverage in azimuth and elevation:
32 × 1 square metres; full sky
- IND2** Canton closes down at 1500 GMT. Bombay operates beyond 1500 GMT normally. By arrangement between India and China, China would agree to operate on 20 kW between 1330 GMT and 1500 GMT provided there is no harmful interference to China from Bombay operating between these hours. India agrees to suspend transmission between 1330 and 1500 GMT or to reduce power in the event of harmful interference to China
- IND3** Occasional use two or three days in a week
- IND4** **Antenna type and dimensions:**
Parabolic cylinder, 530 × 30 metres, with an array of 968 dipoles along its focal line
Effective area and angular coverage in azimuth and elevation:
9500 square metres; coverage from 0° to 180° in azimuth and from 5° to 90° in elevation
- IND5** Relay to the United States of America
- IND7** Notified by India for use by "the Indian Mission in Indo-China"
- IND8** Vertical radiation aerial (C.C.I.R. Diagram No. 39) (Col. 9a)
- INS** **Republic of Indonesia**
- INS1** If harmful interference is caused to Dacca (Pakistan), the power will be reduced to a minimum of 0.15 kW
- INS2** If harmful interference is caused to Delhi (India), the power will be reduced to a minimum of 0.15 kW
- INS3** If harmful interference is caused to Calcutta (India), the power will be reduced to a minimum of 0.1 kW
- INS6** If harmful interference is caused to Calcutta (India) or S. Francisco del Monte (Philippines), the power will be reduced to a minimum of 0.15 kW
- INS10** Transmitter located on a tug (Col. 4a)
- INS13** Beranti Tower (Col. 3)
- IRL** **Ireland**
- IRL1** Lightships, lifeboats, lighthouses
- IRN** **Iran**
- IRN1** On non-interference basis to stations in Portuguese India
- IRN4** On non-interference basis to Indian station Karwar
- IRN9** If harmful interference is caused to Kunming (China), the power will be reduced to 15 kW between 1400 and 1600 GMT
- IRN10** On non-interference basis to Rangoon (Burma) between 1300 and 1800 GMT
- IRQ** **Republic of Iraq**
- IRQ1** Transmissions each hour from H+06 to H+09 and from H+33 to H+39 (Col. 10)
- ISL** **Iceland**
- ISL1** For two 40-minute periods per day (Col. 10)
- ISL3** Reykjavik Naval Control (Col. 3)
- ISR** **State of Israel**
- ISR7** Transmissions every half hour, at H+15 and H+45 (Col. 10)
- J** **Japan**
- J1** **Antenna type and dimensions:**
24 metres spherical reflector
Effective area and angular coverage in azimuth and elevation:
267 square metres; azimuth 180° or 360°; the angle of elevation is between 40° and 90°
- J2** If harmful interference is caused to the reception of Chittagong, Japan will reduce the radiation towards Pakistan as from 1130 GMT
- J3** If harmful interference is caused to the reception of Patna, the effective radiation in the direction of India will be reduced to 10 kW as from 1130 GMT
- J4** If harmful interference is caused to the reception of Chinese stations, Japan will reduce the radiation towards China to 10 kW. If harmful interference is caused to the reception of Pakistan station, Japan will reduce the radiation towards Pakistan as from 1130 GMT

J-NPL

J5	If harmful interference is caused to the operation of Allahabad, Japan will consider measures to eliminate interference
J6	On non-interference basis to India
J7	Transmission of oceanographic data from MET Buoy No. 1 station (135° 00' E 39° 00' N) Identification: JM2A
J8	Transmission of oceanographic data from MET Buoy No. 2 station (136° 30' E 40° 00' N) Identification: JM2B
J9	Transmission of oceanographic data from MET Buoy No. 3 station (135° 00' E 20° 00' N) Identification: JM2C
J54	Tohokudenryokuozehara (Col. 3)
J55	Kawanakajima-Honsha (Col. 3)
J56	Takugin-Muroran (Col. 3)
J57	Takugin-Asahikawa (Col. 3)
J58	Takugin-Obihiro (Col. 3)
J59	Takugin-Kitami (Col. 3)
J60	Takugin-Kushiro (Col. 3)
J61	Takugin-Sapporo (Col. 3)
J62	Takugin-Hakodate (Col. 3)
J73	Mitsuikinzokuatozu (Col. 3)
J74	Tohokudenryoku Oirase (Col. 3)
J75	Mitsuikinzokukanakido (Col. 3)
J77	Mitsuikinzokunakanomata (Col. 3)
J78	Mitsuikinzokushikama (Col. 3)
J80	Tohokudenryoku Iwasaki (Col. 3)
J81	Kensetsu Fukuchiyama (Col. 3)
J82	Kensetsu Maruyama (Col. 3)
J83	Kensetsu Yuzawa (Col. 3)
J84	Kensetsu Sendai (Col. 3)
J85	Mitsuikinzokudo (Col. 3)
J86	Kawanakajima Omachi (Col. 3)
J87	Kawanakajima Takafu (Col. 3)
J88	Kawanakajima Ueda (Col. 3)
J89	Sempoku Honsha (Col. 3)
J90	Sempoku Kensenuma (Col. 3)
J91	Kokutetsu Aizuwakamatsu (Col. 3)
J92	Kensetsu Hiroshima (Col. 3)
J93	Kensetsu Miyakonojo (Col. 3)
J94	Kensetsu Miyazaki (Col. 3)
J95	Kensetsu Ichinoseki (Col. 3)
J96	Kensetsu Iinokawa (Col. 3)
J97	Kensetsu Ishibuchi (Col. 3)
J98	Kensetsu Morioka (Col. 3)
J99	Kensetsu Naruko (Col. 3)
J100	Kensetsu Sakata (Col. 3)
J101	Kensetsu Sarutani (Col. 3)
J102	Kensetsu Tambara (Col. 3)
J103	Kensetsu Yamagata (Col. 3)
J104	Kensetsu Yoroihata (Col. 3)
J105	Hiroshima Hiroden (Col. 3)
J106	Kensetsu Sakuma (Col. 3)
J107	Kensetsu Narude (Col. 3)

J109	Kensetsu Nagaoka (Col. 3)
J110	Kensetsu Nagano (Col. 3)
J112	Kensetsu Matsumoto (Col. 3)
J113	Tone Kumiai (Col. 3)
J114	Kensetsu Akaho (Col. 3)
J115	Kensetsu Sakashita (Col. 3)
J116	Kensetsu Takaoka (Col. 3)
J117	Kensetsu Iwata (Col. 3)
J123	Keiba Hombu (Col. 3)
J128	Hinoemata Hokuden (Col. 3)
J129	Takikawa Kokutetsu (Col. 3)
J130	Oshamambe Kokutetsu (Col. 3)
J131	Nagano Kokutetsu (Col. 3)
J132	Iwamizawa Kokutetsu (Col. 3)

LBY Libyan Arab Republic

LBY1	Transmissions every hour, at H+39 (Col. 10)
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MDG Malagasy Republic

MDG1	Automatic transmission of seismographic data
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MRC Kingdom of Morocco

MRC1	From 2000 to 0600 the station Zagora automatically transmits, for two minutes and thirty seconds, every three hours (synoptic observation times), the result of its observations
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NOR Norway

NOR1	Antenna type and dimensions: 7.6 metres diameter paraboloid Effective area and angular coverage in azimuth and elevation: 28 square metres; full sky
NOR2	Antenna type and dimensions: Three mattress antennas on an East-West baseline; each antenna is composed of 16 half-wave dipoles Effective area and angular coverage in azimuth and elevation: 3 × 18 square metres; fixed azimuth; the angle of elevation is between 0° and 90°
NOR3	Transmissions from 0900 to 1000, 1400 to 1500, 1900 to 2000 and 2300 to 2400 (Col. 10)
NOR5	Antenna type and dimensions: 9.1 metres diameter paraboloid Effective area and angular coverage in azimuth and elevation: 40 square metres; full sky
NOR6	The broadcasting stations Hamar and Roeros, both assigned the frequency 520 kHz, will not transmit simultaneously
NOR7	45°, 105°, 165°, 225°, 285°, 345° (Col. 9a)

NPL Nepal

NPL1	Notified by India
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NZL-S

NZL New Zealand

- NZL10 Transmissions Fridays only (Col. 10)
- NZL13 Transmissions Tuesdays only (Col. 10)
- NZL15 Transmissions from 2300 to 2400 daily plus one 24-hour period monthly (Col. 10)

PAK Pakistan

- PAK3 Pakistan will consider using directional aerial system to reduce radiation in the direction of Vientiane in the event of harmful interference to it

PHL Republic of the Philippines

- PHL4 On non-interference basis to standard frequency signal on 2 500 kHz
- PHL12 Manila relay of the Voice of America (Col. 3)
- PHL14 Transmissions from 2100 to 0200 and 0900 to 1400 on weekdays; from 2100 to 0500 and 0800 to 1400 on Sundays (Col. 10)
- PHL15 Transmissions from 2200 to 1400 on weekdays; from 2200 to 0900 on Sundays and holidays (Col. 10)

POL People's Republic of Poland

- POL1 **Antenna type and dimensions:**
Two cylindrical paraboloids 4×8 metres with folded dipole at the focus, 24 metres East-West spacing
Effective area and angular coverage in azimuth and elevation:
18 square metres; coverage from 120° to 240° in azimuth and from 10° to 70° in elevation
- POL2 **Antenna type and dimensions:**
Two corner reflectors $6 \times 6 \times 80$ metres with eight (λ) dipoles, 1400 metres East-West spacing
Effective area and angular coverage in azimuth and elevation:
800 square metres; coverage from 160° to 200° in azimuth and from 10° to 80° in elevation
- POL3 **Antenna type and dimensions:**
Two log-periodic aerials, 20 metres East-West spacing
Effective area and angular coverage in azimuth and elevation:
0.7 square metre; coverage from 120° to 240° in azimuth and from 10° to 70° in elevation
- POL4 **Antenna type and dimensions:**
Two corner reflectors with eight wideband dipoles, 220 metres East-West spacing

Effective area and angular coverage in azimuth and elevation:

80 square metres; coverage from 170° to 190° in azimuth and from 20° to 80° in elevation

POR Portugal

- POR1 Transmissions at even hours, from H+40 to H+60 and at odd hours, from H+00 to H+20 (Col. 10)
- POR2 Transmissions at even hours, from H+20 to H+60 (Col. 10)
- POR20 Transmissions at: 0115, 0515, 0915 and 1355 (Col. 10)

S Sweden

- S1 Space station aboard a rocket the maximum altitude of which is 350 km (Col. 4a or 5a)
- S2 Transmissions at: 0000, 0300, 0600, 0900, 1200, 1500, 1800 and 2100 (Col. 10)
- S4 **Antenna type and dimensions:**
Antenna array
Effective area and angular coverage in azimuth and elevation:
130 square metres; full sky
- S5 45° , 100° , 162° , 225° , 280° , 342° (Col. 9a)
- S6 **Antenna type and dimensions:**
25.6 metres paraboloid with Cassegrain feed system
Effective area and angular coverage in azimuth and elevation:
300 square metres; full sky
- S7 **Antenna type and dimensions:**
25.6 metres paraboloid with Cassegrain feed system
Effective area and angular coverage in azimuth and elevation:
250 square metres; full sky
- S8 Malmoe Radio, Malmoe Control (Col. 3)
- S9 Directional antenna, protection 296° (Col. 9a)
- S10 Goeteborg Control; Goeteborg Radio (Col. 3)
- S11 Stockholm Control; Stockholm Radio (Col. 3)
- S12 **Antenna type and dimensions:**
25.6 metres paraboloid with Cassegrain feed system
Effective area and angular coverage in azimuth and elevation:
150 square metres; full sky
- S13 SEF, Stockholm Radio (Col. 3)
- S16 SEB, Sundsvall Radio (Col. 3)

S-USA

- S19 100 channels on H_1 line at 1, 10 or 100 kHz intervals down to 1100 MHz
- S20 100 channels on OH line at 1 kHz intervals
- S21 **Antenna type and dimensions:**
Three-element Yagi
Effective area and angular coverage in azimuth and elevation:
51 square metres; all azimuths; angle of elevation: 90°
- S22 **Antenna type and dimensions:**
Two-element interferometer, baseline 60 metres long, each element is a ten-element log-periodical antenna for 35-65 MHz
Effective area and angular coverage in azimuth and elevation:
23 square metres at 50 MHz, baseline rotating in all azimuths, both elements variable in elevation from 0° to 70°
- S23 Balloon at a height of about 30 kilometres
- S24 Decca Sea-Fix Chain used for position finding in connection with hydrographic surveying along the Swedish coast-line
- S26 Radiobeacon in rocket payload used for recovery reasons
Maximum altitude of rocket is 20 km. Transmission starts during the descent at the height of 6000 metres
Estimated number of rockets: 15/year
Operating time during descent: Maximum 10 minutes/rocket
Operating time on ground: Maximum 32 hours/rocket
Test transmissions from ground: 20 hours year
- S27 Space station aboard a rocket the maximum altitude of which is 200 km (Col. 4a or 5a)
- S28 Vertical polarization. Pulse power 10 kW. The field strength from other stations on the same frequency must not exceed $90 \mu V$ at a distance of 200 km
- S29 Space station aboard a rocket the maximum altitude of which is 250 km
Estimated number of rockets: 15/year
Operating time: 8 minutes/rocket
- SDN **Democratic Republic of the Sudan**
- SDN1 This station operates from Khartoum by remote control lines to antenna at Omdurman (Col. 4a)

SUI**Confederation of Switzerland**

- SUI3 The maximum effective height of the transmitting antenna, as defined in Annex 2, Chapter 1, paragraph 6 of the Regional Agreement for the European Broadcasting Area, Stockholm, 1961, is
— 30 metres in the direction of 60° ,
— 60 metres in the direction of France

THA**Thailand**

- THA1 Transmissions at 0000, 0300, 0600, 0900, 1200, 1500 and 1800 (Col. 10)

TUR**Turkey**

- TUR1 Transmissions are made at the beginning of each hour (Col. 10)
- TUR2 Transmissions at 0530 and 1730 (Col. 10)

URG**Oriental Republic of Uruguay**

- URG2 Transmission of fog signals, every 10 minutes, starting at H+00 (Col. 10)
- URG3 Transmission of fog signals, every 10 minutes, starting at H+05 (Col. 10)
- URG4 Transmission of fog signals, every 5 minutes (Col. 10)

URS**Union of Soviet Socialist Republics**

- URS1 Near polar circular orbit
- URS2 The transmitter is brought into operation depending on visibility conditions when the altitude of the satellite is over about 15 000 km. The power is adjusted to ensure that the power flux density produced at the surface of the Earth during operation of the transmitter does not exceed the limit recommended in C.C.I.R. Recommendation 358-1, Oslo, 1966
- URS3 Elliptical orbit

USA**United States of America**

- USA1 The gain (G_v) of the transmitting antenna in the sector 30° to 90° is -30 dB; in the sector 220° to 260° -6 dB
- USA2 Near polar orbit
- USA3 Groups of dashes (Col. 3)
- USA4 Series of dots (Col. 3)
- USA5 **Antenna type and dimensions:**
 109.7×21.3 metres standing paraboloid with tiltable flat reflector
Effective area and angular coverage in azimuth and elevation:
1690 square metres; -35° to $+65^\circ$ declination

USA

- USA6** **Antenna type and dimensions:**
Two-element interferometer, baseline 41 metres long, each element is two five-element Yagis stacked in phase
Effective area and angular coverage in azimuth and elevation:
15 square metres, vertically directed, 45° in both planes
- USA7** **Antenna type and dimensions:**
18.3 metres diameter steerable paraboloid
Effective area and angular coverage in azimuth and elevation:
130.1 square metres; full sky
- USA8** **Antenna type and dimensions:**
1) 65 square metres Horn Reflector
2) 36.6 metres diameter paraboloid, 1050 square metres
Effective area and angular coverage in azimuth and elevation:
1) 42.3 square metres. The Horn Reflector is mounted on single axis, variable only in declination;
2) 472 square metres. The 36.6 metres paraboloid is fully steerable over the hemisphere
A radiometer is used on both antenna systems
- USA9** **Antenna type and dimensions:**
25.6 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
260 square metres; full sky
- USA10** **Antenna type and dimensions:**
8.5 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
30 square metres; full sky
- USA11** The frequencies in the band 1 750-1 800 kHz used for Disaster Service are for disaster communications and, pursuant to paragraph 6 of Resolution No. 1 of Region 2 Conference (ITU) Washington, 1949, such use of these frequencies has been co-ordinated with other interested Administrations of Region 2
- USA12** **Antenna type and dimensions:**
Two 27 metres diameter steerable paraboloids
Effective area and angular coverage in azimuth and elevation:
2 × 300 square metres; hour angle: ± 4 hours; —50° to +90° declination
- USA13** **Antenna type and dimensions:**
18.3 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
100 square metres; full sky
- USA14** In accordance with No. 487 Radio Regulations notice is given that this frequency also will be used by coast stations for the reception of ship stations
- USA15** In accordance with No. 487 Radio Regulations notice is given that this frequency also will be used by land stations for the reception of mobile stations
- USA16** **Antenna type and dimensions:**
305 metres diameter spherical reflector
Effective area and angular coverage in azimuth and elevation:
37 000 square metres; all directions; the angle of elevation is between 69° and 90°
- USA17** **Antenna type and dimensions:**
42.7 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
752.5 square metres; hour angle: ±6 hours; +88° to —48° declination
- USA18** **Antenna type and dimensions:**
91.4 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
2694 square metres; transit telescope; +86° to —20° declination
- USA19** The transponder will operate initially for testing purposes without modulation (FO). In this mode the maximum e.i.r.p. will be 10.5 dBW
- USA20** **Antenna type and dimensions:**
18.3 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
150 square metres: equatorial mount; hour angle: ±6 hours; +90° to —50° declination
- USA21** **Antenna type and dimensions:**
3 metres diameter directive parabolic reflector
Effective area and angular coverage in azimuth and elevation:
4.37 square metres; full sky

USA

- USA22 **Antenna type and dimensions:**
25.6 metres diameter parabolic reflector
Effective area and angular coverage in azimuth and elevation:
275 square metres; full sky
- USA23 **Antenna type and dimensions:**
25.9 metres diameter parabolic reflector
Effective area and angular coverage in azimuth and elevation:
280 square metres; full sky
- USA24 **Antenna type and dimensions:**
25.9 metres diameter parabolic reflector
Effective area and angular coverage in azimuth and elevation:
210 square metres; full sky
- USA25 **Antenna type and dimensions:**
Parabolic cylinder 122×122 metres
Effective area and angular coverage in azimuth and elevation:
7500 square metres; transit telescope; the angle of elevation is between 60° and 90°
- USA26 **Antenna type and dimensions:**
26 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
180 square metres; full sky
- USA27 Continuous during the periods when the satellite moves in the daylight portion of the orbit (Col. 10)
- USA28 There are small differential differences in the velocities of the individual satellites of the system; for this reason the periods will vary between 12 days for the fastest and 13.7 days for the slowest
- USA29 Radiometric system used incorporates flexible bandwidths up to the 1000 MHz limit of the tunnel diodes, with "band-reject" filters
- USA30 This frequency is used primarily for intership communications on the Great Lakes by the United States of America and Canada
- USA31 Telegraphy only
- USA32 **Antenna type and dimensions:**
18.3 metres diameter paraboloid
- Effective area and angular coverage in azimuth and elevation:**
148.6 square metres; full sky
- USA33 **Antenna type and dimensions:**
Broadband dipoles over reflecting screen 5×5 metres
Effective area and angular coverage in azimuth and elevation:
20 square metres; azimuth coverage $\pm 45^\circ$ from South; the angle of elevation is between 0° and 90°
- USA34 **Antenna type and dimensions:**
12.8 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
128.7 square metres; azimuth coverage $\pm 41^\circ$; $+66^\circ$ to 0° declination
- USA35 **Antenna type and dimensions:**
Three elements interferometer, each element is a 25.9 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
526.8 square metres; hour angle: ± 6 hours; $+88^\circ$ to -52° declination
- USA36 **Antenna type and dimensions:**
0.9 metre diameter steerable paraboloid (Dicke radiometer)
Effective area and angular coverage in azimuth and elevation:
0.3 square metre; full sky
- USA37 **Antenna type and dimensions:**
305 metres diameter spherical reflector
Effective area and angular coverage in azimuth and elevation:
79 897 square metres; all directions; the angle of elevation is between 67° and 90°
- USA38 **Antenna type and dimensions:**
25.9 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
300 square metres; full sky
- USA39 **Antenna type and dimensions:**
11 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
37.8 square metres; all directions; the angle of elevation is between 15° and 90°

USA

- USA40 **Antenna type and dimensions:**
2 metres diameter parabolic dish
Effective area and angular coverage in azimuth and elevation:
2 square metres; coverage from 0° to 180° in azimuth and from 0° to 90° in elevation
- USA41 In case of harmful interference to 2 255 kHz (Guadeloupe) mutual agreement will be reached covering the use of these frequencies
- USA42 **Antenna type and dimensions:**
2.44 metres diameter paraboloid
Effective area and angular coverage in azimuth and elevation:
2.35 square metres; full sky
- USA43 Each of the INTELSAT III satellites has a communication system primarily composed of two separate wideband linear translator repeaters, each having a bandwidth of 225 MHz. One of these transponders receives signals in the frequency range 5 930 to 6 155 MHz, translates them through a single 2 225 MHz frequency conversion, and retransmits them in the frequency range 3 705 to 3 930 MHz; the other transponder performs similarly, receiving signals in the range 6 195 to 6 420 MHz and retransmitting them in the range 3 970 to 4 195 MHz (see also Special Section No. SAT/4/728 annexed to I.F.R.B. Circular No. 728, dated 8 November 1966)
- USA44 The operation of FPI, Fort de France (Martinique) on 2 545 kHz will be protected from harmful interference which may be caused by this service
- USA45 The reference frequencies are uniformly separated by 2 500 kHz from frequency 5 935 MHz to frequency 6 155 MHz (both included). The emission may consist of any combination of transmissions with individual bandwidths of 5 000 kHz, 10 000 kHz or 20 000 kHz
- USA46 The reference frequencies are uniformly separated by 2 500 kHz from frequency 6 195 MHz to frequency 6 420 MHz (both included). The emission may consist of any combination of transmissions with individual bandwidths of 5 000 kHz, 10 000 kHz, 20 000 kHz or 40 000 kHz
- USA47 The reference frequencies are uniformly separated by 2 500 kHz from frequency 3 710 MHz to frequency 3 930 MHz (both included). The emission may consist of any combination of transmissions with individual bandwidths of 5 000 kHz, 10 000 kHz or 20 000 kHz
- USA48 In case of harmful interference to 2 830 kHz (Guadeloupe) mutual agreement will be reached covering the use of this frequency
- USA49 In case of harmful interference to 3 205 kHz (Martinique) mutual agreement will be reached covering the use of this frequency
- USA50 The reference frequencies are uniformly separated by 2 500 kHz from frequency 3 970 MHz to frequency 4 195 MHz (both included). The emission may consist of any combination of transmissions with individual bandwidths of 5 000 kHz, 10 000 kHz, 20 000 kHz or 40 000 kHz
- USA51 Transmissions occur only upon telecommand from earth stations at Fairbanks, Alaska, and Rosman, N.C. Each transmission lasts five minutes. The average number of transmissions per day is ten to Fairbanks, Alaska, and two to Rosman, N.C. The average total transmission time per day is 60 minutes. The time of transmissions depends upon orbit angles to earth stations and station workload scheduling
- USA52 Operates from sunrise to sunset at Portland, Ore., and during any night hours not used by WSB
- USA53 Operates from sunrise at Portsmouth, N.H., to sunset at Atlanta, Ga., and during any night hours not used by WSB
- USA54 The station Rosman, N.C., receives an average of two transmissions per day from the satellite and the station Fairbanks, Alaska, ten transmissions per day. Each transmission lasts five minutes. The time of reception depends upon orbit angles and station workload scheduling
- USA55 The altitude of the circular orbit described by the space station around the moon is 1 100 kilometres; the angle of inclination of the orbit in relation to the plane of the lunar equator is 116° and the period of the space vehicle is 226 minutes
- USA56 Operates from sunrise to sunset at Norfolk, Neb., and during any night hours not used by WBBM
- USA57 Operates from sunrise at Chicago, Ill., to sunset at Dallas, Tex., Fort Worth, Tex., and during any night hours not used by WFAA or WBAP
- USA58 Operates from sunrise at Columbus, Ohio, to sunset at Dallas, Tex., Fort Worth, Tex., and during any night hours not used by WFAA or WBAP
- USA59 Operates from sunrise at New York, N.Y., to sunset at Minneapolis, Minn., and during any night hours not used by WCCO

USA-YEM

USA60	Operates from sunrise at Clayton, Mo., to sunset at Denver, Colo., and during any night hours not used by KOA	USA147	Dashes (Col. 3)
USA61	Operates from sunrise at Ithaca, N.Y., to sunset at New Orleans, La., and during any night hours not used by WWL	USA192	Unlimited when synchronized with WVET-TV (Col. 10)
USA64	Operates from sunrise to sunset at Chicago, Ill., and during any night hours not used by WBT or KFAB	USA194	Emissions limited to —1.6 kHz and —5 kHz (Col. 7)
USA66	Directional antenna, same pattern day and night. Unlimited when synchronized with WBZA	USA195	Radio Free Europe (Col. 3)
USA68	Operates from sunrise at Chicago, Ill., to sunset at Salt Lake City, Utah, and during any night hours not used by KSL	USA198	Voice of America (Col. 3)
USA69	Operates from sunrise at New York, N.Y., to sunset at Fort Wayne, Ind., and during any night hours not used by WOWO	USA199	Radio Liberation (Col. 3)
		USA202	Emissions limited to +3 kc/s and —6 kc/s (Col. 7)
		VTN	Republic of Viet-Nam
		VTN1	On non-interference basis to Delhi (India)
		YEM	Yemen Arab Republic
		YEM1	Transmissions at 1200 and 1500, according to traffic (Col. 10)

SUPPLEMENT**TABLE No. 4****SPECIAL REMARKS APPLYING TO SPECIFIC COUNTRIES**

Explanation of the symbols used in Column 13c of the International Frequency List

3.5 Add the following Remark:

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"GRC2 *Antenna type and dimensions:*
2.5 metres diameter steerable paraboloid

Effective area and angular coverage in azimuth and elevation:

2.5 square metres; the azimuth is between 71° and 289° and the angle of elevation between 0° and 74° (sun-oriented antenna)"

3.6 Replace the text of Special Remark J9 by the following:

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"J9 Transmission of oceanographic data from MET Buoy No. 3 station (135°00'E 29°00'N)
Identification: JM2C"

TABLE No. 6

SYMBOLS REPRESENTING THE FINDINGS OF THE I.F.R.B. AND RELATED REMARKS

Explanation of the symbols used in Columns 13a and 13b of the International Frequency List

See the special notice appearing on page 2 of the present edition of the Preface

1. SYMBOLS USED IN COLUMN 13a OF THE INTERNATIONAL FREQUENCY LIST

A	<p>Finding favourable with respect to Nos. 501 and 502 or 503 or 542 or 544 or 545 or 548 or 550 or 553, 554 Aer, 555, 556 Aer and 557 Aer or 558 Aer or 563 or 564 or 565 or 629 to 633 of the Radio Regulations,</p> <p>or</p> <p>Finding favourable with respect to Nos. 570AB Spa and 570AD Spa of the Radio Regulations,</p> <p>or</p> <p>Finding favourable with respect to Nos. 639AS Spa and 639AU Spa of the Radio Regulations,</p> <p>or</p> <p>Finding favourable with respect to Nos. 570AB Spa or 639AS Spa in cases where the provisions of Nos. 570AC Spa and 570AD Spa or 639AT Spa and 639AU Spa are not applicable</p>
B	<p>Finding favourable with respect to Nos. 501 or 570AB Spa or 639AS Spa, but unfavourable with respect to Nos. 502 or 503 or 545 or 548 and 550 or 554 Aer or 556 Aer or 558 Aer or 563 or 564 or 565 or 570AD Spa or 639AU Spa of the Radio Regulations. If the symbol C appears in Column 13c, the Finding is favourable with respect to Nos. 534 or 570BB Spa or 639BU Spa of the Radio Regulations because the change in the basic characteristics of the assignment does not increase the probability of harmful interference to assignments already recorded in the Master International Frequency Register</p>
C	<p>Finding favourable with respect to No. 501 but unfavourable with respect to Nos. 502 or 503 or 545 of the Radio Regulations after investigation according to No. 516 of those Regulations. If the symbol C appears in Column 13c, the Finding is favourable with respect to No. 534 of the Radio Regulations because the change in the basic characteristics of the assignment does not increase the probability of harmful interference to assignments already recorded in the Master International Frequency Register</p>
D	<p>Finding unfavourable with respect to Nos. 501 or 570AB Spa or 639AS Spa of the Radio Regulations</p>
DA	<p>Finding unfavourable with respect to No. 501 but favourable with respect to Nos. 502 or 503 of the Radio Regulations</p>
DB	<p>Finding unfavourable with respect to Nos. 501 and 502 or 503 of the Radio Regulations</p>
E	<p>Finding favourable with respect to Nos. 501 or 570AB Spa of the Radio Regulations and with respect to Nos. 629 to 633 or 534 or 570BB Spa because the change in the basic characteristics of the assignment does not increase the probability of harmful interference to assignments already recorded in the Master International Frequency Register (This symbol is used only when Finding A cannot be given in cases where the existing entry has no Finding symbol in Column 13a)</p>
F	<p>Finding favourable with respect to Nos. 501 and 502 or 503 of the Radio Regulations. In view of the provisions of No. 505 of the Regulations, the I.F.R.B., in examining this frequency assignment which is not in conformity with the relevant regional agreement, did not take into account assignments entered in the Master Register on behalf of countries which are parties to this agreement</p>

H	<p>Finding favourable with respect to No. 570AB Spa of the Radio Regulations in cases where the coordination procedure referred to in No. 570AC Spa has been successfully applied,</p> <p>or</p> <p>Finding favourable with respect to No. 639AS Spa of the Radio Regulations in cases where the coordination procedure referred to in No. 639AT Spa has been successfully applied,</p> <p>or</p> <p>Finding favourable with respect to No. 639AS Spa of the Radio Regulations in cases where the provisions of No. 639AF Spa are applicable</p>
T	For the explanation of this symbol, see the same symbol in Part 1 of Table No. 3 (General Remarks represented by symbols)
U	As a result of investigations under Nos. 516 [or 622], the I.F.R.B. has received confirmation that this assignment is being used in accordance with the notified basic characteristics [according to this entry]
V	The I.F.R.B. has conducted the investigation envisaged in No. 516 of the Radio Regulations, but has been unable to establish the reasons why the operations represented by this entry do not give rise to complaints of harmful interference being caused to the operations of an assignment or assignments with which they appeared to the Board to be incompatible
W	When the I.F.R.B. conducted investigations envisaged in No. 516 of the Radio Regulations, it concluded that there was a probability that the operations of at least one of the assignments which have been recorded in the Master International Frequency Register in accordance with No. 515 of the Radio Regulations would cause harmful interference to the operations represented by this entry. The Board has been unable, however, to establish the reasons why the operations of at least one of these assignments which have been recorded in the Master International Frequency Register in accordance with No. 515 of the Radio Regulations do not give rise to complaints of harmful interference to the operations represented by this entry since they appeared to the Board to be incompatible
X	For the explanation of this symbol, see the same symbol in Part 1 of Table No. 3 (General Remarks represented by symbols)
XX	For the explanation of this symbol, see the same symbol in Part 1 of Table No. 3 (General Remarks represented by symbols)
Y	For the explanation of this symbol, see the same symbol in Part 1 of Table No. 3 (General Remarks represented by symbols)
Z	For the explanation of this symbol, see the same symbol in Part 1 of Table No. 3 (General Remarks represented by symbols)

2. SYMBOLS USED IN COLUMN 13b OF THE INTERNATIONAL FREQUENCY LIST

A number composed of three figures	<p>This symbol indicates a number of the Radio Regulations.</p> <p>In the case of number 139, where this number is preceded by an asterisk (*), this means that the relevant provisions of No. 139 of the Radio Regulations are applicable only within the area where the class of service shown for the entry concerned is a secondary service</p>
A	<p>According to the examination by the I.F.R.B., there exists a slight probability of harmful interference being caused to assignments already recorded in the Master International Frequency Register, and hence precautions must be taken in the use of this assignment, as reflected by this entry, to avoid harmful interference to assignments already recorded in the Master Register (No. 511 of the Radio Regulations)</p>
AF63	<p>This listing is either in accordance with the Plans adopted by the African VHF/UHF Broadcasting Conference, Geneva, 1963, or one for which the consultation procedure prescribed in Article 3 of the Regional Agreement, Geneva, 1963, has been carried out successfully</p>
AP18	<p>This listing is in conformity with Appendix 18 to the Radio Regulations (Transmitting Frequencies for the Band 156-174 MHz for Radiotelephony in the International Maritime Mobile Service) or with the Maritime VHF Radiotelephone Agreement, The Hague, 1957</p>
B	<p>The date entered in the appropriate part of Column 2 has been established according to the provisions of No. 518 of the Radio Regulations</p>
BR62	<p>This listing is either in accordance with the Plan annexed to the Special Agreement, Brussels, 1962, concerning the use of the band 582-606 MHz by the Radionavigation Service or one for which the procedure prescribed in Article 3 of the Special Agreement, Brussels, 1962, has been carried out successfully</p>
BRS	<p>This listing is in conformity with the Regional Agreement, Brussels, 1970, concerning the Rhine Radiotelephone Service (International VHF Radiotelephone Mobile Service for Shipping on Waterways of the Rhine Basin)</p>
C	<p>This entry has been amended and the original date retained in the appropriate part of Column 2 in accordance with Nos. 534 or 570BB Spa or 639BU Spa of the Radio Regulations. The change in the basic characteristics may result in an increase of the probability of harmful interference that may be experienced by this assignment</p>
D	<p>This entry is not in conformity with Nos. 501 or 570AB Spa or 639AS Spa of the Radio Regulations</p>
DD	<p>Since, according to the information recorded in Column 5 of this entry, communication is intended to be received in a region, or an area, in which the frequency band concerned is not allocated to the particular service according to the Table of Frequency Allocations, the entry has been considered as not being in conformity with No. 501 of the Radio Regulations</p>
E	<p>The examination carried out by the I.F.R.B. with respect to the provisions of Article 7 of the Radio Regulations shows that some of the characteristics of the frequency assignment concerned exceed the limits specified in this Article. However, in view of the small margin by which these limits are exceeded and the fact that in practice the conditions of use will certainly be more favourable than the assumptions on which the calculations were based, the Board has reached a favourable finding with respect to Nos. 501 or 570AB Spa of the Radio Regulations, as the case may be</p>
F	<p>The favourable Finding with respect to Nos. 502 or 503 of the Radio Regulations has been given subject to this use of the standard frequency being co-ordinated with all Administrations concerned</p>
G	<p>This assignment has been recorded in the Master International Frequency Register as a consequence of a favourable Finding reached by the I.F.R.B. on the understanding that the new assignment will not affect in practice the reception at a notified point, or notified points, located in the territory under the jurisdiction of the notifying Administration, of transmissions by a station, or stations, operating according to particulars of a frequency assignment, or frequency assignments, already recorded in the Master International Frequency Register on behalf of another Administration, or other Administrations</p>

- GE60 This listing is either in accordance with the Plans adopted by the Special Regional Conference, Geneva, 1960, for the VHF Broadcasting Service (sound broadcasting and television services) or one for which the procedure prescribed in Article 5 of the Regional Agreement, Geneva, 1960, has been carried out successfully
- ICAO This entry is in accordance with a Regional Agreement, or Recommendations of a Regional Meeting of the International Civil Aviation Organization (I.C.A.O.)
- ST61 This listing is either in accordance with the Plans adopted by the European VHF/UHF Broadcasting Conference, Stockholm, 1961, or one for which the procedure prescribed in Article 4 of the Regional Agreement, Stockholm, 1961 has been carried out successfully

FREQUENCIES PRESCRIBED BY THE RADIO REGULATIONS FOR COMMUN USE BY STATIONS OF A GIVEN SERVICE

See the special notice appearing on page 2 of the present edition of the Preface

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended commun use	Reference to the Radio Regulations (RR) *)
20 kHz	RR160 STANDARD	Worldwide standard frequency	RR160
410 kHz	RR182 GONIO MARIT	Worldwide frequency for radio direction-finding in the maritime radionavigation service	RR182
405 - 535 kHz (425 kHz) (454 kHz) (468 kHz) (480 kHz)	RR1123 TRAV	Worldwide working frequency for ship radiotelegraph stations in the authorized bands between 405 and 535 kHz	RR1123 Mar
(500 kHz)	RR187 DETR APL RR999E	Worldwide distress and calling frequency for radiotelegraphy. The conditions for the use of the band 490 - 510 kHz are prescribed in Article 32. This frequency can also be used by coast stations for selective calls	RR187 999E Mar
(512 kHz)	RR1123 RR1125 TRAV APL	Worldwide working frequency for use by ship radiotelegraph stations in the authorized bands between 405 and 535 kHz. This frequency may also be used on a worldwide basis by ship stations as a supplementary calling frequency when 500 kHz is being used for distress	RR1123 Mar 1125 Mar
2 047.4 kHz	RR1343 RR1344 TRAV REG 1	Ship-shore working frequency (carrier frequency 2 046 kHz) which ship radio-telephone stations making international voyages should be able to use in Region 1 for class A3A and A3J emissions if required by their service	RR1343 1344 Mar
2 050.4 kHz	RR1343 RR1344 TRAV REG 1	Ship-shore working frequency (carrier frequency 2 049 kHz) which ship radio-telephone stations making international voyages should be able to use in Region 1 for class A3A and A3J emissions if required by their service. These stations should also be able to use the carrier frequency 2 049 kHz for class A3 and A3H emissions up to 1 January 1982	RR1343 1344 Mar

*) The following symbols printed immediately after the numbers of certain provisions indicate that those provisions have been added or amended by the following conferences :

- Aer Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the aeronautical mobile (R) service, Geneva, 1966
- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR) (*)
2 054.4 kHz	RR1343 RR1345 REG 1	Intership frequency (carrier frequency 2 053 kHz) which ship radiotelephone stations making international voyages should be able to use in Region 1 for class A3A and A3J emissions if required by their service. It can also be used in Region 1 as an additional ship-shore frequency	RR1343 1345 Mar
2 057.4 kHz	RR1343 RR1345 TRAV REG 1	Intership frequency (carrier frequency 2 056 kHz) which ship radiotelephone stations making international voyages should be able to use in Region 1 for class A3A and A3J emissions if required by their service. It can be used in Region 1 as an additional ship-shore frequency. These stations should also be able to use the carrier frequency 2 056 kHz for A3 and A3H emissions up to 1 January 1982	RR1343 1345 Mar
2 170 - 2 194 kHz (2 182 kHz)	RR201 DETR APL RR999E	Worldwide distress and calling frequency for radiotelephony. The conditions for the use of the band 2 170 - 2 194 kHz are prescribed in Article 35. This frequency can also be used by coast stations for selective calls	RR201 Mar 999E Mar
2 500 kHz	RR203 STANDARD	Worldwide standard frequency	RR203
2 636.4 kHz	RR445 RR1351 TRAV REG 2 REG 3	Intership working frequency (carrier frequency 2 635 kHz) for use by ship stations in Regions 2 and 3 for class A3A and A3J radiotelephone emissions	RR445 Mar 1351 Mar
2 639.4 kHz	RR445 RR1351 TRAV REG 2 REG 3	Intership working frequency (carrier frequency 2 638 kHz) for use by ship stations in Regions 2 and 3 for class A3, A3H, A3A and A3J radiotelephone emissions	RR445 Mar 1351 Mar
3 023.5 kHz		Worldwide frequency for use by stations of the aeronautical mobile (R) and (OR) services as laid down in Part II of Appendix 27 to the Radio Regulations	RR Appendix 27 Number 27/196 page 46 RR1326C Mar
3 499 kHz		Worldwide frequency for use by radiotelegraph stations (A1) of the aeronautical mobile (R) service	RR Appendix 27 Number 27/197 Page 47
4 000 - 27 500 kHz	RR1355 RR1357 APP 17 SEC/A	Worldwide frequency for use by ship radiotelephone stations for double sideband emissions (duplex operation)	RR1355 Mar 1357 Mar
4 000 - 27 500 kHz	RR1355 RR1357 APP 17 SEC/B	Worldwide frequency for use by ship radiotelephone stations for single sideband emissions (duplex operation)	RR1355 Mar 1357 Mar

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- Aer Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the aeronautical mobile (R) service, Geneva, 1966
- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR) *)
4 000 - 27 500 kHz	RR1356 RR1357 APP 17 SEC/C	Worldwide frequency for use by ship radiotelephone stations and by coast radiotelephone stations for single sideband emissions (simplex operation)	RR1356 Mar 1357 Mar
4 000 - 27 500 kHz (4 137.7 kHz) (6 205.4 kHz) (8 269.8 kHz) (12 404.9 kHz) (16 534.9 kHz) (22 074.9 kHz)	RR1352 APL	Worldwide calling frequency for use by ship radio-telephone stations for single sideband emissions	RR1352 Mar
4 000 - 27 500 kHz (4 137.7 kHz)	RR1352B RR1353A APL REP SECUR DETR	Frequency to be used in the zone lying between the parallels 33° North and 57° South by coast and ship stations for call, reply and safety purposes, in radiotelephony (single sideband emissions). It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages	RR1352B Mar 1353A Mar
4 000 - 27 500 kHz (4 137.7 kHz)	RR1352.1 TRAV	Working frequency for common use in Region 2 by coast and ship radiotelephone stations for single sideband emissions (simplex operation)	RR1352.1 Mar
4 000 - 27 500 kHz (6 205.4 kHz)	RR1353 RR1353A APL REP SECUR DETR	Frequency to be used in the zone of Regions 1 and 3 lying between the parallels 33° North and 57° South by coast and ship stations for call, reply and safety purposes, in radiotelephony (single sideband emissions). It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages	RR1353 Mar 1353A Mar
4 000 - 27 500 kHz (4 436.3 kHz) (6 520 kHz) (8 803.8 kHz) (13 183.9 kHz) (17 329.9 kHz) (22 700.4 kHz)	RR1352A RR1352A.1 RR999E APL	Worldwide calling frequency for use by coast radiotelephone stations for single sideband emissions. This frequency may also be used for selective calling purposes by coast radiotelegraph stations	RR1352A Mar 1352A.1 Mar 999E Mar
4 000 - 27 500 kHz (4 436.3 kHz) (6 520 kHz)	RR1352A.2 TRAV	Working frequency for common use in Region 2 by coast and ship radiotelephone stations for single sideband emissions (simplex operation)	RR1352A.2 Mar
4 000 - 27 500 kHz	RR1146 RR1188 APP 15 TRAV	Worldwide working frequency for ship stations equipped for wide-band telegraphy, facsimile and special transmission systems	RR1146 Mar 1188 Mar
4 000 - 27 500 kHz	RR1191A RR1191B APP 15 TRAV	Worldwide working frequency for use by ship stations for the transmission of oceanographic data, by buoy stations for oceanographic data transmission and by stations interrogating these buoys	RR1191A Mar 1191B Mar

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- Aer Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the aeronautical mobile (R) service, Geneva, 1966
- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR) (*)
4 000 - 27 500 kHz	RR964A RR1191D RR1191E RR1202 APP 15 TRAV	Worldwide working frequency for ship stations using narrow-band direct-printing telegraph and data transmission systems (class F1 only)	RR964A Mar 1191D Mar 1191E Mar 1202 Mar
4 000 - 27 500 kHz	RR1145 RR1192 RR1195 APP 15 TRAV	Worldwide working frequency for use by high-traffic ship stations. This frequency may also be used by aircraft stations for the exclusive purpose of communication with stations of the maritime mobile service (class A1 only)	RR1145 Mar 1192 Mar 1195
4 000 - 27 500 kHz	RR1145 RR1196 RR1197 RR1198 RR1199 APP 15 TRAV	Worldwide working frequency for low-traffic ship stations (class A1 only)	RR1145 Mar 1196 Mar 1197 Mar 1198 Mar 1199 Mar
4 000 - 27 500 kHz (25 082.5-25 110 kHz)	RR1154 RR1202 APP 15 TRAV	Worldwide working frequency for ship radio-telegraph stations of all kinds (class A1 or F1 only)	RR1154 Mar 1202 Mar
4 000 - 27 500 kHz	RR1145 RR1174 APP 15 APL	Worldwide calling frequency for ship radio-telegraph stations (class A1 only)	RR1145 Mar 1174 Mar
4 000 - 27 500 kHz (25.070 - 25 082.5 kHz)	RR1154 RR1174 APP 15 APL	Worldwide calling frequency for ship radio-telegraph stations of all categories (class A1 or F1 only)	RR1154 Mar 1174 Mar
4 000 - 27 500 kHz (4 182 kHz) (6 273 kHz) (12 546 kHz) (16 728 kHz) (22 245 kHz)	RR1145 RR1174 RR1178 APP 15 APL	Worldwide calling frequency for ship radio-telegraph stations reserved as far as possible for the use of aircraft desiring to communicate with stations of the maritime mobile service (class A1 only)	RR1145 Mar 1174 Mar 1178 Mar
4 000 - 27 500 kHz (4 186.5 kHz) (6 279.75 kHz) (8 373 kHz) (12 559.5 kHz) (16 746 kHz) (22 262.5 kHz)	RR1145 RR1174 RR1013E APP 15 APL	Special worldwide calling frequency for ship radiotelegraph stations (class A1 only)	RR1145 Mar 1174 Mar 1013E Mar
4 000 - 27 500 kHz (8 364 kHz)	RR1145 RR1174 RR1178 RR1179 RR997 APP15 APL SAR	Worldwide calling frequency for the use of aircraft desiring to communicate with stations of the maritime mobile service (class A1 only). Also for use by survival craft stations (class A2) desiring to establish with stations of the maritime and aeronautical mobile services communications relating to search and rescue operations	RR1145 Mar 1174 Mar 1178 Mar 1179 997 Mar

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- Aer Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the aeronautical mobile (R) service, Geneva, 1966
- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR) *
5 000 kHz	RR210 STANDARD	Worldwide standard frequency	RR210
5 680 kHz		Worldwide frequency for use by stations of the aeronautical mobile (R) and (OR) services as laid down in Part II of Appendix 27 to the Radio Regulations	RR Appendix 27 No. 27/201 page 50 RR1353B Mar
6 526 kHz		Worldwide frequency for use by radiotelegraph (A1) and radiotelephone (A3A, A3H, A3J) stations of the aeronautical mobile (R) service	RR Appendix 27 No. 27/202 page 51
8 963 kHz		Worldwide frequency for use by radiotelegraph stations (A1) of the aeronautical mobile (R) service	RR Appendix 27 No. 27/203 page 54
10 000 kHz	RR214 STANDARD	Worldwide standard frequency	RR214
10 093 kHz		Worldwide frequency for use by radiotelegraph (A1) and radiotelephone (A3A, A3H, A3J) stations of the aeronautical mobile (R) service	RR Appendix 27 No. 27/204 page 55
13 356 kHz		Worldwide frequency for use by radiotelegraph (A1) and radiotelephone (A3A, A3H, A3J) stations of the aeronautical mobile (R) service	RR Appendix 27 No. 27/206 page 57
13 560 kHz	RR217 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes	RR217
15 000 kHz	RR219 STANDARD	Worldwide standard frequency	RR219
20 000 kHz	RR220 STANDARD	Worldwide standard frequency	RR220
20 007 kHz	RR221A SAUV	Frequency to be used, in emergency for astronaut and space vehicle search and rescue purposes	RR221A Spa
25 000 kHz	RR223 STANDARD	Worldwide standard frequency	RR223
27 120 kHz	RR225 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes	RR225

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- Aer Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the aeronautical mobile (R) service, Geneva, 1966
- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR) (*)
37.75 - 38.25 MHz (38 MHz)	RECOMM No. 32 CAR ASTR	Frequency used for radio astronomical observations in certain countries	Recommendation No. 32 of the Administrative Radio Conference, Geneva, 1959
40.43 - 40.93 MHz (40.68 MHz)	RECOMM No. 32 CAR ASTR	Frequency used for radio astronomical observations in certain countries	
40.68 MHz	RR236 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes	RR236
75 MHz	RR259 MARKER AER	Worldwide frequency assigned to aeronautical marker beacons	RR259
121.5 MHz	RR273 RR969 URG T AER	Aeronautical emergency frequency. This frequency may also be used (class A3 emissions) by mobile stations of the maritime mobile service for the exclusive purpose of communication, for safety purposes, with stations of the aeronautical mobile service	RR273 969
156 - 174 MHz	RR1373 APP 18 SERV MARIT INT	Worldwide transmitting frequency for the maritime mobile service in the international radiotelephone service	RR1373 Mar RR Appendix 18 Mar
156.8 MHz	RR287 RR999E RR1359 APL REP SECUR	Worldwide frequency for use by the international maritime mobile VHF radiotelephone service for call, reply and safety purposes. This frequency may also be used for messages preceded by the urgency and safety signals and if necessary for distress messages. May also be used by coast stations for selective calls	RR287 Mar 999E Mar 1359 1359A Mar
156.3 MHz 156.8 MHz	RR953 SECUR	Worldwide frequency for use by aircraft stations for safety purposes only	RR953
243 MHz	RR309 SAUV	Worldwide frequency for use by survival craft stations and equipment used for survival purposes	RR309
433.92 MHz	RR321 AUT POR D YUG SUI IDL SCIENT MED	Frequency for industrial, scientific and medical purposes in Austria, Portugal, the F.R. of Germany, Switzerland and Yugoslavia	RR321
915 MHz	RR340 REG 2 IDL SCIENT MED	Frequency for industrial, scientific and medical purposes in Region 2	RR340

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- Mar World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967
- Spa Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, Geneva, 1963

Prescribed frequency or band in which the prescribed frequency is situated	Descriptive symbols (Columns 4a and 5a of the International Frequency List)	Prescribed or recommended common use	Reference to the Radio Regulations (RR)
2 375 MHz	RR357 ALB BUL HNG POL ROU TCH URS IDL SCIENT MED	Frequency for industrial, scientific and medical purposes in Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R.	RR357
2 450 MHz	RR357 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes except in Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R.	RR357
5 800 MHz	RR391 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes	RR391
22.125 GHz	RR410 IDL SCIENT MED	Worldwide frequency for industrial, scientific and medical purposes	RR410

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 216-E
26 April 1974
Original : English

COMMITTEE 2

FIRST REPORT BY
THE WORKING PARTY OF COMMITTEE 2
(CREDENTIALS)

1. The Working Party of Committee 2 (Credentials) met on 26 April 1974 at 1100 hrs with Mr. Samuel H. Butler, Chairman of Committee 2 in the chair.

2. During this first meeting the Working Party examined 4 transfers of powers received by the Secretariat of the Conference :

from Egypt to Morocco
from Luxembourg to Belgium
from Central African Republic to Cameroon
from Group of Territories represented by the French Overseas
Post and Telecommunication Agency to France

3. In accordance with the Montreux Convention (1965) the Working Party decided to accept the following transfers of powers :

from Luxembourg to Belgium
from Group of Territories represented by the French Overseas
Post and Telecommunication Agency to France

4. The Working Party of Committee 2 will meet again on 29 April 1974 prior to Committee 2 to reconsider the transfers of powers not accepted and others that may possibly have arrived.

P.A. TRAUB
Secretary
Working Party

SAMUEL H. BUTLER
Chairman of Committee 2



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

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COMMITTEES 4 AND 5

Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item No. 7 : Table of Frequency Tolerances, Appendix 3

Reference is made to Document No. 185 in which Norway proposes a new frequency plan for the HF A1 calling bands (additions and corrections to Documents Nos. 46 and 50). A separate document is submitted for the revision of Article 29 (calling procedure).

As a consequence of these proposals, and in the endeavour to obtain a more efficient utilization of the frequency spectrum available, the following changes should be made to Appendix 3 and applicable from the date of the Final Acts of the Conference :

Band 4 to 29.7 Me/s MHz

3. Mobile stations

NOR/217/86 MOD

a) Ship stations :

- | | |
|---|-------------|
| 1) Class A1 emissions | 40 o) |
| low-traffic-ships 200 200-j) | |
| high-traffic-ships - 50-j)-m) | |
| 2) Emissions other than class A1 | 25 i) k) o) |
| power-50-W-or-less 50e 50-e)-i)-k) | |
| power-above-50-W 50 50-i)-k) | |

Notes referring to the Table of Frequency Tolerances

NOR/217/87 SUP

c), j) and m)



Consequential upon the above proposals
and considerations

NOR/217/88 ADD

o) For ship station transmitters
equipped with frequency synthesizers the tolerance
is 100 Hz.

Changing from c/s to Hz and from kc/s
to kHz and renumbering the notes may assumably
be left to the drafting committee.

COMMITTEE 6A

United States of America

INFORMATION PAPER: RADIOCOMMUNICATION OPERATOR'S
GENERAL CERTIFICATE

The United States has proposed (Nos. 888 and 907-909) amendment of the Radio Regulations to establish the Radiocommunication Operator's General Certificate (Maritime) on these fundamental principles:

- a) We recognize that major changes in maritime radiocommunication technology have occurred and continue to occur in equipment, techniques, modes and practices;
- b) accompanying these changes have been substantial increases in the size, speed and number of vessels, posing vastly greater safety, economic and environmental hazards;
- c) we perceive the great contribution the rapidly developing radiocommunication technology can make to solving some of these problems, through the application of advanced equipment and procedures;
- d) noting that this contribution can only be made to the extent that such devices are reliable, we see preventative and remedial maintenance as an important factor in keeping these modern, complex devices operational;
- e) the technical skills of holders of Radio Operator Certificates issued under Article 23 are crucial to such maintenance and repairs at sea, where these devices must be kept operational;
- f) to produce a higher standard of practical maintenance of these modern devices, a higher level of both theoretical and practical knowledge must be required as qualifications of holders of operator's certificates; these qualifications must be advanced enough to produce an adaptability and flexibility of technical skills that will be needed as new devices and techniques are continually being introduced.



In addition to the general considerations set forth above, the proposal of the United States is responsive to developments along these same lines in the Intergovernmental Maritime Consultative Organization, whose Radio Officer requirements supplement and are supplemented by the Radio Regulation Radio Operator Certificate requirements. As you know, Chapter IV of I.M.C.O.'s Safety of Life at Sea Convention defines the Radio Officer it requires on ships of 1,600 gross tons and over as:

A person holding at least a first or second class radiotelegraph operator's certificate, or a radiocommunication operator's general certificate for the Maritime Mobile Service, complying with the provisions of the Radio Regulations ... (Regulation 2(c)).

In its Policy Document on the Future Maritime Distress System called to our attention by I.M.C.O. in Document No. 178, an effort is made to expedite the introduction of improved equipment and practices to increase safety and efficiency of vessels in both the near and more distant future terms.

I.M.C.O. recommends, as a matter of urgency, that the training of Radio Officers and Radio Operators be expanded as appropriate, to ensure adequate maintenance and repairs at sea of the telecommunications and other electronic navigation equipment involved in the safety of life at sea, both in the near-term future distress system and the more distant one.

Another I.M.C.O. development relevant to Radio Operator's Certificate qualifications is found in I.M.C.O.'s Supplementary Recommendation in Document No. 179, at page 15, which calls attention to recent amendments to Chapter IV of SOLAS directed toward increasing the availability of the ship Radio Officer for technical maintenance of radiocommunication and radio electronic navigation equipment involved in the safety of life at sea, provided, among other conditions, that at the discretion of the administration concerned, the Radio Officer is appropriately qualified to perform these duties. (Another condition is the fitting of selective calling equipment.)

Since qualifications of Radio Operator's Certificate holders are directly affected by the qualifications set by the Radio Regulations, and training is directed toward meeting the certificate standards of the Radio Regulations, the United States proposes qualifications for the Radiocommunications Operator's General Certificate that are appropriate to I.M.C.O.'s needs are as follows:

- a) its standards are set to provide the technical qualifications that will meet the need for preventative and remedial maintenance on the current and more modern equipment, as and to the extent it is introduced aboard vessels, and thus to expedite its being fitted and performing the functions for which it is intended; it thus

permits the Future Maritime Distress System requirement for expanded Radio Officer training to be implemented by administrations electing to utilize this optional Certificate;

- b) by raising Certificate qualifications with the progress of the technology, it is also potentially useful to those administrations desiring to avail themselves of the recent I.M.C.O. amendments to redirect some of the time Radio Officers now spend on standing manual radio watches to the performance of the vital safety function of maintaining the equipments involved in safety in fully operational condition, so that it might contribute to preventing sea casualties, on the one hand, or in summoning rescue and saving life, on the other.

We propose the Radiocommunication Operator's General Certificate as one that is optional for administrations, intending that at this stage it shall supplement the existing first and second class Certificates. We believe that as it functions to expedite the introduction of new technology, it may eventually be adopted generally, and at future world conferences it may be judged worthy of superseding these other two Certificates in the Maritime Mobile Service. This can only occur if the present technical standards of the present first class Radiotelegraph Operator's Certificate are increased to the extent made necessary by the current and developing technology.

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A N N E XAMENDMENTS TO CHAPTER IV OF THE 1960 SAFETY CONVENTIONAmendments to Regulations 6 and 16

1. The following new text is proposed to replace the present Regulation 6(d):

Regulation 6(d)

- i) During the period when a Radio Officer is required by this Regulation to listen on the radiotelegraph distress frequency, the Radio Officer may discontinue such listening during the time when he is handling traffic on other frequencies, or performing other essential radio duties, but only if it is impracticable to listen by split headphones or loudspeaker. The listening watch shall always be maintained by a Radio Officer using headphones or loudspeaker during the silence periods provided for by the Radio Regulations.

The term "essential radio duties" in this Regulation includes urgent repairs of:

- 1) equipment for radio communication used for safety;
- 2) radio navigational equipment by order of the Master.

- ii) In addition to the provisions of sub-paragraph (i) of this Regulation, on ships other than multi-radio officer passenger ships, the Radio Officer may, in exceptional cases, i.e. when it is impractical to listen by split headphones or loudspeaker discontinue listening by order of the Master in order to carry out maintenance required to prevent imminent malfunction of:

- 1) equipment for radiocommunication used for safety;
- 2) radio navigational equipment;
- 3) other electronic navigational equipment including its repair;

provided that:

- 1) the Radio Officer, at the discretion of the administration concerned, is appropriately qualified to perform these duties; and

- 2) the ship is fitted with a receiving selector which meets the requirements of the Radio Regulations;
- 3) the listening watch is always maintained by a Radio Officer using headphones or loudspeaker during the silence periods provided for by the Radio Regulations.

2. A new sub-paragraph (viii) should be added to the existing text of Regulations 16(a):

- viii) the time at which the listening watch was discontinued in accordance with paragraph (d) of Regulation 6 of this Chapter, together with the reason and the time at which the listening watch was resumed.
-

MARITIME CONFERENCE

GENEVA, 1974

Document No. 219-E

29 April 1974

Original : Spanish

COMMITTEE 5Mexico

PROPOSAL FOR THE WORK OF THE CONFERENCE

Mexico's additional frequency requirements in the revised frequency allotment plan for coast radiotelephone stations operating in the bands between 4 000 and 23.000 kHz of the Maritime Mobile Service (Appendix 25 of the Radio Regulations) are as follows :

Frequency band (MHz)	4	6	8	12	16	22
Number of SSB channels	2	2	2	2	2	2



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 220-E

29 April 1974

Original : French

COMMITTEE 5

Islamic Republic of Mauritania

PROPOSAL FOR THE WORK OF THE CONFERENCE

As part of the development of its radio maritime service, the Administration of the Islamic Republic of Mauritania plans in the near future to establish a coast station at Nouakchott.

In accordance with this expansion of its radio maritime service and with a view to improving the existing service, the Administration of the Islamic Republic of Mauritania has the following frequency requirements (see the table below) which it herewith brings to the notice of the Conference in connection with the revision of the frequency allotment plan for coast radiotelephone stations (Appendix 25 of the Radio Regulations) :

Frequency bands, in MHz	4	6	8	12	16	22
Number of SSB channels	2	2	2	2	2	2



MARITIME CONFERENCE

GENEVA, 1974

Document No. 221-E

29 April 1974

Original : English

PLENARY MEETING

Greece

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1 : HF radiotelephone traffic statistics through the Greek
Coast Stations

Reference should be made to Document 9 which contains the Greek proposals concerning the revision of the Frequency Allotment Plan for HF radiotelephone coast stations.

The Annex to the present document contains traffic statistics for the HF radiotelephone traffic exchanged through the Greek coast stations. These statistics are established in accordance with Annex 1 to Document 9.

It should be noted that the traffic intensity in the evenings seems lower. This is due to poor propagation conditions and to interferences noted from other coast stations, sharing the same channels.

Finally, it should be also noted that due to lack of the necessary number of allotted channels to Greece in radiotelephony, Greek ships are urged to speed up their calls. As a consequence the average value of paid minutes per call in HF bands becomes about 4.6 instead of the normal value, that is of 7 minutes.

Annex : 1



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A N N E XG r e e c eHF radiotelephone traffic data

of

the Greek Coast Station

1. Average daily distribution of the HF radiotelephone traffic :

Time G.MT	Average number of connections completed	Average time in paid mi- nutes	Average traffic intensity (erlangs)
00-01	8.2	35.6	1.14
01-02	10.2	46.2	1.45
02-03	8.8	37.4	1.21
03-04	11.2	45.8	1.51
04-05	8.8	36.4	1.19
05-06	12.0	48.0	1.60
06-07	33.0	137.0	4.48
07-08	42.6	190.8	6.02
08-09	35.9	163.7	5.12
09-10	38.8	173.2	5.47
10-11	30.8	141.6	4.41
11-12	35.7	167.7	5.17
12-13	41.8	204.8	6.20
13-14	46.7	228.8	6.93
14-15	40.6	194.8	5.95
15-16	36.7	172.5	5.32
16-17	29.4	144.0	4.32
17-18	23.0	112.2	3.40
18-19	23.6	101.2	3.26
19-20	22.6	100.4	3.18
20-21	17.2	80.6	2.49
21-22	17.6	83.8	2.57
22-23	11.2	50.0	1.58
23-24	9.4	41.0	1.31

2. Number of completed HF radiotelephone connections effected in 1973 :
164,049
3. Total number of paid minutes of completed HF radiotelephone calls effected in 1973 :
754,625

4. Average value of paid minutes per HF radiotelephone call :

4.6

5. Percentage of HF radiotelephone traffic per Ocean :

Atlantic : 74%

Indian : 21%

Pacific : 5%

6. Percentage of radiotelephone traffic per HF band :

4 MHz }
6 MHz } 8%

8 MHz 28%
12 MHz 22%
16 MHz 22%
22 MHz 20%

7. Other data.

Number of ships notified in the ITU List of ship stations:

3,119

from which 1,608 ships are equipped with HF radiotelephone installation.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 222-E

29 April 1974

Original : Spanish

COMMITTEE 5

Chile

PROPOSALS FOR THE WORK OF THE CONFERENCE

Revision of Appendix 25 MOD to the Radio Regulations

1. The radiotelephone frequencies allotted to Chile in the above-mentioned Appendix should be maintained.
2. The radiotelephone frequencies allotted to Chile by the I.F.R.B. in Circular letter No. 223 dated 29 August 1969 should also be maintained.
3. The frequencies 6 515.4 and 6 521.8 MHz in the 6 MHz band, which were not granted in I.F.R.B. Circular letter No. 223 dated 29 August 1969, should be allotted to Chile.

- Reasons :
- 1) Chile is completing the new installations of its coast radiotelephone station network based on the single sideband frequencies already allotted in Appendix 25 MOD. They will be brought into service before the end of the current year.
 - 2) Owing to the nature of propagation on Chile's rugged southern coastline and channels, it is requested that the allotment of the frequencies mentioned in point 3 above should be reconsidered.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 223-E

29 April 1974

Original : French

PLENARY MEETING

Note by the Chairman of the Conference

PROXY

(General Regulations, No. 641)

(by The People's Republic of Bulgaria for
the Czechoslovak Socialist Republic)

I have the honour to transmit to the Conference a letter addressed to me by the Deputy Head of the Delegation of the Czechoslovak Socialist Republic.

R.M. BILLINGTON

Chairman of the Conference

Annex : 1



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A N N E X

Geneva, 29 April 1974

Mr. R.M. BILLINGTON
Chairman of the Maritime Radio Conference

Because of its professional commitments, the Czechoslovak Delegation is obliged to be absent from the Conference for a certain period.

I have the honour to inform you that, in accordance with Chapter 5, number 641, of the General Regulations, I have given the Delegation of the People's Republic of Bulgaria the right to vote on behalf of the Delegation of the Czechoslovak Socialist Republic during the latter's absence.

Accept, Sir, the assurances of my highest consideration.

(Signed) M. ZAHRADNICEK
Deputy Head of the Delegation of the
Czechoslovak Socialist Republic

MARITIME CONFERENCE

GENEVA, 1974

Document No. 224-E

30 April 1974

Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE 4

Tuesday, 23 April 1974, at 1500 hrs

Chairman : Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed

Document No.

1. Organization of work
2. Proposals of administrations concerning rearrangement of frequency bands between 4 and 27.5 MHz allocated to the maritime mobile service

DT/2

DT/3



1. Organization of work (Document DT/2)

1.1 The Chairman welcomed delegates and drew their attention to the various Articles and Appendices which had been assigned to Committee 4 (Document DT/2, Annex 1). He suggested that the Committee should proceed by holding a general discussion on major issues and, once guiding principles had been laid down, entrusting a more detailed study to working groups. He had hoped to begin with Appendix 15 but wished to draw the Committee's attention to the fact that Committee 5 had proposed the establishment of a joint working group of Committees 4 and 5, under the chairmanship of Mr. Dunell (United Kingdom), with the following terms of reference : "to consider and revise the sub-bands for the various services in the frequency bands allocated to the maritime mobile service between 4 and 27.5 MHz". If Committee 4 agreed to that proposal it could hold a general discussion on Appendix 15 before the joint group commenced its work.

Once the joint working group had completed its task the same group, which would thereupon become Working Group 4A, could be given the following terms of reference : "to consider and revise the provisions of Article 32 and Appendices 15 and 15A of the Radio Regulations".

1.2 To consider the question of narrow band direct-printing telegraphy and selective calling systems he wished to suggest the establishment, under the chairmanship of Mr. Lundberg (Sweden), of Working Group 4B, with the following terms of reference : "to consider and propose provisions for the introduction of narrow band direct-printing telegraphy, including those for notification and registration procedures for stations of this system, and to consider and propose provisions for the introduction of digital selective calling systems and to revise technical provisions for the SSFC selective calling system".

1.3 Finally, he wished to suggest that a further group, 4C, be set up with the following terms of reference : "to consider and revise other provisions of the Radio Regulations which are assigned to Committee 4 in Document DT/2 on the basis of the relevant proposals". He had no candidate to propose, as yet, for the post of chairman.

In due course a document would be circulated outlining his suggestions and indicating the Articles and Appendices assigned to each group.

The delegates of Italy and New Zealand agreed with the Chairman's proposals.

The delegate of the United Kingdom recalled that the words "consequential revision of the relevant provisions of Article 7 of the Radio Regulations" should be included in the terms of reference of the joint

working group. In addition, he thought it would be preferable to set up two separate groups to examine narrow band direct-printing telegraphy and selective calling systems respectively.

The Chairman agreed that the phrase mentioned by the United Kingdom delegate should be added to the terms of reference of the joint working group. He had suggested a single group to deal with direct-printing and selective calling because he wished to keep the number of groups to a minimum in order to assist the smaller delegations, because the techniques involved were similar, and because the subjects would be considered successively rather than simultaneously.

The delegate of the United Kingdom accepted the Chairman's explanation.

The delegate of the U.S.S.R. agreed with the Chairman on the subject of Working Group 4B.

The Chairman noted that the delegations of the United Kingdom and Sweden were willing to provide chairmen for Working Groups 4A and 4B and took it that the Committee wished to approve the suggestions he had made.

It was so agreed.

2. Proposals of administrations concerning rearrangement of frequency bands between 4 and 27.5 MHz allocated to the maritime mobile service
(Document DT/3)

The Secretary of the Committee, introducing Document DT/3, pointed out that the proposals made by administrations up to the opening of the Conference had been tabulated in the columns following the legend of figures. In order to facilitate comparison, all proposals concerning narrow band were set out on the same page. The first column represented the provisions of the Radio Regulations. The significance of figures 1 to 17 was explained in the legend. It would be noted that a thick line in the columns separated the frequencies used by ship stations from those of coast stations. He requested the delegates to verify their proposals and inform him of any errors in Document DT/3.

The delegate of Australia pointed out that the volume of traffic handled by Australian coast stations had increased considerably, making it essential to provide more radiotelephone channels. Furthermore, a trend towards high-speed Morse transmission and possibly narrow band direct-printing had created a need for more spectrum for such services. The column labelled AUS (34) represented his country's proposals for the rearrangement of the bands, full details of which could be found in Document 34. The proposals had been thoroughly discussed by a preparatory group and formed a sound basis for a new division.

The delegate of Canada said that his proposals were designed principally to provide additional single sideband radiotelephony channels, to remove high and low-traffic ship stations, to improve tolerances, to leave oceanographic data transmission unchanged, to split wide-band channels while leaving the channels themselves, the bandwidths and the number of channels unchanged, and partially to retain harmonic relationships in Al Morse only. Full details would be found in Document 55.

The delegate of the United Kingdom said that the underlying principles of his country's proposals were set forth in Document 57. His delegation supported the retention of harmonic relationships for Al Morse only, but proposed to remove all reference to them in the Radio Regulations. There was an urgent need for additional frequencies for HF radiotelephony and narrow band direct-printing. In his view, the United Kingdom proposals were practically the best available.

He wished to draw the Committee's attention to a minor but significant revision in the United Kingdom proposals relating to narrow band direct-printing, which would be circulated in due course.

The delegate of the Netherlands said that his proposals were intended to keep changes to Appendix 15 to a minimum, since too many modifications would entail widespread alterations to equipment and consequent administrative control measures. He was of the opinion that change from double sideband to single sideband should be adequate to meet the need of radiotelephony. However, operational requirements for direct-printing called for changes and his Administration therefore proposed to eliminate the distinction between high and low-traffic ships and to transfer a portion of the high-traffic frequencies to narrow band direct-printing telegraphy. The frequency allocations for wide-band telegraphy and oceanographic data transmissions were retained, as were harmonic relationships. Full details of the Netherlands proposals would be found in Document 27.

The delegate of Japan agreed with the previous speaker that changes should be kept to a minimum. Increasing demand for duplex telephony had created a need for additional frequencies, which could be taken from the manual telegraphy band. He also wished to propose that frequency spacing between telegraphy channels should be narrower, that harmonic relationships should be retained and that new frequency bands should be provided for coast stations using narrow band direct-printing. Finally, he wished to draw attention to the fact that the scale used for the different figures in the columns of Document DT/3 could be misleading.

The delegate of Norway introduced his Administration's proposals, the main aims of which were to provide for additional radiotelephone and direct-printing channels and provision for shore/ship direct-printing. A

general survey of the proposals was contained in Document 46 and full details in Document 50. Additional proposals for the detailed division of telegraphic calling bands and new calling procedures would be distributed shortly.

The delegate of the United States of America said that, unlike many others, his Administration did not envisage the provision of extra frequencies for radiotelephony. In view of the increasing use of direct-printing and the inadequacy of present frequencies, it proposed additional direct-printing telegraphy frequencies for ships and an equivalent number for coast stations, the elimination of special frequencies for high traffic ships and the reduction of spacing between manual telegraphic frequencies together with a tightening of frequency tolerances. It was in favour of maintaining harmonic relationships for ships carrying the appropriate equipment but envisaged that future new installations should not depend on harmonic relationships.

It believed that the present Conference should modify the Radio Regulations with a view to improving telegraphy systems where justified, but should maintain unchanged certain allocations such as those for oceanographic data, wide-band and special transmission systems and coast telegraphy bands. Further action should be deferred until the W.A.R.C. in 1979.

The delegate of the U.S.S.R. introduced his Administration's proposals, details of which appeared in Document 63, which called in particular for an increase in the number of direct-printing and data transmission frequencies for ship radiotelegraphy stations, the allocation of an additional band to coast radiotelegraphy stations and an increase in calling frequencies and in the number of duplex and simplex radiotelephone channels.

The delegate of New Zealand introduced his Administration's proposals which were contained in Documents 85 and 86, a slightly corrected version of which would be distributed shortly. His Administration advocated additional frequencies for radiotelephony, some alterations in radiotelegraphy bands and increased space for data transmission systems.

Referring to Document DT/3, the 8 MHz table should be corrected in the New Zealand column by the replacement against block 14 of the figure 8 431.5 by 8 428.5, against block 2 of the figure 8 456 by 8 453 and against block 9 of the figure 8 725 by 8 722.

The delegate of India introduced his Administration's proposals, details of which were to be found in Document 111, and which called for increasing use of narrow band direct-printing radiotelegraphy and data transmission and a reduction in the use of sub-bands for ship station telegraphy and in the spacing of frequencies. It had not proposed the transfer of allocations from telegraphy to telephony. It had proposed new

channel spacing for ship station manual telegraphy, bearing in mind the minimum bandwidth required to allow for receiver characteristics/tolerances and the retention of the maximum possible spot frequencies which was of special importance to the developing countries in view of the increase in shipping traffic. Finally it had proposed a new Appendix 15A for paired frequencies to be used for narrow band direct-printing telegraphy.

The Chairman asked if any other delegations wished to submit proposals on the matter.

The delegate of Greece said his Administration had submitted proposals similar to the majority of those already presented to the Conference. It considered it necessary to redistribute existing maritime mobile frequencies to meet current and future requirements for additional radiotelephony and radiotelegraphy channels. Those requirements could probably not be met by the use of maritime satellite communications which would probably involve too high costs for many operators for many years to come. He was in favour of increasing duplex channels, Al Morse and direct-printing channels. No change should be made in harmonic relationships. Wide-band telegraphy and oceanography should be maintained in spectrum width but moved.

The Chairman called for comments on the possibility of making additional radio channels available and on the possible transfer of allocations from radiotelegraphy to radiotelephony.

The delegate of Mexico, pointing out that the proposed changes would have considerable financial repercussions, hoped that their number would be kept to a minimum and that the time-limits for their introduction would be as long as possible.

The delegate of Argentina expressed his support for the proposal to increase the number of channels available for radiotelephony, and shared the views of the previous speaker concerning the manner in which any changes should be effected.

The observer from the International Transport Workers' Federation said he had understood the Committee's main task to be that of ensuring that telegraphy requirements were met within the limited spectrum available. Telephony channels require a wider bandwidth than telegraphy channels and therefore seemed wasteful when used in cases in which telegraphy would be more appropriate and economical. The use of telephony ought to be limited to areas, such as that of personal contacts, in which it was indispensable and not for the transmission of bills of lading, etc. Ships not equipped with the distress system must, of course, use radiotelephony for all purposes but should not be encouraged to use it increasingly.

He was not convinced by the argument showing a percentage increase in telegraphy usage of 12% a year as compared with an increase in telephony usage of 15% a year for he believed it was based on faulty premises.

The frequency spectrum available was too limited to allow for wasteful usage. Radiotelephony should be strictly controlled and all suitable traffic diverted to radiotelegraphy for which operational procedures could be improved and frequency tolerances tightened up. It would be a retrograde step to transfer frequencies from telegraphy to telephony.

The delegate of the United Kingdom said that he too had noticed the prominence given to radiotelephony in the Committee dealing with telegraphy but considered it acceptable to discuss the matter with a view to assisting the Conference in obtaining the best possible use of maritime mobile frequencies. His delegation believed it essential to increase radiotelephony allocations as rapidly as possible. The first decision to be made was on the extent to which radiotelephony allocations could be increased, even if an increase were to be provided for in respect of direct-printing as well.

The delegate of Brazil fully supported the views expressed by the delegate of Mexico concerning the introduction of changes and hoped the Joint Working Group would bear them in mind. He was in favour of maintaining existing harmonic relationships and oceanographical bands.

The observer from the International Chamber of Shipping, speaking on behalf of shipowners, expressed his sympathy for the view that any changes made should be kept to a minimum. Some changes were clearly needed but no more than were essential should be entertained. He supported the limited reallocation of HF bands, but hoped that the financial implications of such a step to shipowners as well as to administrations would be borne in mind. The abandoning of harmonic relationships and recrystallising could also have serious financial repercussions for most shipping lines. In that respect he recalled that, in his introductory address to the Conference, the Secretary-General had made special mention of the fact that a large proportion of world trade, including raw materials exported and capital goods imported by the developing countries, was carried by sea.

The delegate of Italy said he was in favour of increasing radiotelephony frequency allocations.

The delegate of Cuba shared the views expressed by the delegate of Mexico.

The delegate of France supported the proposed increase of telephony allocations and of providing for more direct-printing channels without altering the width of wide-band telegraphy systems.

The delegate of Spain observed that a number of administrations had brought out the need to increase the number of frequencies for radiotelephony and, while agreeing that the need existed, he was not certain that it could best be met by a reduction in radiotelegraphy frequencies; that solution could be both costly and complicated to put into effect.

The Chairman, summing up the debate, said that the majority view seemed to be in favour of increasing the number of radiotelephony channels, that some delegations believed it necessary to keep the number of changes to a minimum to avoid excessive administrative measures and costs arising from the need to re-crystal equipment from falling on administrations and shipowners, that no objections had been raised concerning the abandoning of high traffic bands and the use of the space released thereby for direct-printing, which must be adequate for paired channelling arrangements, that the spacing of A1 services could be reduced but that harmonic relationships should be maintained as far as possible. He had the impression that the Committee would be in favour of retaining wideband and oceanographic data channels.

The delegate of the United States of America considered that the Committee had not yet concluded its general discussion. He reiterated the view that changes should be kept to a minimum at present and that it would be more appropriate to defer enlarging maritime mobile bands until the W.A.R.C. in 1979 and to deal with additional radiotelephony allocations on that occasion.

The delegate of Norway supported by the delegates of the United Kingdom and Greece agreed that the Committee should continue its general discussion but disagreed that the revision of maritime mobile frequencies should be deferred until 1979.

The meeting rose at 1755 hours.

The Secretary :

M. SANT

The Chairman :

Capt. V.R.Y. WINKELMAN

MARITIME CONFERENCE

GENEVA, 1974

Document No. 225-E

30 April 1974

Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

SECOND MEETING OF COMMITTEE 4

Wednesday, 24 April 1974, at 1500 hrs

Chairman : Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed

Document No.

1. General discussion on proposals concerning narrow-band direct-printing telegraphy

ADD Article 28C

ADD AP 18A

AP 20B

HOL/28/152-156

HOL/28/170

CAN/55/126, G/57/237

USA/54/236, D/16/29

HOL/28/171-174

2. Notification and registration procedures

HOL/28/175, F/67/12,

USA/54/243, G/57/272 and

Document 101



1. General discussion on proposals concerning narrow-band direct-printing telegraphy

(Documents HOL/28/152-156, CAN/55/126, G/57/237, USA/54/236, D/16/29)

The delegate of the Netherlands introduced his delegation's proposals on Article 28C, which had been submitted before the last meeting of C.C.I.R.'s Study Group 8 in February 1974. Some minor modifications, arising from the outcome of that meeting, to those proposals would have to be made in Working Group 4B. The proposals for operational procedures in the MF and HF bands were superseded by C.C.I.R. recommendations which, with the exception of a few editorial points, were in line with the Netherlands proposals. The Netherlands delegation was also making some proposals concerning the VHF band; those procedures have not yet been recommended in the C.C.I.R. pending further trials and studies. It was for the Conference to decide whether those proposals should or should not be discussed. The Netherlands delegation considered it necessary to allocate two channels in the VHF band, as set out in paragraph (4) on page 3 of Document 28. It was suggested that channels 80 and 81 should be so allocated, but in view of the C.C.I.R. opinion that it was preferable to have two adjacent channels, those channels could be 80 and 21 or 21 and 82. The Netherlands proposals for Appendix 20B would have to be changed by Working Group 4B in view of the C.C.I.R. amendments of Recommendation 476.

The delegate of Canada introduced proposal CAN/55/126.

The delegate of the United Kingdom said that his delegation's proposals (G/57/237) were intended to give effect to the C.C.I.R. recommendations for a suitable system and to bring them into the Radio Regulations. Since repetition of the long specifications would make the Radio Regulations too bulky, that purpose could be achieved by means of a reference to the relevant C.C.I.R. recommendation. A note on frequency tolerance was also included.

The delegate of the United States of America introduced proposal USA/54/236.

The delegate of the Federal Republic of Germany, introducing proposal D/16/29, said that the existing provisions of the Radio Regulations were felt to be inadequate. He agreed with the delegate of the United Kingdom that the results of the C.C.I.R.'s work, as embodied in Recommendation 476, should be incorporated in the Radio Regulations.

Replying to a question by the Chairman, the Director of the C.C.I.R. said that any C.C.I.R. recommendation referred to in the Radio Regulations would undoubtedly remain on the books of the C.C.I.R. A possibility of reviewing and up-dating recommendations at C.C.I.R. meetings was provided. Recommendation 476 now bore the number 476-2, which meant that the present version was the second modification of the original text. Presumably there would be further modifications in the future.

Replying to a question by the delegate of the United Kingdom, he explained that Recommendation 476(Rev. 72) was not the official symbol of the recommendation in question, as the Plenary Assembly of the C.C.I.R. had not yet approved it, but was only a draft prepared at interim meetings during 1972 and further modified at meetings of C.C.I.R. Study Groups in February and March 1974. It would be presented to the XIIIth Plenary Assembly of the C.C.I.R. in July 1974, when the latest version of the recommendation would be adopted, probably under the symbol 476-3. He suggested that the reference in the Radio Regulations might read: "the latest version of Recommendation 476 as approved by the Plenary Assembly of the C.C.I.R.".

The observer from I.M.C.O., referring to the suggestion for a method of by-passing the error control function contained in the United States proposal, said that the subject had been considered by I.M.C.O. and also jointly by I.M.C.O. and the International Hydrographic Organization (I.H.O.). The need for receiving navigational warnings by direct-printing had been emphasized in that connection. I.M.C.O.'s recommendations for the Conference, which would shortly be circulated as conference documents, included a recommendation for a capacity for unattended operation and for facilities to be provided, in particular, for broadcasts of safety messages.

The delegate of France said that the Netherlands proposal would create difficulties for F1 emissions on the 405 to 525 kHz bands. It would produce disturbances on manually operated Morse transmissions particularly on the 500 kHz emissions and automatic alerting receivers would be put out of action. Narrow-band direct-printing telegraphy would require special frequencies.

The delegate of Sweden said that the French objections should be referred to Working Group 4B.

The delegate of Denmark said that it would be preferable not to include too many detailed provisions in the Radio Regulations. On the other hand, if too much was left to C.C.I.R. frequent modifications might result.

The delegate of the United Kingdom said that it would be better to simplify the Radio Regulations by making reference therein to the specific C.C.I.R. Recommendation current at the time of the Administrative Conference.

The delegate of the Federal Republic of Germany said that there was a steady improvement in techniques but they must be used for a reasonable length of time to justify expenditure. If they were changed too often the financial burden would be excessive.

The delegate of the United States of America said that rather than include details in the Radio Regulations, reference should be made to the C.C.I.R. recommendation because of the difficulty of introducing minor improvements in the Radio Regulations.

The Chairman said that there seemed to be general support for a reference to the C.C.I.R. recommendation.

It was so agreed.

The delegate of France, introducing his proposal (Document 67) concerning notification and registration procedures said that the draft resolution in the English text should refer to the "narrow-band" and not "wide-band" direct-printing telegraph service. Most proposals seemed to favour a system of paired frequencies for emission and reception to coast stations.

The French Administration proposed that I.F.R.B. should register the frequencies of different countries but the assignments would not bear a date in columns 2a, 2b and 2d of the Master International Frequency Register. Free channels should be taken in order in making the assignments at the outset and a future conference could examine additional requirements and more detailed regulations.

The delegate of the United States of America said that his delegation's proposal (Document 54) had the same basic purpose as the French proposal. He agreed with that proposal but considered that the dates in columns 2c and 2d should be retained for information purposes as they showed existing assignments and the time when they had been brought into use.

The delegate of the United Kingdom said that he was submitting a revised proposal on narrow-band direct-printing with some provision for paired and non-paired channels. The latter should be treated according to Resolution No. Mar 8 with some up-dating and the former in accordance with the proposed Resolution C.

The meeting rose at 1600 hours.

The Secretary :

M. SANT

The Chairman :

Capt. V.R.Y. WINKELMAN

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Addendum No. 1 to
Document No. 226-E
16 May 1974
Original : English

COMMITTEE 5

Turkey

PROPOSALS FOR THE WORK OF THE CONFERENCE

The additional HF frequency requirements of the Republic of Turkey in the revised Frequency Allotment Plan for the nine coast radiotelephone stations existing and in operation (Appendix 25 MOD to the Radio Regulations) will be as follows :

Frequency Bands	4	6	8	12	16	22
Number of SSB Channels Required	10	4	10	10	10	6



MARITIME CONFERENCE

GENEVA, 1974

Document No. 226-E

30 April 1974

Original : EnglishCOMMITTEE 5Turkey

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Republic of Turkey in the revised Frequency Allotment Plan for coast radiotelephone stations (Appendix 25 MOD to the Radio Regulations) will be as follows :

	Carrier frequency (kHz)	Assigned frequency (kHz)	Country	Power kW
1	4 380.6	4 382.0	Turkey	3.5
2*	4 422.2	4 423.6	Turkey	3.5
3	8 760.8	8 762.2	Turkey	3.5
4*	8 796.0	8 797.4	Turkey	3.5
5	13 130.0	13 131.4	Turkey	3.5
6*	13 168.5	13 169.9	Turkey	3.5
7	17 262.0	17 263.4	Turkey	3.5
8*	17 314.5	17 315.9	Turkey	3.5
9	22 653.5	22 654.9	Turkey	3.5

Note : * Frequencies already allotted to Turkey with Appendix 25 MOD.



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 227-E
30 April 1974
Original : French

COMMITTEE 3

Report by the Secretary-General

SITUATION CONCERNING EXPENDITURE FOR THE MARITIME CONFERENCE

AT 26 APRIL 1974

Rule 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention, Montreux, 1965, stipulates that the Budget Control Committee is responsible, inter alia, for examining and approving the accounts for expenditure incurred throughout the duration of a conference or meeting. The Rule also provides that the Committee shall present a report to the Plenary Meeting showing, as accurately as possible, the estimated total expenditure of the Conference.

In accordance with the above-mentioned provisions, a report on the expenditure of the Conference at 26 April 1974 is submitted to the Budget Control Committee for consideration. The report is supplemented by an estimate of foreseeable expenditure till the conclusion of the work of the Conference, i.e. for a total duration of seven weeks.

Transfer of credits

According to article 15, paragraph 3 of the I.T.U. Financial Regulations, the Budget Control Committee may authorize the transfer of credits from one chapter to another; transfers from one item to another of the same chapter fall within the competence of the Secretary-General.

It is accordingly proposed that the Budget Control Committee should authorize the transfer of a credit of 210,000 Swiss francs

from Chapter III - Other expenses

to Chapter II - Premises and equipment



As explained in Document No. 146, it has been arranged for the blue, pink and white proofs to be produced by the Union's internal reproduction services. It will therefore be very difficult, if not impossible, to differentiate between the expenditure arising from the production of preparatory documents and of current conference documents, the credits for which are included in Chapter II and that arising from the preparation of documents relating to the Final Acts, the credits for which are included in Chapter III. It is accordingly proposed to include all expenditure on documents produced by the Union's reproduction services in a single item.

Situation of expenditure

The Annex to this document shows that total expenditure is at present estimated at 2,901,000 Swiss francs for a conference lasting seven weeks, which leaves a margin of 24,000 Swiss francs as compared with the draft final budget.

M. MILI

Secretary-General

No.	Item	Budget approved by A.C.	Proposed revised budget	Transfers of credits		Credits available	Expenditure at 26 April 1974			Total expenditure	Difference
				Item/item	Chap./chap.		Actual	Committed	Estimated		
1	2	3	4	5	6	7	8	9	10	11	12
	<u>Chapter I - Staff</u>										
7.601	<u>Salaries and related expenses</u>										
	- Salaries	1,615,000	1,592,000				150,300	1,333,570	83,130	1,567,000	
	- Overtime	200,000	200,000				5,362	-	194,638	200,000	
		1,815,000	1,792,000	- 9,000		1,783,000	155,662	1,333,570	277,768	1,767,000	- 16,000
7.602	<u>Travel expenses</u>										
	- Travel expenses	40,000	28,000	+ 7,000		35,000	3,195	27,740	4,065	35,000	-
7.603	<u>Insurance</u>										
	- UNJSFP	-	-				802	1,600	598	3,000	
	- Sickness	25,000	25,000				947	-	23,053	24,000	
	- Accidents	10,000	10,000				-	-	10,000	10,000	
		35,000	35,000	+ 2,000		37,000	1,749	1,600	33,651	37,000	-
<u>TOTAL CHAPTER I</u>		1,890,000	1,855,000	-	-	1,855,000	160,606	1,362,910	315,484	1,839,000	- 16,000
	<u>Chapter II - Premises and Equipment</u>										
7.604	<u>Premises, furniture, machines</u>										
	- Rental for CIG	450,000	450,000					420,000	10,000	430,000	
	- Purchase/lease furniture and machines	10,000	10,000				1,500	9,125	4,375	15,000	
		460,000	460,000	- 13,000		447,000	1,500	429,125	14,375	445,000	- 2,000
7.605	<u>Document production</u>										
	- Production of current documents	80,000	130,000				35,896	2,900	281,204	320,000	
	- DT/1	60,000	60,000				-	63,000	10,000	73,000	
	- CCIR Report	10,000	10,000				14,524	11,996	3,480	30,000	
		150,000	200,000	+ 13,000	+ 210,000	423,000	50,420	77,896	294,684	423,000	

1	2	3	4	5	6	7	8	9	10	11	12
7.606	<u>Office supplies and overheads</u>										
	- Supplies	30,000	30,000				4,014	1,000	24,986	30,000	
	- Local transport	5,000	5,000				-	-	5,000	5,000	
	- Internal removals	5,000	5,000				-	-	5,000	5,000	
	- Sundry	5,000	5,000				-	-	5,000	5,000	
		45,000	45,000	-	-	45,000	4,014	1,000	39,986	45,000	-
7.607	<u>Post, telegraph and telephone</u>										
	- Post	50,000	50,000				17,796	-	32,204	50,000	
	- Telegraph charges	2,000	2,000				-	-	2,000	2,000	
	- Telephone charges	2,000	2,000				-	-	2,000	2,000	
		54,000	54,000	-	-	54,000	17,796	-	36,204	54,000	-
7.608	<u>Technical material</u>										
	- Technical material	1,000	1,000	-	-	1,000	-	-	-	-	- 1,000
7.609	<u>Sundry and unforeseen</u>										
	- Badges, etc.	8,000	8,000				-	3,000	-	3,000	
	- Sundry	22,000	22,000				-	1,120	20,880	22,000	
		30,000	30,000	-	-	30,000	-	4,120	20,880	25,000	- 5,000
<u>TOTAL CHAPTER II</u>		740,000	790,000		+ 210,000	1,000,000	73,730	512,141	406,129	992,000	- 8,000
<u>Chapter III - Other expenses</u>											
7.610	<u>IFRB preparatory work</u>										
	- Computer supplies	7,000	7,000				-	-	7,000	7,000	
	- Reproduction of documents	9,000	9,000				6,580	-	2,420	9,000	
	- Office and other supplies	4,000	4,000				-	-	4,000	4,000	
		20,000	20,000	-	-	20,000	6,580	-	13,420	20,000	-

[illegible]

MARITIME CONFERENCE**GENEVA, 1974**

Document No. 228-E

30 April 1974

Original : FrenchCOMMITTEES 4 AND 5Tunisia

PROPOSALS FOR THE WORK OF THE CONFERENCE

As part of plans to develop its maritime radio links, the Tunisian Republic's Posts, Telegraph and Telephone Administration plans to inaugurate a short-wave service in the near future.

The following frequency requirements of the Tunisian Republic should be taken into account when revising the Frequency Allotment Plan (Appendix 25) for Coast Radiotelephone and Radiotelegraph Stations.

Frequency bands (in MHz)	4	6	8	12	16	22
No. of SSB channels	2	2	2	2	2	2
No. of TG channels	2	2	2	2	2	2



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 229-E(Rev.1)

17 May 1974

Original : French

COMMITTEE 5

Republic of the Ivory Coast

PROPOSALS FOR THE WORK OF SUB-GROUP 5C-3

The Ivory Coast's requirements under the new Frequency Allotment Plan for coast radiotelephone and radiotelegraph stations operating in the maritime mobile bands (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands (MHz)	4	6	8	12	16	22
Number of existing SSB channels	2 4 383.8 4 433.2	1 6 515.4	2 8 812 8 813.4	2 13 193 13 194.4	1 17 354.4	1 22 717.9
Number of additional SSB channels		1			1	1



MARITIME CONFERENCE

GENEVA, 1974

Document No. 229-E

30 April 1974

Original : French

COMMITTEE 5

Republic of the Ivory Coast

PROPOSALS FOR THE WORK OF THE CONFERENCE

The Ivory Coast's channel needs under the revised Frequency Allotment Plan for Coast Radiotelephone Stations operating in the bands allocated to the maritime mobile service between 4 000 and 23 000 kHz (Appendix 25 to the Radio Regulations) are as follows :

Frequency Bands (MHz)	4	6	8	12	16	22
Number of single sideband channels	2	2	2	2	2	2



MARITIME CONFERENCE**GENEVA, 1974**

Document No. 230-E

30 April 1974

Original : RussianCOMMITTEE 5Union of Soviet Socialist Republics

PROPOSALS FOR THE WORK OF THE CONFERENCE

The U.S.S.R. delegation submits to the Conference the following information concerning the radiotelephone frequencies in use by U.S.S.R. coast stations in the bands allocated to the maritime mobile service between 4 and 27.5 MHz.

Area Coast of station use frequencies	European part of the USSR	North-Western part of the U.S.S.R.	Far East of the U.S.S.R.	U.S.S.R. Northern Asia	U.S.S.R. Southern Asia	Ukraine
1	2	3	4	5	6	7
		I. 4 MHz band				
4 363.0	x	x	x	x	x	x
4 366.1	x	x	x	x	x	x
4 369.2					x	
4 372.4					x	
4 375.6			x			
4 378.8			x			
4 401.2		x		x		
4 404.4		x		x		
4 407.6	x	x				
4 410.8	x	x				
4 426.8						x
4 430.0	x					x
		II. 6 MHz band				
6 523.2			x		x	



1	2	3	4	5	6	7
III. 8 MHz band						
8 730.4	x	x	x			x
8 733.5	x	x	x			x
8 743.0					x	
8 746.2					x	
8 755.8		x		x		
8 759.0		x		x		
8 768.6	x					
8 771.8	x					
8 775.0		x				
8 778.2		x				
8 781.4	x				x	x
8 784.6	x				x	x
8 787.8			x			
8 791.0			x			
8 794.2		x		x		
8 797.4		x		x		
8 807.0			x			
IV. 12 MHz band						
13 110.4	x	x	x			x
13 113.9	x	x	x			x
13 117.4		x		x		
13 120.9		x		x		
13 124.4			x			
13 127.9			x			
13 138.4	x					x
13 141.9	x					x
13 145.4					x	
13 148.9					x	
13 173.4	x		x	x		
13 176.9	x	x	x	x		
13 187.4	x	x	x			
V. 16 MHz band						
17 256.4	x	x				x
17 259.9	x	x				x
17 263.4			x	x		
17 266.9			x	x		

1	2	3	4	5	6	7
17 284.4	x	x				x
17 287.9	x	x				x
17 298.4			x			
17 301.9			x			
17 305.4	x					
17 308.9	x					
17 319.4		x		x		
17 322.9		x		x		
17 333.4	x	x	x			x
17 343.9			x			
VI. 22 MHz band						
22 626.9		x				x
22 630.4		x				x
22 633.9			x			
22 637.4			x			
22 654.9	x	x				
22 658.4	x	x				x
22 707.4	x		x			x

COMMITTEE 6

Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 29

1. Reference is made to Documents 52 and 185 submitted by Norway.
2. After careful consideration of the latest reports by the Norwegian HF coast station and a large number of Radio Officers on board ships, resulting from the test of a new general calling procedure, the Norwegian Administration is confident that a new method of radiotelegraphy (morse) calling should be introduced in order to obtain a more efficient and economic service.
3. As a universal calling procedure is assumed preferable, it is proposed that the new method should be applicable for radiotelegraphy (morse) calling generally, irrespective of calling frequency/band used.
4. Proposed amendments to Article 29 are attached.
5. The proposals of Document 52 (Proposals NOR/52/34 and NOR/52/36) are withdrawn.

Annex : 1



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A N N E X

- NOR/231/89 MOD 1013A (3) The procedure described in
Mar Nos. 1012 and 1013 is not applica. to the
maritime mobile service.
- 1013AA (4) When selective calling is used in
Mar the maritime mobile service, the procedures
prescribed in Nos. 999B, 999C and 999D shall be
observed.
- NOR/231/90 MOD Method of Calling in the Maritime Mobile
Service ~~Bands between 4-000 kc/s and 27-500 kc/s.~~
- NOR/231/91 MOD 1013B § 6A (1) The call consists of :
Mar
- the call sign of the station called, not
more than ~~three-times~~; twice;
 - the word DE;
 - the call sign of the calling station,
not more than ~~three-times~~; twice;
 - ~~the-signal-----~~(separation-sign);
 - ~~the-call-sign-of-the-station-called;~~
~~once-only~~;
 - the letter K.
- NOR/231/92 ADD 1013BA (2) On calling frequencies in the
bands between 4-27.5 MHz, when the requirements of
No. 1162 have been met, the call consists of :
- the call sign of the station called, not
more than twice;
 - the word DE;
 - the call sign of the calling station, not
more than twice;
 - information required by RR 1016, if
necessary;
 - the call sign of the station called,
once only;
 - the letter K.

NOR/231/93 MOD 1013C ~~(2)~~ (3) For normal calling, ~~when the~~
Mar ~~requirements of No. 1162 have been met~~; the calls
specified in Nos. 1013B and 1013BA may be repeated
~~at after intervals of not less than~~ one minute for
~~a period not exceeding five minutes~~ and shall ~~after~~
~~that~~ not be renewed until after an interval of
of ~~ten~~ five minutes.

NOR/231/94 MOD 1013D ~~(3)~~ (4) When, however, the conditions of
Mar establishing contact are extremely difficult, the
calling sign may be ~~transmitted not more than ten~~
~~times in succession~~. The ~~call shall~~ consist of :

- the call sign of the station called, not
more than ~~ten~~ five times;
- the word DE;
- the call sign of the calling station,
not more than ~~three~~ five times;
- information required by RR 1016, if
necessary;
- ~~the signal-----~~ (separation sign);
- the call sign of the station called,
once only;
- the letter K.

~~If necessary, This~~ call may be
transmitted a second time (see No. 1079). ~~The call~~
~~or group of two consecutive calls may be repeated~~
~~three times at~~ after an interval of two three
minutes; thereafter it shall not be repeated until
an interval of ten minutes has elapsed.

NOR/231/95 SUP 1013E

NOR/231/96 SUP 1013E.1

NOR/231/97 MOD 1016 § 8. (1) The call, as described in Nos. 1012,
Mar 1013, MOD 1013B, ADD 1013BA and MOD 1013D ~~and 1013E~~,
shall be followed by the service abbreviations

indicating the working frequency ~~and, if useful,~~
the class of emission proposed ~~which the calling~~
~~station proposes to use~~ for the transmission ~~of its~~
~~traffic-~~, and the information mentioned in
Nos. 1020 and 1021, as necessary.

NOR/231/98 MOD 1019A (3) When, in the maritime mobile
Mar service, ~~as an exception to No. 1016,~~ the call by
a coast station is not followed by an indication
of the frequency to be used for the traffic, this
indicates that the coast station proposes to use
for traffic its normal working frequency shown in
the List of Coast Stations.

NOR/231/99 MOD 1022 § 10. The reply to calls consists of :

- the call sign of the calling station,
not more ~~than three times;~~ twice;
 - the word DE;
 - the call sign of the station called.
-

MARITIME CONFERENCE

GENEVA, 1974

Document No. 232-E

30 April 1974

Original: English

COMMITTEE 5

People's Republic of Albania

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the People's Republic of Albania in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 MOD to the Radio Regulations) are as follows:

Frequency bands MHz	4	6	8	12	16	22
Number of single sideband channels	2	1	2	2	1	1

This document supersedes those published in Document No. 151.



MARITIME CONFERENCE

GENEVA, 1974

Corrigendum to
Document No. 233-E
7 May 1974
Original : English

COMMITTEE 5

S.F.R. of Yugoslavia

PROPOSALS FOR THE WORK OF THE CONFERENCE

Yugoslavia requests that the requirements shown below be taken into consideration in the new Frequency Allotment Plan for Coast Radiotelephone Stations (App. 25 MOD to the Radio Regulations).

Frequency bands in MHz	4	6	8	12	16	22
No. of SSB channels	4	4	5	4	4	3



MARITIME CONFERENCE

GENEVA, 1974

Document No. 233-L

30 April 1974

Original: English

COMMITTEE 5

Socialist Federal Republic of Yugoslavia

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the Socialist Federal Republic of Yugoslavia in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 to the Radio Regulations) are as follows:

Frequency bands in MHz	4	6	8	12	16(17)	22
No. of SSB channels	2	2	2	2	2	2

MARITIME CONFERENCE

GENEVA, 1974

Document No. 234-E

30 April 1974

Original : EnglishCOMMITTEE 5Republic of Ghana

PROPOSALS FOR THE WORK OF THE CONFERENCE

The total frequency requirements of the Republic of Ghana in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 to the Radio Regulations) will be as follows:

Frequency bands (MHz)	4	6	8	12	16	22
Number of SSB channels (existing)	-	1	1	1	1	1
Additional number of SSB channels (required)	2	1	1	1	1	1
Total	2	2	2	2	2	2

Reasons : The additional channels are required for Ghana's two coast stations to cope with the present and prospective increase in ship movements in Ghana.



MARITIME CONFERENCE**GENEVA, 1974**

Document No. 235-E(Rev.1)

23 May 1974

Original : EnglishCOMMITTEE 5United Republic of Cameroon

PROPOSALS FOR THE WORK OF THE CONFERENCE

The requirements of the United Republic of Cameroon that should be taken into consideration in the revision of the Frequency Allotment Plan for coast radiotelephone stations operating in the exclusive maritime mobile bands (Appendix 25 MOD to the Radio Regulations) are as follows :

Frequency in MHz	4	6	8	12	16	22
Present assignments in MHz	1 4,383.8 MHz	-	1 8,752.6 MHz	1 13,134.9 MHz	-	-
New SSB channels required	1	1	1	1	1	1
Total requirements	2	1	2	2	1	1

MARITIME CONFERENCE

GENEVA, 1974

Document No. 235-E

30 April 1974

Original : English

COMMITTEE 5

United Republic of Cameroon

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of the United Republic of Cameroon in the revised Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands (Appendix 25 MOD to the Radio Regulations) will be as follows :

Frequency bands in MHz	4	6	8	12	16	22
No. of SSB working channels	2	2	2	2	2	1



MARITIME CONFERENCE

GENEVA, 1974

Document No. 236-E

30 April 1974

Original: Spanish

COMMITTEE 5

Argentina, Mexico, Paraguay, Brazil

PROPOSALS FOR THE WORK OF THE CONFERENCE

Provisions of the Radio Regulations

Article 5, footnotes 209 and 211 to the Table

The above-mentioned footnotes allow stations in the fixed service to operate on a sharing basis with stations of the maritime mobile service on the conditions specified in the text.

This situation has enabled the administrations signatories to this document to operate their maritime mobile services and fixed services in harmony. No problem of harmful interference has in fact been encountered.

The Conference is therefore requested to maintain the text of these footnotes, at least so far as Region 2 is concerned.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 237-E

30 April 1974

Original : English

COMMITTEE 2

SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE 2

(CREDENTIALS)

Thursday, 25 April 1974, at 1520 hrs.

Chairman : Mr. S.H. BUTLER (Liberia)

Subjects discussed

Document No.

1. Terms of reference
2. Organization of the Committee's work
3. Proxy voting

171, 172



1. Terms of reference

The Chairman recalled that the Committee's terms of reference were set forth in Chapter 5 of the General Regulations governing the deposit and verification of credentials.

Those terms of reference were adopted.

2. Organization of the Committee's work

The Chairman announced that 50 delegations had so far deposited their credentials, and hoped that all delegations would be duly accredited before the signature of the Final Acts of the Conference.

He suggested that a Working Group composed of one member from each of the five regions be set up to examine credentials.

It was so agreed.

On the proposal of the delegate of the Khmer Republic, seconded by the delegate of Korea, the delegation of Japan agreed to represent Asia and Oceania.

On the proposal of the delegate of the Federal Republic of Germany, seconded by the delegate of Italy, the delegation of France agreed to represent Western Europe.

On the proposal of the delegate of Chile, seconded by the delegate of the United States of America, the delegation of Argentina agreed to represent America.

On the proposal of the delegate of the Democratic Republic of Germany, the delegation of the U.S.S.R. agreed to represent Eastern Europe.

On the proposal of the delegate of Spain, seconded by the delegate of the Republic of Liberia (Chairman of Committee 2), the delegation of Ghana agreed to represent Africa.

The Chairman asked for the names of the members of the Working Group to be communicated to the Secretariat as quickly as possible.

It was agreed that the Working Group would meet the following day.

3. Proxy voting

The Chairman announced that proxies had been received from Egypt (Document 171) and Luxembourg (Document 172) empowering Morocco and Belgium respectively to vote on their behalf. A further proxy received from Central African Republic, giving Cameroon powers to represent it, would be circulated shortly as Document 190.

Mr. Butler (Vice Secretary-General) recalled that the Working Group established to examine the question of credentials was usually also asked to examine any proxies received to see that they met the requirements of the Regulations attached to the Convention.

It was agreed to refer the question of proxies to the Working Group.

It was decided that the Committee should hold its next meeting on Monday 29 April at 0900 hours to consider the report of the Working Group.

The meeting rose at 1545 hours.

Secretary :

P.A. TRAUB

Chairman :

S.H. BUTLER

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 238-E
1 May 1974
Original : English

COMMITTEES 4, 5 and 6

Australia

PROPOSAL FOR THE PROVISION OF GUARD BANDS FOR THE PROPOSED
DISTRESS AND SAFETY FREQUENCIES 4 136 AND 6 204 kHz

This proposal is in two parts, a proposed frequency plan and a proposal for the allotment and assignment of the relevant frequencies.

1. Frequency Plan

Adjacent carrier frequency kHz	Guard band frequency limits kHz	Calling channel carrier frequency kHz	Guard band frequency limits kHz	Adjacent carrier frequency kHz
4 132.1*)	4 135.0- 4 136.0	4 136.0	4 138.8- 4 139.8	4 139.9**)
6 200.1	6 203.0- 6 204.0	6 204.0	6 206.8- 6 207.8	6 207.9**)

*) Lower frequency if possible.

**) Higher frequency if possible.

2. Allotment Plan and frequency assignments

- A) If at all possible, the new Allotment Plan should not allot the adjacent carrier frequencies, shown above, to stations in the Southern Hemisphere.
- B) If at all possible, administrations in the Southern Hemisphere should not seek assignments on the adjacent carrier frequencies shown above and the I.F.R.B. should refer back to the administration concerned any assignment notice for use of these frequencies by stations in the Southern Hemisphere.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 239-E

1 May 1974

Original : English

COMMITTEE 6

Sweden

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item No. 18 : Radio operators' certificate

ARTICLE 33

Operators' Certificates
for ship and aircraft stations

Section III

Conditions for the
Issue of Operators' Certificates

S/239/32	MOD	879	Sufficient knowledge of <u>the English language</u>
S/239/33	MOD	888	

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.~~

Reasons : In accordance with a recent I.M.C.O. resolution all ships will in the future be equipped with means of radiotelephony in addition to radiotelegraph apparatus.

Furthermore an I.M.C.O. decision has been taken that the language which should be used by navigators between ships is English.



In telephony communications it is necessary to use one common language.

It consequently seems necessary to modify the Radio Regulations to clearly indicate that Radio Operators are required to have knowledge of the English language.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 240-E
1 May 1974
Original : English

COMMITTEE 6

Norway*)

PROPOSAL FOR THE WORK OF THE CONFERENCE

ARTICLE 23

The restricted radiotelephone operator's certificate (RR 899 - 902) authorizes the holder to carry out service according to the provisions of RR 863A. Even though the qualifications for obtaining this certificate are limited, RR 900 does require practical knowledge of radiotelephone operation and procedure, i.e. MF, HF and VHF.

RR 906 provides for some flexibility, by agreements, in order to meet special needs, but does not meet the requirements for general limitation.

As the installation rate, particularly of exclusive VHF radiotelephone stations, is growing on board small fishing and pleasure boats, need is felt to have in the Radio Regulations provision to the effect that the radiotelephone operator's restricted certificate may be limited to one or more of the frequency bands.

The following addition and modification are proposed :

NOR/240/100 ADD 863AA (3B) The radiotelephone operator's restricted certificate may be limited exclusively to one or more of the maritime mobile frequency bands, in which cases the certificate shall be suitably endorsed.

NOR/240/101 MOD 905 § 15. A radiotelephone operator's certificate shall show whether it is a general certificate or a restricted certificate and, in the latter case, whether it is limited as provided for in ADD 863AA or if it has been issued in conformity with the provisions of No. 903, as relevant.

*) See also Document 231.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 241-E

1 May 1974

Original : English

COMMITTEE 5

SUMMARY RECORD

OF THE

SECOND MEETING OF COMMITTEE 5

Friday, 26 April 1974, at 0930 hrs

Chairman : Mr. O.J. HAGA (Norway)

Subjects discussed

Document No.

1. Verbal report of Working Group Chairmen
2. General discussion on the revision of Appendix 25 MOD

107 and 133

1. Verbal report of Working Group Chairmen

The Chairman opened the meeting and called on the Chairmen of the various Working Groups to report on the progress of work in their Groups.

The Chairman of Working Group 5A said that his Group would shortly hold its first meeting. To facilitate its work, a working document had been prepared grouping the proposals for examination by subject.

The Chairman of Working Group 5B said that his group had had one meeting, which had begun by considering those points of its terms of reference having a bearing on the work of Working Group 5C. There had been a general discussion on channel spacing and that would be continued at the next meeting of the Group.

The Chairman of Working Group 5C said that his Group had had one meeting which had been devoted to the presentation of documents commenting on Appendix 25. The presentation of further documents on the subject would continue at the next meeting of the Group.

In the absence of the Chairman of Working Group 5D, the Chairman indicated that the first meeting of Working Group 5D was scheduled for early the following week.

The Chairman of the Joint Working Group C4/C5 said that the Group had met twice. The time had been devoted to general discussion, from which it appeared that it would be possible to release some frequency space from the A1 telegraphy band, although great care would have to be taken to avoid inhibiting the manual A1 telegraphy services as these were very important to many administrations. There had also been some discussion on how any frequency space made available should be apportioned between radiotelephony and direct-printing telegraphy, but that subject required further investigation.

The delegate of the United States of America felt that the Chairman of Joint Working Group C4/C5 was being unduly optimistic about the availability of frequency space. His delegation's view was that complete justification for the release of each telegraph band was required before any conclusions were reached. Many delegations had not yet made known their opinions on the subject, while others had expressed concern about implementation. The matter therefore needed more thorough discussion in the Joint Working Group.

The delegate of Australia said that there had been several suggestions so far during the Conference that it would be better to wait until the General Administrative Radio Conference planned for 1979 to see what part of the frequency spectrum would be available to the maritime

mobile service. That delay disturbed him for it appeared to him that frequency allocations to the fixed services were at present increasing rather than decreasing. If the I.F.R.B. could give details of the fixed service assignments made or cancelled over the last five years it might indicate what portion of the frequency spectrum the maritime mobile service could expect to obtain in 1979.

The Vice-Chairman of the I.F.R.B. said that the I.F.R.B. was at present preparing, for the present Conference, extracts from the International Frequency List to indicate the present occupation of frequencies in the M.I.F.R. by the maritime mobile service. It would be a lengthy and complicated undertaking to do the same for the fixed services. The present position briefly was that most additional assignments to the fixed services were in the bands above 30 MHz. Due to new means of international communication, pressure on the HF band from the large fixed service users was decreasing. On the other hand, there were new requests for HF assignments from other users, as HF services remained, for many new and developing countries, their sole or major means of international (or even national) communication. The actual situation was unfortunately not clear, as HF assignments replaced by satellites, submarine cables or radio relays had not always been cancelled. An I.F.R.B. survey, due to be completed in two years time, was in progress to determine how much of the International Frequency List could be cancelled or amended, in order that the International Frequency List submitted to the 1979 Conference would be as close to reality as possible.

The delegate of the United Kingdom expressed concern that if extra frequency space could not be made available until 1979, then, in view of the time lag due to implementation, it would be well into the 1980's before such frequencies could be used.

The delegate of the United States of America felt that estimate was based on the long time taken to implement the decisions of the 1951 Conference, where large segments of frequencies had been reallocated. After the 1967 Maritime Conference it had taken only 16 months to implement the rearrangement of a smaller segment of frequencies within the maritime mobile service and he considered, with the corroboration of Mr. Petit, Member of the I.F.R.B. that it would take no more than several months to a year to implement a similar rearrangement after the 1979 Conference. It would be preferable to have the minimum disruption at present and he thought a suitable solution would be for the present Conference to adopt a recommendation indicating the need for additional channels to be available for radiotelephony, stating what areas of the spectrum those channels could be obtained from and giving a proposed time framework for implementation of any relevant provisions, and leave it to the 1979 Conference to review frequency assignments and see where space could be made available.

The delegate of New Zealand said that the need for new channels was immediate, while under the United States proposal his delegation felt that it would take from 6 to 14 years to get more telephony channels. He believed it would be relatively simple at present to reallocate the sub-bands of the maritime mobile service to provide a more equitable distribution between radiotelegraphy and radiotelephony.

The delegate of the United Kingdom, supporting the delegate of New Zealand, drew attention to the fact that as the 1979 Conference would have to make a full review of the spectrum needs of all services it would not be able to look into the detailed needs of all services in the short time available to it. The detailed allocation of bands within the maritime mobile service would in that case have to await the next Maritime Conference, to be held at the earliest in 1982.

It was then agreed, on a proposal by the Chairman, that the discussion should be continued in the Joint Working Group, taking account of the views expressed in full Committee.

2. General discussion on the revision of Appendix 25 MOD (Documents 107 and 133)

Mr. Petit, Member of the I.F.R.B., introduced Documents 107 and 133, which reported on the work accomplished by the I.F.R.B. in implementation of the provisions of Appendix 25.

The delegate of the United Kingdom noted with approval that the reports stressed the importance of coordination in arrangements for frequency sharing. As that was the main reason for the existence of Committee 5, it highlighted the importance of its work.

In reply to a query from the delegate of Spain, Mr. Petit, Member of the I.F.R.B., said that with regard to the last sentence in paragraph 4.1, page 9, of Document 133, it had been found that when a double sideband channel had been split into two single sideband channels administrations tended to use the upper channels in preference to the lower. That explained the greater availability of the lower channel as noted in paragraph 5.6, page 12, of the same document.

The meeting rose at 1050 hours.

The Secretary :

J. BALFROID

The Chairman :

O.J. HAGA

COMMITTEE 6

FIRST REPORT OF WORKING GROUP 6B

TO COMMITTEE 6

(Operation)

Article 36

Section V - MOD 1429
MOD 1430

Section VI - MOD 1449
ADD 1449A
MOD 1450
MOD 1451

Section VIIIA - MOD 1476L

Section IX - MOD 1478
MOD 1482A

Section X - MOD 1492

Appendix 13A

Q code

All Proposals concerning the above provisions were considered.
Working Group 6B unanimously recommended the revised and additional texts
appearing in the Annex to the present Report for adoption by Committee 6.

CAPT. W.T. ADAMS
Chairman

Annex : 1



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A N N E X

ARTICLE 36

Section V

MOD 1429

(a) Radiotelegraphy :

- the distress signal;
- 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.

MOD 1430
Mar

(b) Radiotelephony :

- the distress signal;
- the call sign or other identification of the station sending the distress message, spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- the call sign or other identification of the station acknowledging receipt, spoken three times;
- the word RECEIVED (or RRR spoken as ROMEO ROMEO ROMEO in case of language difficulties);
- the distress signal.

Section VI

MOD 1449 § 34. (1) When distress traffic has ceased, 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" (CQ) indicating that normal working may be resumed.

ADD 1449A When complete silence is no longer necessary on a frequency which is being used for distress traffic, the station controlling the traffic shall transmit on that frequency a message addressed "to all stations" (CQ) indicating that restricted working may be resumed.

MOD 1450 (2) (a) In radiotelegraphy, the message referred to in No. 1449 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.

(b) In radiotelegraphy, the message referred to in 1449A 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 is in distress;
- the service abbreviation QUZ.

MOD 1451 (3) (a) In radiotelephony, the message referred to in 1449 consists of :

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- 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".

 (b) In radiotelephony, the message referred to in 1449A consists of :

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- 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 is in distress;
- the words SUHME SEELONCE pronounced as the French words "semi silence".

Section VIIIA

MOD 1476L (9) Equipment designed to transmit emergency
Mar position indicating radiobeacon signals on the frequencies
121.5 MHz and 243 MHz shall be in agreement with the
recommendations and standards recommended by the organizations
mentioned in Resolution No. Mar 7.

Section IX

MOD 1478 (2) In radiotelephony, the urgency signal consists
of three repetitions of the group of words PAN PAN, each word
of the group pronounced as the French word "panne". The urgency
signal shall be transmitted before the call.

MOD 1482A (2A) However, in the maritime mobile service, the
Mar message shall be transmitted on a working frequency -

(a) in the case of a long message or a
medical call or

(b) in areas of heavy traffic in the case of
the repetition of a message transmitted in accordance with the
provision as laid down in No. 1482.

An indication to this effect shall be given at
the end of the call.

Section X

MOD 1492 (3) The safety message which follows the call
should be sent on a working frequency. A suitable announcement
to this effect shall be made at the end of the call.

APPENDIX 13A

After QUY :

ADD	Abbreviation	Question	Answer or advice
	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In sub-section "Suspension of Work", after QUM :

ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.
-----	-----	----------------------------------	---

In sub-section "Distress" after QUM :

ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.
-----	-----	----------------------------------	---

In sub-section "Search and Rescue" after QUY :

ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.
-----	-----	----------------------------------	---

COMMITTEE 6

FIRST REPORT BY WORKING GROUP 6A
TO COMMITTEE 6

The Working Group 6A during the meeting of 30 April 1974 and after consideration of all relative proposals agreed on the attached texts:

Article 24

MOD	Title
MOD	RR 912
MOD	RR 913

U.K. reserves the right to return to this matter in Committee 6.
(See Annex 1.)

Article 28, Section III

MOD RR 970

Unanimously agreed.
(See Annex 2.)

Article 25

ADD RR 927A

Unanimously agreed.
(See Annex 3.)

In addition it was agreed that the following course of action should be taken in respect to proposals concerning RR 964B, 964C and RR 964D.

(a)	RR 964B, RR 964C and RR 964D	be examined by Committee 5 prior to being considered by Committee 6
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A N N E X 1

Article 24

MOD	Title	Class and Minimum Number of Operators for Stations on board Ships and Aircraft
MOD	912	§ 1. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships and aircraft of its own nationality have personnel adequate to perform efficient service.
MOD	913	§ 2. The personnel of ship and aircraft stations in the public correspondence service shall, having regard to the provisions of Article 23, include at least:

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A N N E X 2

Article 28, Section III

MOD 970

§ 12. Ship stations equipped with radiotelegraph apparatus intended to be used for normal morse telegraphy 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.

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A N N E X 3

Article 25

ADD 927A

- c) making a general call to all stations announcing the closing down of the service and advising the time of re-opening, if outside its normal hours of service.
-

MARITIME CONFERENCE

GENEVA, 1974

Document No. 244-E

6 May 1974

Original : French

COMMITTEE 6

SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE.6

(OPERATION)

Wednesday, 24 April 1974, at 1000 hrs

Chairman : Mr. W.W. SCOTT (Canada)

Subjects discussed

Document No.

- 1, Death of the President of the Republic of Austria
- 2, a) General discussion, organization of the work of Committee 6 and constitution of Working Groups
- b) Appointment of the Chairman of the Working Groups

DT/4



1. Death of the President of Austria

Opening the meeting, the Chairman announced the death of the President of the Republic of Austria, Mr. Franz JONAS, and proposed that a telegram of condolence should be sent to the Government and people of Austria and the widow and family of the deceased on behalf of the I.T.U. and the World Administrative Conference for Maritime Mobile Telecommunications.

It was so agreed.

2. a) General discussion, organization of the work of Committee 6 and constitution of the Working Groups (Document No. DT/4)

The Chairman introduced Document No. DT/4 and enumerated the items with which the three Working Groups would have to deal. Since some of the smaller delegations might wish to take part in the work of the various Groups, efforts had been made, for example, to limit the terms of reference of Group B to enable it to complete its work quickly and thus make it possible for the smaller delegations to participate in the work of the other Groups. A new working document would shortly be issued listing all the proposals received concerning the various matters to be dealt with by the Operation Committee.

The representative of the I.F.R.B. stated that the Board had examined Document No. DT/4 and would like to make the following additions :

- a) for Working Group A : under "Licences and Certificates" insert "Resolution No. Mar 16";
- b) under "Selective Calling Systems", insert "Resolution No. Mar 8";
- c) under "Radiotelegraph Operational Procedures", insert "Article 32 and Resolution No. Mar 18";
- d) under "Radiotelephone Operational Procedures", insert "Article 35".

It was so agreed.

He further stated that, in accordance with No. 482 of the Radio Regulations, the I.F.R.B. had prepared documents for Committee 6 and for the other Committees of the Conference. However, in view of the complexity and variety of the questions to be dealt with by Committee 6, the I.F.R.B. had prepared a document for the Committee giving a

breakdown of the proposals allocated to it by subject. The document contained seventeen sections which could easily be integrated into Document No. DT/4 and dealt with all the texts issued for the Conference which involved Committee 6, up to and including Document No. 162. The Chairman could count on the Board's full cooperation in the Committee as well as in its Working Groups.

The Chairman thanked the I.F.R.B. representative for the document described which would doubtless prove very useful to the Committee and would be a valuable addition to Document No. DT/4 which was not exhaustive; Recommendation No. Mar 2 would also be added.

The delegate of the United Kingdom said that, since Working Group C would deal mainly with accounting matters, its meetings could be held, without in any way jeopardizing the work as a whole, at the same time as the meetings of the other two Groups. Group C should start its work immediately so that the financial experts attached to several of the delegations could leave the Conference as soon as the relevant questions had been settled. The delegation of the U.K. would not be as optimistic as the Chairman concerning the possibility of Group B terminating its work quickly.

The delegate of the U.S.S.R. said that the document referred to by the I.F.R.B. representative would undoubtedly be extremely useful to the Committee.

The Chairman said that at the following meeting of the Steering Committee arrangements could, if necessary, be made to set up a further small Working Group of Committee 6 to study the operation of satellite systems. The document prepared by the I.F.R.B. would be a follow-up to Document No. DT/4 but would be much more detailed.

b) Appointment of the Chairmen of the Working Groups

At the proposal of the Chairman and with the consent of the delegates proposed, the following delegates were appointed to direct the work of the three Working Groups :

Working Group A : Mr. H.A. YOUNG (Australia), assisted as Secretary by Mr. A. ZACCAGNINI of the General secretariat;

Working Group B : Mr. W.T. ADAMS (United States of America), assisted as Secretary by Mr. C. STETTLER of the C.C.I.R. Secretariat;

Working Group C : At the proposal of the delegate of New Zealand seconded by the delegates of Turkey and of Singapore and with the consent of the delegate proposed, Mr. M.O. MEREDITH (United Kingdom) was appointed to direct the work of Working Group C with the assistance of Mr. P.A. TRAUB of the General Secretariat as Secretary of the Working Group.

The Chairman thanked the Committee for the speed with which it had organized its work and accepted the structure of the Working Groups.

The meeting rose at 1040 hrs.

The Secretary :

A. MACLENNAN

The Chairman :

W.W. SCOTT

UNION INTERNATIONALE DES TELECOMMUNICATIONS
CONFERENCE MARITIME

GENEVE, 1974

Corrigendum au
Document N° 245-F/E/S
3 mai 1974

COMMISSION 6

Prière de remplacer les pages 5 et 6 par les suivantes

Concerns French version only

Concierne solo al testo francés



A N N E X E B

PROJET
RESOLUTION N° Mar ...

Concernant la comptabilité de la correspondance publique
du service mobile maritime

La Conférence mondiale des radiocommunications maritimes,
Genève 1974,

considérant

- a) que les méthodes actuelles de comptabilité de la correspondance publique du service mobile maritime sont complexes et coûteuses, pour les administrations et les exploitations privées reconnues chargées de la comptabilité maritime,
- b) que des propositions soumises à la Conférence administrative mondiale des radiocommunications, Genève 1974, visent à modifier les règles actuellement applicables aux méthodes de comptabilité, et notamment à ne pas inclure les taxes de bord dans les comptes maritimes échangés entre les administrations et les exploitations privées reconnues chargées de la comptabilité maritime,
- c) que l'on dispose actuellement de moyens modernes qui pourraient contribuer à améliorer et accélérer l'établissement et l'échange des comptes,
- d) que l'on a déjà constaté la nécessité d'améliorer les méthodes de comptabilité, par exemple, dans le cas :
 - de l'accès automatique entre stations de navire et stations côtières,
 - et de l'établissement de communications directes, par télex et par téléphone, entre les abonnés d'un pays et les stations de navire par l'intermédiaire des stations côtières d'un autre pays,
- e) qu'il pourrait se révéler nécessaire d'adopter, pour les services mobiles maritimes de Terre et par satellite, un système de comptabilité commun ou, à tout le moins, deux systèmes fondés sur les mêmes principes,

décide

qu'une étude doit être entreprise en vue d'améliorer les méthodes de comptabilité actuellement utilisées dans le service mobile maritime et de faire face aux développements futurs prévisibles,

invite le C.C.I.T.T.

1. d'entreprendre d'urgence dans ses Commissions d'études pertinentes l'étude de la question jointe en annexe en vue de parvenir le plus tôt possible à la diminution des tâches incombant aux administrations et aux exploitations privées reconnues chargées de la comptabilité radiomaritime;

2. de demander aux administrations d'envoyer aux réunions de ces Commissions d'études des délégués particulièrement concernés par la comptabilité maritime,

3. de s'assurer que les résultats de l'étude seront inclus dans les rapports à soumettre à la VIe Assemblée plénière du C.C.I.T.T. (1976) et que ces rapports tels qu'ils auront été approuvés par cette Assemblée seront distribués aux administrations de tous les pays Membres de l'U.I.T. avant le 1er janvier 1977, en vue de leur permettre de préparer leurs propositions à la Conférence administrative mondiale des Radiocommunications prévue en 1979,

invite

les administrations et exploitations privées reconnues intéressées par cette comptabilité à prendre, en attendant les résultats de cette étude, toutes les mesures nécessaires pour atténuer, autant que possible, les inconvénients dus à la comptabilité des taxes de bord.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 245-E

2 May 1974

Original : English

COMMITTEE 6

FIRST REPORT OF WORKING GROUP 6C TO COMMITTEE 6

(Operation)

Article 40 Section I - Accounting for radiotelegrams and radiotelephone calls

ADD 1504A ADD 1505A

(Land-line charges relating to transmission over the general national and international network of telecommunication channels.)

Draft Resolution relating to the accounting for maritime mobile public correspondence service

1. Article 40 Section I

ADD 1504A ADD 1505A

All the proposals on the above provisions were considered and Working Group 6C unanimously recommends the adoption of the revised provisions appearing in Annex A to the present Report.

2. Draft Resolution relating to the accounting for maritime mobile public correspondence service

Working Group 6C unanimously recommends the adoption of the draft Resolution appearing in Annex B to the present Report.

M.O. MEREDITH
Chairman
Working Group 6C

Annexes : 2



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A N N E X A

ARTICLE 40

Section I

ADD 1504A In the Maritime Mobile Service, the following are definitions of certain terms used in Article 40 :

Land-line charges

Charges relating to transmission over the general national and international network of telecommunication channels.

/Note to the Editorial Committee : It is expected that other definitions will be added as consideration of Article 40 proceeds./

ADD 1505A In the Maritime Mobile Service, the following charges shall be included in the accounts :

(1) In the case of radiotelegrams, radiotelephone calls and /direct-printing messages_ originating on mobile stations

- the land station charges,
 - the land-line charges,
 - the accessory charges for radiotelegrams which have to be considered in the accounting and
 - the supplementary charges for radiotelephone calls with special facilities.
-

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A N N E X B

DRAFT

RESOLUTION No. Mar2 ..

Relating to the accounting for maritime mobile public
correspondence service

The World Administrative Radio Conference, Geneva, 1974,
considering

- a) that the existing methods of accounting for public correspondence in the maritime mobile service are complex and expensive for administrations and recognized private operating agencies concerned with maritime accounting;
- b) that proposals were made to the World Administrative Radio Conference, Geneva, 1974 to amend the existing regulations relating to methods of accounting and particularly not to include ship charges in the maritime accounts exchanged between administrations and recognized private operating agencies concerned with maritime accounting;
- c) that modern accounting aids are available which could possibly improve and expedite the preparation and exchange of accounts;
- d) that, for example, there is already a need for improved accounting methods to provide for:
 - automatic access between ship and shore; and
 - direct access by telex and telephone, from subscribers in one country, to ships via coast stations in another country;
- e) that there may be a future need for an accounting system common to both terrestrial and satellite maritime mobile services; or, at least, two systems based on the same principles;

resolves

that a study should be undertaken with a view to improving the present accounting methods in the maritime mobile service and providing for foreseeable developments;

invites the C.C.I.T.T.

1. to undertake a study of the annexed question as a matter of urgency with a view to achieving, as soon as possible, a reduction of the work load upon administrations and recognized private operating agencies concerned with maritime radio accounting;
2. to ask administrations to send delegates particularly concerned with maritime accounting to the relevant Study Group meetings;
3. to ensure that the results of the study are included in the Study Group Reports to the Sixth Plenary Assembly in 1976 and that these Reports, as approved by the Plenary Assembly, are distributed to the administrations of all Members of the Union before 1 January 1977 to enable them to prepare proposals for the World Administrative Radio Conference foreseen in 1979;

invites

administrations and recognized private operating agencies concerned with such accounting, pending the results of this study, to take all steps calculated to mitigate, as far as possible, the inconvenience caused by accounting for ship charges.

ANNEX

What amendments are necessary to carry into the principles and methods of the accounting of the maritime mobile public correspondence service to improve present methods including accounting for ship charges and to provide for foreseeable future developments?

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 246-E
2 May 1974
Original : English

WORKING GROUP 5B

FIRST REPORT OF SUB-WORKING GROUP 5B-1

TO WORKING GROUP 5B

1. Introduction

The Sub-Working Group adopted the terms of reference shown in the Annex.

2. Technical implications

After considerable discussion a clear majority of delegations favoured the proposed reduction to a uniform 3.1 kHz spacing. They accepted that there would be some increase in the level of adjacent channel interference but felt that this could be tolerated, to meet the demand for more channels, particularly as there should be no increase in the probability of such interference. The reduced spacing would not necessarily incur any immediate modifications in existing equipments.

It was agreed that coast station transmit/receive pairings should have constant spacing within each band.

Other views expressed were :

- that any increase in the levels of adjacent channel interference would be negligible in comparison to the existing potential of transmitter intermodulation effects;
- that, unless changes were made now there could be no change in spacing for many years;
- that spacing should be reduced only in the 12, 16 and 22 MHz bands;
- that some existing receivers would require modifications to filter circuits;



- that only new equipments with suitable specifications would be satisfactory and that the gain in channel numbers would not constitute sufficient justification;
- that adjacent channel harmful interference is already a problem;
- that, in order to facilitate early implementation of a new allotment plan, there should be no change in spacing;
- that the spacing should be further reduced to 3.0 kHz.

3. Implementation problems

A small majority felt that the date of implementation should be late 1977 or early 1978, that a single date should apply to the whole spectrum then available and that there may be merit in adopting the date by which DSB emissions are required to cease. The changeover to new frequencies would not substantially affect the quality of the maritime radiotelephone service and the only action required would be recrystallizing.

Other views expressed were :

- that the new standard should be implemented as quickly as possible;
- that, as far as possible, synthesizers should be provided but, as yet, few ships were so fitted;
- that the changeover would require administrations, in some cases, besides recrystallizing, to perform additional work to improve the service quality by eliminating possible harmful interference;
- that implementation should be deferred for at least six years to allow the replacement of equipments.

4. Economic aspects

Some delegations expressed concern about the possible costs but none presented estimates. The general view was that costs would be quite small in relation to the costs of building and running modern vessels and that the efficient use of the limited HF spectrum should be the paramount consideration. Nevertheless costs should be kept as low as possible and, if the recrystallizing required by new channel spacing were to coincide with any required by a new allotment plan, costs would be minimized.

Annex : 1

A N N E X

TERMS OF REFERENCE OF SUB-WORKING GROUP 5B-1

To consider the possible reduction of the channel spacing to a uniform 3.1 kHz throughout the HF maritime mobile radiotelephony bands taking into account :

- the technical implications (e.g. adjacent channel interference)
 - the broad economical aspects (cost involved for recrystallization)
 - problems involved with the implementation of the rearranged channels.
-

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 247-E
2 May 1974
Original : English

COMMITTEE 6

Sweden

PROPOSALS FOR THE WORK OF THE CONFERENCE *)

ARTICLES 35 AND 36

Concerning the use of
alarm and warning signals

S/247/34 MOD 1326 Any station should be able to transmit
 (MF phone) the radiotelephone alarm signal described in
 No. 1465. For coast stations this requirement
 is compulsory.

Reasons : The radiotelephone alarm signal should
precede all distress calls or messages,
not only on 2 182 kHz, but also on
other radiotelephone frequencies.

S/247/35 ADD 1326 Any coast station, authorized to send
 bis important navigational warnings, shall be able to
 (VHF) transmit the NAVIGATIONAL WARNING SIGNAL
 described in ADD Section VIII bis.

S/247/36 MOD 1334 Insert : ... described in No. 1465
 and the NAVIGATIONAL WARNING SIGNAL described
 in ADD Section VIII bis, as well as

S/247/37 ADD 1353 Any station should be able to transmit
 bis the radiotelephone alarm signal described in
 (HF phone) No. 1465.

*) Document 117 is withdrawn



S/247/38 ADD 1363A Any station should be able to transmit the radiotelephone alarm signal described in No. 1465. This requirement is compulsory for coast stations.

Reasons : Distress calls and messages shall on all frequencies in the UHF-band be preceded by the radiotelephone alarm signal.

S/247/39 ADD 1363B Any coast station, authorized to send important navigational warnings, shall be able to transmit the NAVIGATIONAL WARNING SIGNAL described in ADD Section VIII bis.

S/247/40 MOD 1367 Relevant modifications be made to this item.

S/247/41 MOD 1416 Delete "(whenever possible)".

Reasons : The wording is superseded by Nos. 1381 and 1382. Experience has shown that the signals often are deleted.

S/247/42 ADD 1463B The dashes of the radiotelegraph auto alarm signal described in No. 1463, may be modulated by the radiotelephone alarm signal described in No. 1465.

Reasons : This provision makes the radiotelegraph auto alarm signal audible and easy to recognize even by persons without knowledge of the morse alphabet.

S/247/43 MOD 1469 Add giving the alarm or activating a device, opening a silenced loudspeaker for the message which is to follow.

S/247/44 ADD Section VIII bis

(a) The NAVIGATIONAL WARNING SIGNAL consists of a keyed emission of one substantially sinusoidal tone of the frequency 2 200 Hz, the duration of tone and space being 250 milliseconds each.

Reasons : The signal consists of the radiotelephone alarm signal with the frequency 1 300 Hz deleted. It shall precede important navigational warnings and will be received by filtered loudspeakers intended for watch of the radiotelephone alarm signal.

(b) The signal shall be transmitted by coast stations continuously for a period of at least 10 seconds to precede important navigational warnings on radiotelephony in the maritime MF and UHF bands.

(c) The purpose of the signal is to attract the attention of the person on watch, using a loudspeaker, a filtered loudspeaker, or to activate an automatic device, opening a silenced loudspeaker for the message, which is to follow.

INTERNATIONAL TELECOMMUNICATION UNION--

MARITIME CONFERENCE

GENEVA, 1974

Document No. 248-E

2 May 1974

Original : English

French

Spanish

PLENARY MEETING

INTERNATIONAL CIVIL AVIATION ORGANISATION

(I.C.A.O.)

The attached copy of the I.C.A.O. letter E3/5-73/167, of 27 September 1973 to Member States is presented to the Conference for information.

Annex : 1



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A N N E X

Ref.: E 3/5 - 73/167

27 September 1973

Subject: ITU World Administrative Radio
Conference for Maritime Mobile Telecommunications
(WARC MAR 1974)

Action required: For information and to take
into consideration when preparing for the
Conference

Sir,

I have the honour to invite your attention to decisions reached by the Administrative Council of the International Telecommunication Union, in Resolution No. 704, that a World Administrative Radio Conference for Maritime Mobile Telecommunications shall meet in Geneva on 22 April 1974.

Because the Aeronautical and the Maritime Services for many years and in varying degrees have shared areas of interest in the field of telecommunications, it is certain that the convening of a Conference as important as this one for the Maritime Mobile Service will be of great interest to Aeronautical Administrations. Furthermore, the joint efforts of ICAO and the Inter-Governmental Maritime Consultative Organization (IMCO) aimed at the better co-ordination of Distress, Safety and SAR arrangements for ships and aircraft are largely brought to fruition at ITU Conferences of this nature, empowered to change the Radio Regulations and also to identify matters for further study by both Organizations.

... For these reasons the Secretariat has reviewed some of the matters likely to be considered at the Conference, especially those which have a bearing on aeronautical interests of concern to ICAO. The Attachment to this letter describes these subjects and provides information which you may wish to consider when your Government's position for the Conference is being prepared.

Regardless of the national arrangements in each State to determine its position for a conference concerning maritime interests the need usually arises for account to be taken of the interests of aviation in areas of common concern such as those referred to above. The Attachment may assist you in responding to any request for a statement of international aviation interests in pertinent subjects likely to be considered by the Conference.

Accept, Sir, the assurances of my highest consideration.



Assad Kotaite
Secretary General

Enclosure:

Guidance Material Relating to Matters of
Aeronautical Interest for the ITU World
Administrative Radio Conference for Maritime
Mobile Telecommunications (1974)

ATTACHMENT to State letter E 3/5-73/167

GUIDANCE MATERIAL RELATING TO MATTERS
OF AERONAUTICAL INTEREST
FOR THE
ITU WORLD ADMINISTRATIVE
RADIO CONFERENCE FOR
MARITIME MOBILE TELECOMMUNICATIONS (1974)

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ATTACHMENT

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SUMMARY

This document, prepared by the Secretariat, embodies a number of contributions derived from one State and reflects consultations with others. It identifies subjects of aeronautical interest in the agenda of the ITU MAR WARC 1974 and suggests action that if taken would be consonant with ICAO policy or in agreement with understandings reached with IMCO upon them. This paper has not been considered by either the Council or the Air Navigation Commission as its prime purpose is to restate existing policies, where these exist, rather than to establish new ones.

1. Introduction

1.1 The full text of Resolution No. 70⁴ adopted by the ITU Administrative Council is at Appendix 1 and this contains the Agenda of the Conference followed by a long but non-exhaustive list of items to be considered. It will be noted that the agenda contains specific restrictions on the powers of the Conference with respect to frequency matters as only those parts of the frequency spectrum already available to the Maritime Mobile Services can be considered. By including such a constraint the Administrative Council recognizes the concern that might be felt by other Services at the prospect of their frequency allocations being open to consideration. Pending the convening of any Conference empowered to consider the whole of the Frequency Allocation Table in Article 5 it would be reasonable to expect similar constraints on any future "Service" Conference, such as Aeronautical, Broadcasting etc.

1.2 However, whilst constraints such as this may be necessary and effective in the case of clearly stated frequency allocations of other Services they are scarcely applicable to frequencies which the Maritime Services "share" with others. Throughout the Table of Article 5 the most numerous examples of such sharing occur with the Aeronautical Services especially above 1500 MHz and involving the Mobile and Radio-navigation Satellite applications. At lower orders of frequencies also there is common interest in matters such as Search and Rescue, Distress and Safety, etc. and it is tempting to believe, because both Services are Mobile, that their telecommunication requirements are essentially the same. One of the purposes of this paper is to indicate some of the differences and the steps most appropriate to safeguard each other's interests, recognizing these differences.

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2. Provisions concerning distress and safety (Agenda Item 3)

Agenda Item 3 lists ten subjects for consideration including:

2.1 2,182 kHz - International distress and calling frequency - radiotelephony

2.1.1 In accordance with RR 201 (Art. 5) and RR 1323 (Art. 35) 2182 kHz is the international distress frequency for radiotelephony and until 1 January 1982 should be available for A3 (DSB) and A3H (SSB full carrier) emissions (RR 984). 2182 kHz is also a traffic calling frequency for maritime mobile stations and as such is subject to considerable congestion which reduces its usefulness for distress.

2.1.2 For several years ICAO and IMCO have jointly pressed for the use of 2182 kHz for distress purposes only and in Resolution A 217 (VII) IMCO recommended measures for improving listening watch thereon, similar to 500 kHz (W/T). ICAO has consistently supported any steps to improve the status of 2182 kHz but progress is very slow. By Amendment No. 10 to Annex 12 and No. 51 to Annex 10, effective 16 August 1973, each SAR aircraft operating over the sea and required to communicate with merchant ships shall be equipped with 2182 kHz.

2.1.3 Suggested Action

- a) That Administrations, to the extent that they feel able, support ICAO policy for the retention of 2182 kHz solely for Distress purposes, the reduction of interference on that frequency, and the introduction of satisfactory listening watch procedures associated with automatic alerting facilities in the Maritime Mobile Service.
- b) That in any proposals to prohibit the use in the Maritime Services, of double side band emissions (A3 and A3H) due attention be given to ensuring compatibility between equipment available in SAR aircraft, survival craft and ships.

2.2 Item 3.4 Common scene of action frequencies other than 500 kHz and 2182 kHz

2.2.1 In Annex 10 Volume I Part II 2.2.1 RECOMMENDATION states:

"Where there is a requirement for the use of high frequencies for search and rescue scene of action co-ordination purposes the frequencies 3,023.5 kHz and 5,680 kHz should be employed".

2.2.2 In the Radio Regulations Article 35 RRs 1326C Mar. and 1353B Mar. state that.....3023.5 kHz and 5,680 kHz, respectively, may be used for intercommunication between mobile stations engaged in co-ordinated search and rescue operations.... in accordance with Appendix 27.

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2.2.3 With regard to 121.5 MHz Annex 10 Vol. I Part II 4.1.3.1.1 (c) and Note 2 reflect Radio Regulations 968 and 969 which permit ship stations to communicate, for safety purposes with stations of the aeronautical mobile service using class A3 emissions.

2.2.4 By Amendment No. 52 to Annex 10, applicable 23 May 1974, para. 4.1.4.1 of Chapter 4 Part II will state that where a frequency auxiliary to 121.5 MHz is required, the frequency 123.1 MHz shall be used.

2.2.5 All of the foregoing frequencies, 3023.5, 5680 kHz, 121.5 and 123.1 MHz are in bands allocated to the Aeronautical Mobile (R) and (OR) Services, for the HF, and the exclusive (R) Service for the VHF. It is fully consonant with ICAO policy and with agreements reached with IMCO that they be used for search and rescue, scene-of-action purposes for intercommunication between aircraft and surface craft.

2.2.6 Suggested Action

That Administrations consider the addition of appropriate NEW FOOTNOTES to the Table in Article 5 of the Radio Regulations, to identify that each of these frequencies is available to all mobile stations, along the following lines:

a) 2850 - 3025 kHz Aeronautical Mobile (R)

ADD 205A The carrier frequency 3023.5 kHz may be used for intercommunication between mobile stations engaged in coordinated search and rescue operations, including communications between these stations and participating land stations (See Appendix 27 No. 27/196)

b) 5680 - 5730 kHz Aeronautical Mobile (OR)

ADD 210A The carrier frequency 5680 kHz may be used for intercommunication between mobile stations engaged in coordinated search and rescue operations, including communication between these stations and participating land stations (See Appendix 27 No. 27/201).

c) 117.975 - 132 MHz Aeronautical Mobile (R)

ADD 273B The frequency 123.1 MHz is an auxiliary to the aeronautical emergency frequency (121.5 MHz) and may be used for intercommunication between mobile stations engaged in coordinated search and rescue operations and using A3 emissions.

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2.3 Emergency Position Indicating Radio Beacons (EPIRB's) Agenda Item 3.5 and 3.9

2.3.1 Whilst ICAO and IMCO for some years have endeavoured to co-ordinate and unify the provisions for emergency beacons for the aeronautical and maritime services the present situation remains slightly confused. Recognizing that in any search and rescue operation over the sea, whether marine or aeronautical, the participation of SAR aircraft is essential so the need for common equipment using common frequencies and procedures is equally essential. At present this goal has not been fully achieved and the relevant ICAO, IMCO and ITU provisions are as follows:

2.3.1.1 ITU Provisions

Article 36 of the Radio Regulations defines the signal characteristics for EPIRB's operating on 2182 kHz. Resolution No. MAR 7 and RRs 1476D and 1476L states that EPIRB's operating on 121.5 MHz and 243 MHz shall conform with ICAO and IMCO Standards and Recommendations. The ITU Space Conference 1971 allocated the band 406-406.1 MHz solely for low-power EPIRB's using space techniques.

2.3.1.2 IMCO Provisions

Resolution A.91(IV) and A.225(VII) recommend 2182 kHz as the first choice of frequency for EPIRB's, that such beacons are intended primarily for homing and that all search and rescue aircraft be equipped with homing facilities on transmissions of all internationally recognized beacons.

2.3.1.3 ICAO Provisions

Amendment 52 to Annex 10, applicable 23 May 1974 specifies the technical requirements for Emergency Location Beacons-Aircraft (ELBA) for SAR operating on 121.5 MHz and 243 MHz. Amendments now under consideration for Annex 12 include a Recommendation that SAR aircraft be equipped with homing devices for homing on aircraft-ELBA's and survival radio equipment.

2.3.2 From the foregoing it will be seen that whilst the maritime services regard 2182 kHz as the primary frequency it does not feature in the requirements for ELBA and consequently would not be included as an ICAO requirement for homing facilities in SAR aircraft. It is furthermore expected that proposals may be made at the 1974 Conference to include 156.8 MHz as an additional frequency for the operation of EPIRB's.

2.3.3 Comments

It is important to recognize that SAR aircraft are the subject of special requirements prescribed in Annex 12 and by national decisions. It is not a requirement for normal international civil aircraft to carry homing facilities on the frequencies listed and it would be unrealistic to regard any such obligation as acceptable.

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2.3.4 Action Suggested

That when reviewing the provisions for EPIRB's for the Maritime Service Administrations endeavour to consider the Search and Rescue environment as an entity involving ships and aircraft. When considering the selection of frequencies additional to 2182 kHz, 121.5 and 243 MHz due account be taken of obligations these may impose on SAR services and co-ordination procedures, and the incompatibility of aeronautical and maritime communication equipment using frequencies above 100 MHz.

3. VHF Provisions (Agenda Item 4)

3.1 Item 4.4 Use of VHF for communication between aircraft and ships

Article 27 of the Radio Regulations entitled "Aircraft and Aeronautical Stations" is a small one mainly to enable aircraft to communicate with maritime mobile stations when they use radio frequencies of that Service and, when handling public correspondence, to require them to conform to the Regulations. As written, RR 952 is somewhat restrictive as the increasing use of helicopters and light aircraft in support of maritime operations calls for greater flexibility in the rules. Proposals are envisaged to amend Article 27 to specify the conditions of height, power and class of emission to include such aircraft stations to operate in the 156-174 MHz band. A minor amendment to the Region I allocation of this band in Article 5 to delete the clause "except aeronautical mobile" would seem to be required.

3.2 Suggested Action

Recognizing that the practical application of such an amendment would not affect the ICAO requirements for the aeronautical mobile (R) Service but would be a "special" operation subject to national regulation and involving the carriage of special equipment it should be supported as a realistic provision.

4. Regulations for the Maritime Mobile Satellite etc. Services (Agenda Item 13)

4.1 Through the co-ordinating medium of IMCO significant and rapid progress is being made toward the establishment of a Maritime Mobile Satellite Service, most of the technical characteristics for which have been prepared by the CCIR. The opportunity of the 1974 Conference undoubtedly will be taken to make provisions for the minimum necessary regulations for introducing such a service.

4.2 The frequency bands for a Maritime-Mobile Satellite Service were allocated by the 1971 Space Conference and are those adjacent to but distinct from similar allocations to the Aeronautical Mobile Satellite(R) i.e. 1535-1542.5 MHz and 1636.5 - 1644 MHz on an exclusive basis. The IMCO Expert Panel on Maritime Satellites (MARSAT) recently agreed that for the first phase of a system the emphasis will be on the exchange of public correspondence and no areas of common interest with an aeronautical satellite service are envisaged. ICAO policy does not foresee any areas of common

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interest between the two Satellite Services at present although these may be identified later in the field of Distress and Safety Systems.

4.3 Comments

Sufficient is known now (from the work of ICAO's ASTRA Panel and IMCO's MARSAT Panel) to determine the policies and objectives of the proposed Aeronautical Satellite system and the Maritime Satellite system with some clarity. The two systems are quite different in their operational requirements and the existing frequency allocations, are separate and adequate for each. The small bands which are allocated for each Service on a shared basis 1542.5-1543.5 MHz and 1644-1644.5 MHz and which separate the two exclusive allocations are adequate, in the initial phases, for meeting any common needs as foreseen at present.

4.4 Suggested Action

When preparing the necessary minimum regulations for introducing a Maritime Mobile Satellite and Radiodetermination Satellite Services references to the Aeronautical Mobile Satellite Services should be avoided wherever possible. Any proposals to include the Aeronautical Services in the new regulations to cater for possible "public correspondence" applications are premature at this time.

5. Questions on frequencies for radio-determination (Agenda Item 14)

5.1 At first glance this item may seem unusual because Article 5 contains no frequency allocations for Radiodetermination defined in RR's 45, 46 and 47. However in the maritime terrestrial service the need has been established in some countries for a form of interrogator/transponder system for positive target identification on ships radar. The Conference may be asked to consider proposals for the development of such a system in the appropriate Radionavigation bands of 2900-3100 MHz, 5460-5650 MHz and 9300-9500 MHz, with preference for the highest of these bands.

5.2 Comments

When considering any such proposal it is important to appreciate that the "radar bands" mentioned are not planned bands and therefore that numerous equipments for aviation, marine, civil and military operate within them with equal rights. To ensure that a satisfactory transponder system would reliably operate without interference it may be necessary to select discrete channels similar to the SSR/DME channels in the band 960/1215 MHz. Administrations will wish to consider this question before reaching final conclusions to ensure that the interests of other users such as airborne and ground based radars are protected. In this connection, ITU Recommendation No. 12 of 1959 relating to the use of the band 9300-9500 MHz may need to be reviewed.

5.3 Suggested Action

To take account of the comments in 5.2 above.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 249-E(Rev.1)

21 May 1974

Original : EnglishCOMMITTEE 5Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

Realizing the difficulty in accommodating all new requirements with satisfactory sharing, the following amended figures for the frequency requirements of Norway in the revised Frequency Allotment Plan for Coast Radiotelephone Stations are submitted :

Frequency bands in MHz	Number of required frequencies
4	10
6	2
8	13
12	16
16	18
22	16

MARITIME CONFERENCE

GENEVA, 1974

Document No. 249-E

2 May 1974

Original : EnglishCOMMITTEE 5Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of Norway in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 to the Radio Regulations) will be as follows :

Frequency bands in MHz	Number of required frequencies
4	15
6	5
8	23
12	25
16	25
22	22
25	6

MARITIME CONFERENCE

GENEVA, 1974

Document No. 250-E

2 May 1974

Original : English

COMMITTEE 6

Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 36

Section X

Safety Signal

NOR/250/102 MOD 1490 § 52. (1) The safety signal indicates that the station is about to transmit a message ~~concerning the safety of navigation~~ containing an important navigational or giving important meteorological warning.

Reasons : To implement the I.M.C.O. recommendation to limit the present excessive use of the safety signal.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 251-E

2 May 1974

Original : English

PLENARY MEETING

International Association of Lighthouse Authorities (I.A.L.A.)

RADAR TRANSPONDER BEACONS FOR NAVIGATIONAL USES

Agenda item No. 14

I.A.L.A. studied the problems raised by the uses of radar transponder beacons for navigation and future capabilities of such equipments.

The report of the I.A.L.A. Working Group was agreed by I.A.L.A., February 1973, sent to I.M.C.O. on 14 May 1973 and circulated as I.M.C.O. Doc. NAV/XV/7(b)1; it was also published in the I.A.L.A. Bulletin No. 56 - July 1973.

From this Report the following information might be regarded as useful for the 1974 ITU/WARC :

"Historical review"

For a number of years, slow sweep X-band transponder beacons (racons) have been used by some navigation Authorities to enable a navigator to identify certain important navigational marks.

Soon after radar equipment was made available to the merchant service, it became apparent that some device was necessary which would help an operator to identify certain points of interest on the radar display. Work proceeded in several countries, but the major developments took place mainly in the United Kingdom, where preliminary work on ramarks was followed by the development of early racons. Two types were investigated, one operating at a fixed frequency on the edge of merchant marine X-band, the other utilizing a transmitter which was swept over the whole of the merchant marine X-band at a rate of 2 MHz per second.

Operational problems

Experience with these racons has revealed some operational problems. The most common adverse comment on the present equipment is that the frequency of presentation of the racon signal, or information rate is too low in a large number of cases. This problem arises because of the operational requirement to provide a racon service for all merchant ships equipped with X-band radars at maximum racon range as well as close aboard. The rate of frequency sweep can be made faster, but this reduces the number of signal presentations each sweep, and the advantages are marginal. The sweep rate of racons is usually set to produce from two to four paints every 90 to 120 seconds. Ideally a mariner would like to see a paint each time his rotating radar beam illuminates the racon, particularly when he is navigating close to dangers. When he does not require the racon paint for navigation, he would like to be able to remove it from his PPI. This can

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be done with many of the racons in use at the present by operating the Fast Time Constant or Rain Clutter Control, by which the video signals are differentiated. Some racons being investigated have a high updating rate and produce paints that cannot be removed by differentiation.

In any marine racon system, the information provided is generally redundant once the initial identification has been made; it is only required at infrequent intervals for checking purposes. Since the signal continues to be displayed, it could be considered as a form of interference which should, if possible, be eliminated.

There have been reports of interference to the standard radar picture by side lobe triggering. This causes the racon signals to appear over an extended arc. This interference can of course be eliminated by differentiation but if the racon signal is very strong, shadows appear on the radar display in the former position of the racon signals, and these could mask a small target.

Finally, there are low power, short range racons which are now being offered by some manufacturers for fitting on buoys. Because they are of limited range, 5 to 8 miles, some or all of the racon signal could be lost in sea clutter signals, thus nullifying the usefulness of this type of racon.

In addition to the slow sweep racons referred to above, work has been carried out, particularly in France, on fast sweep racons. In these the racon frequency is swept across the band in up to 12 μ secs, the sweep being repeated a number of times during each response. This system has the advantage that the response will appear every revolution of the radar antenna. It has the disadvantage though, that due to the rapidity of the sweep, the racon signal is within the radar receiver pass band for about 0.3 μ sec. The point will therefore be in the form of a bright dot. With a number of sweeps, a number of dots will be seen, separated by the time between sweeps, normally equivalent to 1 n. mile. A typical response would be 10 dots (or pairs of dots) separated by a distance equivalent to 1 n. mile. Although this type of response may be easily detected at the maximum range of the racon, if there is clutter or land echoes in the vicinity of the target, the response can be lost in these echoes.

Summary

Several aspects need to be examined if any international agreement is to be reached on the various applications of radar transponder beacons. At the present time there are no technical problems in the production of any of the equipments which have been discussed. There are some operational and administrative problems which need studying though. It has been suggested that those racons which are fitted on navigational marks should in future operate on a fixed frequency. Although this is the obvious technical solution, no very great experience has yet been obtained on its operational aspects in the merchant marine service and this should be examined in the very near future. The radar equipment will either have to be modified or re-designed to operate on a beacon mode. It is realized that both of these factors, the operational testing of the system and the design

of suitable radar equipment, will take time, and a period of about 10 years is suggested before a system is implemented. However, this should not delay the consideration of the problem which is considered to be one of some urgency if some orderly organization of radar transponder beacons is to be introduced.

It is desirable that studies be instituted into the optimum frequency sweep rate and pulse lengths. Various forms of coding are at present being used, and these should be studied in order to produce some form of standardization.

It would be desirable also to reach agreement on operational standards for radar transponder beacons in their various applications.

The major outstanding problem in the implementation of a fixed frequency racon system is the frequency at which it operates. If such systems are to be adopted universally it is necessary to operate all racons at the same frequency, or at least restrict them to a minimum number of frequencies. It would therefore be desirable to reach agreement on a frequency, which should preferably be at the edge of the radar band for technical reasons. Having reached agreement, application should then be made to the appropriate Authority for a permanent frequency allocation. It is imperative that such a frequency or frequencies be reserved as soon as possible so that work can proceed on development. A suggested suitable frequency would be 9 310 MHz which is well separated from the lowest magnetron frequency commonly used in radar sets, and is also within the frequency band which had been reserved in some areas for radar beacons.

The above discussion has dealt only with radar beacons and radar equipments operating in the X-band. An increasing number of vessels are now using S-band radars, and it may be necessary to introduce a racon service into this band in the future. It would be desirable therefore, to consider also the use of fixed frequency racons operating in this band. The introduction of a fixed frequency service into the S-band might be helped by the fact that at the moment little work has been done on swept frequency racon systems in this band, the only operational racon being that on the Le Havre lightvessel in France.

It is again considered that this is the appropriate time to reach agreement on operating frequencies for fixed frequency racons in the S-band so that the necessary arrangements can be made.

Suggestions

It is therefore suggested that consideration be given to the following :

1. That as from an agreed date, and subject to satisfactory operational investigations, the racons used on navigation marks should operate in the fixed frequency mode only.

2. If suggestion 1 is adopted, swept frequency in-band radar beacons should be reserved for :
 - a) use on survival craft or vessels in distress;
 - b) fitting to temporary navigational buoys and structures marking hazards;
 - c) use on certain classes of hampered vessels, particularly in traffic separation schemes.
3. Short response transponder beacons (echo enhancers) be reserved for small craft having poor radar reflecting properties.
4. Consideration should be given to the desirability of agreeing on the operating frequency or frequencies for a fixed frequency racon service, and an approach made to the appropriate Authority for the allocation of such frequency or frequencies.
5. Investigations should be instituted to study the following :
 - a) desirable sweep rates for in-band swept frequency racons;
 - b) length of racon signal for various applications;
 - c) desirability of coding the racon signal and the type of code to be used;
 - d) use of special codes for temporary navigational hazards, hampered vessels, distress, etc."

In this document, I.A.L.A. suggested that a frequency of 9 310 MHz would be adopted for fixed frequency transponder beacons in the X-band.

The question of the required bandwidth has since been further discussed. It was thought that this would be dependent on a number of technical parameters, such as pulse length employed, the range resolution required and the range accuracy. It would seem that the minimum bandwidth requirement would be in the order of 20 MHz, although this may have to be increased.

- For the initial work it is suggested that in the 3-cm band, a frequency band 9 300-9 320 MHz be reserved for investigations into fixed frequency racons. This would be necessary for the initial experimentation and assessment of the system.
- An increasing number of vessels are fitting 10-cm radar, and radar beacons may be required in this band also. It is therefore proposed that a similar 20 MHz band of frequencies be reserved at the lower end of the 10-cm band (2 900-2 920 MHz) for the same purpose.
- In the band 5 470-5 650 MHz there are at present no commercial vessel radars in operation. However this band is allocated primarily to radio-navigation for maritime purposes, so that it is felt that, should it be necessary, it will be possible to allocate some bandwidth to fixed frequency racons within this band.

I.A.L.A. also considers that in any investigation into fixed frequency racons, consideration should be given to such problems as antenna squint angle, TR call bandwidth, range resolution, etc . . .

MARITIME CONFERENCE

GENEVA, 1974

Document No. 252-E(Rev.1)

22 May 1974

Original : EnglishCOMMITTEE 5Denmark

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item No. 1

The frequency requirements of Denmark in the revised Frequency Allotment Plan for Coast Radiotelephone Stations operating in the exclusive maritime mobile bands between 4 000 and 23 000 kHz (Appendix 25 to the Radio Regulations) are as follows :

Frequency band MHz	4	6	8	12	16	22
Number of single sideband channels	9	2	9	9	10	9



MARITIME CONFERENCE

GENEVA, 1974

Document No. 252-E

2 May 1974

Original : EnglishCOMMITTEE 5Denmark

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item No. 1

The frequency requirements of Denmark in the revised Frequency Allotment Plan for Coast Radiotelephone Stations operating in the exclusive maritime mobile bands between 4 000 and 23 000 kHz (Appendix 25 to the Radio Regulations) are as follows :

Frequency band MHz	4	6	8	12	16	22
Number of single sideband channels	10	4	10	10	11	10

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Corrigendum No. 1 to
Document No. 253-E
13 May 1974

PLENARY MEETING

MINUTES OF THE FIRST PLENARY MEETING

Replace the third paragraph under item 11 on page 6 by the following :

"As representative of the management administration of the C.E.P.T., he congratulated the Chairman on his election and conveyed to delegates best wishes for the success of the I.T.U. Maritime Conference.

"The Chairman thanked the delegate of Spain for his congratulations and on behalf of the delegates for the good wishes for a successful Conference."



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 253-E

8 May 1974

Original : French

PLENARY MEETING

MINUTES
OF THE
FIRST PLENARY MEETING

Monday, 22 April 1974, at 1600 hours

Chairman : Mr Johannes KUPPER (Federal Republic of Germany)
Doyen of the Conference, then

Mr R.M. BILLINGTON (United Kingdom)

Document No.

- | | |
|--|-------------|
| 1. Opening of the Conference | - |
| 2. Election of the Chairman of the Conference | - |
| 3. Election of the Vice-Chairman of the Conference | - |
| 4. Address by the Secretary-General | - |
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| 13. Date by which the Credentials Committee must reach its conclusions | - |
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| 15. Other business. | - |



1. Opening of the Conference

In accordance with the provisions of the Convention, Mr Johannes KUPPER (Federal Republic of Germany), Doyen of the Conference, declared the World Administrative Maritime Radio Conference, Geneva 1974, open.

He remarked that growing old usually meant having to cope with many disadvantages, but that once in a while it also offered a few advantages. It was indeed an advantage for him, as Doyen, to have the honour to open the work of so important a conference.

Ever since the discovery of radio waves at the end of the last century, one of the most important fields of application had been the transmission of messages to and from ships at sea. With the improvement in that technique, it was applied not only to the commercial transmission of messages but also to the safety of human life at sea. In all probability, the maritime radio service would become still more important in future.

It was not surprising therefore, that more than 2,000 proposals had been submitted to the present Maritime Conference, whose task it would be to harmonize and adapt them in such a way that, eventually there would be a useful and acceptable result for all delegations. The result thus achieved should help to improve the maritime radio service and be of benefit to all countries in the world. It would, of course, not always be easy to achieve that aim as the time available was very limited.

He wished the Conference every success. Furthermore, he hoped it would be possible to terminate it on time and that, in the course of its discussions there would be the necessary understanding and cooperation to achieve that aim. Looking back over more than 100 years of the history of the Union, he found that Member countries had always clearly recognized that world-wide telecommunication was not possible without the willingness to compromise. That is why he believed that all participants could start work with confidence.

2. Election of the Chairman of the Conference

The Doyen of the Conference invited delegations to submit nominations.

The delegate of France nominated Mr Billington (United Kingdom). His delegation thought it was speaking for all participants at the Conference because Mr Billington had long had special responsibilities in the field of radio maritime communications, having been in charge of the world maritime service of the United Kingdom Post Office for many years. He also had a wide experience of international conferences. For more than a quarter of a century, he had participated in many important I.T.U. meetings, such as Atlantic City in 1947 and Geneva in 1959, and had chaired the 1.57 Maritime Conference most successfully. Moreover, Mr Billington was chairman of the I.M.C.O. MARSAT Group of Experts. In addition to his competence and experience, Mr Billington knew how to exercise authority, which he did with skill, tact and humour. He was sure that the unanimous election of Mr Billington would augur well for the success of the Conference's work.

Applause

The Doyen of the Conference noted that the Conference unanimously elected Mr Billington (United Kingdom) its Chairman. After taking the Chair, Mr. Billington thanked the delegate of France for the generous way in which he had proposed his election and all the delegates who had responded in the affirmative to that proposal.

The newly-elected Chairman said that he was profoundly conscious of the honour done to him and his country, all the more since it was the second time that he had acted as Chairman to a maritime conference. That implied, he presumed, that the way in which he had performed his functions in 1967 had given satisfaction and he hoped that it would be the same this time.

He then made the statement reproduced in Annex 1.

3. Election of the Vice-Chairman of the Conference

The Chairman said that, during the meeting of Heads of Delegations held that morning, it had been proposed that four Vice-Chairman be elected from the delegations of the following countries : the People's Republic of China, the Republic of the Senegal, the United States of America and the Union of Soviet Socialist Republics.

The proposal by the Heads of Delegations was adopted by acclamation.

4. Address by the Secretary-General

The Secretary-General delivered the address reproduced as Annex 2 to these minutes.

The Chairman thanked the Secretary-General for the interesting, comprehensive and eloquent way in which he had outlined the tasks before the Conference in view of the changes and developments which were taking place in maritime radiocommunications.

5. Committee structure and organization of the work of the Conference
(Document DT/2)

On the proposal of the delegate of the United Kingdom seconded by the delegates of India and Saudi Arabia, Document DT/2, which had been unanimously approved by the heads of delegations, was adopted.

6. Election of the Chairmen and Vice-Chairmen of Committees

The Chairman said that, during the meeting of Heads of Delegations, it had been unanimously proposed that the Chairmen and Vice-Chairmen of Committees be chosen as follows :

	<u>Chairman</u>	<u>Vice-Chairman(Chairmen)</u>
Committee 1 - Steering	The Chairman	The Vice-Chairmen
	of the Conference (according to custom)	
Committee 2 - Credentials	Liberia	Malaysia
Committee 3 - Budget control	Hungary	Nigeria
Committee 4 - Radiotelegraphy	Netherlands	Saudi Arabia
Committee 5 - Radiotelephony	Norway	Argentina
Committee 6 - Operation	Canada	Brazil
Committee 7 - Editorial	France	Spain

That proposal was adopted by acclamation.

The Chairman invited the delegations of the countries listed above to inform the Conference Secretariat as soon as possible of the names of the members they had appointed to serve as Chairman or Vice-Chairman.

7. Constitution of the Conference Secretariat

The Secretary-General recalled that, in accordance with the provisions of the Convention, the first plenary meeting was called upon to constitute the Conference Secretariat which would be at the disposal of the Chairman and Vice-Chairmen of the Committees. The Conference Secretariat might be composed in the following manner :

Secretary of the Conference	: the Secretary-General of the I.T.U.
Secretary for technical and operating questions	: Mr. K. Čomić
Executive Secretary	: Mr. A. Winter-Jensen
Secretary of Plenary Meeting	: Mr. R. Smith
Committee 1	: Mr. R. Smith
Committee 2	: Mr. P.A. Traub
Committee 3	: Mr. R. Prélaz
Committee 4	: Mr. M. Sant
Committee 5	: Mr. J. Balfroid
Committee 6	: Mr. A. MacLennan
Committee 7	: Mr. R. Macheret

It was decided that the Conference Secretariat should be so constituted.

8. Convening of the Conference (Document 135)

The above-mentioned document was noted.

9. Invitations to the Conference (Document 136 and Corrigendum)

The Secretary-General informed delegations that, since the publication of the above-mentioned document, the following countries had announced their intention of participating in the Conference : Costa Rica, El Salvador, Guatemala, Lebanon, the Malagasy Republic and the Islamic Republic of Mauritania.

On the other hand, Luxembourg had stated that it was unable to take part in the Conference. It had, however, given Belgium the powers to vote and sign on its behalf.

Egypt had sent a telegram announcing that, being unable to participate in the Conference, it delegated its powers to the Kingdom of Morocco. The designation of a proxy would be confirmed by an official letter.

Document No. 136 and its Corrigendum were noted, together with the additional information supplied by the Secretary-General.

10. Situation of certain countries with respect to the Convention (Document 141)

The above-mentioned document was noted.

11. Admission of international organizations (Document 137 and Corrigendum)

It was decided to admit to the Conference the organizations listed in the Annex to Document 137.

The delegate of Spain said that, statutorily, the C.E.P.T., to which the I.T.U. had sent an invitation, was not entitled to send representations to meetings of other international organizations, and that was why its name did not appear in the Annex to Document 137. Nearly all its Member Administrations, however, were attending the present Conference in their individual capacity.

As representative of C.E.P.T., he congratulated the Chairman on his election and conveyed to delegates the best wishes of C.E.P.T. for the success of the I.T.U. Maritime Conference. The Chairman thanked the delegate of Spain for his congratulations and on behalf of the delegates for the best wishes of C.E.P.T. for a successful Conference.

12. Election of members of the I.F.R.B. (Document 144)

In accordance with the decisions taken by the meeting of Heads of Delegations, it was decided to complete the above-mentioned document as follows :

Annex 1 - Circular telegram (Page 3) :

insert : in the second line, the date "29 April 1974",

in the third line, the date "24 April 1974, midnight GMT";

Annex 2 - Procedure for the Election (Page 5) :

In the fourth line of the parenthesis under the heading, add "1959" after "1947".

On the proposal of the delegate of the Federal Republic of Germany, seconded by the delegates of Liberia and Argentina, Document No. 144, as amended, was approved.

13. Date by which the Credentials Committee must reach its conclusions

The Chairman said that the meeting of Heads of Delegations had proposed 4 June 1974 as the date by which the Credentials Committee must reach its conclusions.

Replying to the delegate of Argentina, who said that to fix a date so near to the end of the Conference might lead to difficulties and contradictions in voting, the Secretary-General read out the relevant provisions of the Convention and reassured those who might be worried by the adoption of what might seem such a late date. It had been found by experience that fixing a late final date had always enabled all delegations to submit their credentials in due form in time without in any way upsetting the work and voting of the Conference.

After a short discussion in which the delegates of Argentina, Dahomey and Liberia and the Secretary-General took part, the date of 4 June 1974 proposed by the meeting of Heads of Delegations was approved.

14. Working hours of the Conference

It was decided to fix the following working hours for the Conference :

0930 hrs to 1230 hrs

1500 hrs to 1800 hrs.

15. Other business

The delegate of India made the statement reproduced in Annex 3.

The delegate of Saudi Arabia also congratulated the Chairman on his election to direct the work of such an important Conference.

The Chairman thanked the delegates of India and Saudi Arabia for their congratulations.

The meeting rose at 1730 hrs.

M. MILI
Secretary-General

R.M. BILLINGTON
Chairman

Annexes : 3

A N N E X 1

STATEMENT BY THE CHAIRMAN

In his introductory remarks, Mr. Kupper has referred to the history of the Union and the importance of the maritime service. One of the first applications of radio was to shipping - and the first radio conference in 1906 was devoted exclusively to the maritime service and now again we have reached the period where the service is of sufficient importance to justify its own service conference, first in 1967 and again in 1974. It is also interesting to note that this Conference coincides with the centenary of the birth of Marconi who played such an important part in the development of radiocommunication and developed some of the basic principles on which the present services are based. The Delegate of France, in his gracious introductory remarks, also referred to the conferences that I had attended in the past and it is worthy to note that each one has marked an advancement in the maritime mobile service. Atlantic City in 1947, I think, might rightly be termed as the HF radiotelegraph conference. It adopted principles upon which the long-distance telegraph service has operated ever since. Some of those are now outmoded by development of equipment and new techniques. The 1959 Radio Conference saw the expansion of the long-distance radiotelephone service, and the development and introduction of a short-range service, commonly referred to as the VHF service. At the time of the 1967 Maritime Conference another stage had been reached in that we were faced with an expanding service and the old proverbial difficulty of trying to get a quart into a pint pot. We were compelled to make the maximum use of the various technical developments that had taken place. At that Conference the foundations were laid for the conversion of the long-distance (HF) and the medium-distance (MF) radiotelephone services to single sideband working. We also made provision for the further expansion of the short-range services in the VHF band. Today we are meeting again, to take those developments to a further stage and to complete the tasks that were begun in 1967. The most important task, I think, or one of them at least, is the revision of Appendix 25 to complete the implementation of single sideband working in the HF bands, thereby increasing the capacity, and to bring such revision into force - as some proposals that I have seen would wish - at an earlier date than that agreed in 1967.

Similarly there are proposals concerning the medium frequency bands, some proposing to implement single sideband working earlier than was agreed in 1967. Similarly in view of the development of new services in the VHF band, it is necessary to implement those additional channels, made available at the 1967 Conference, earlier than was foreseen at that time. This in itself indicates the development that is taking place in the maritime mobile services today and the importance that radiocommunication plays in the successful operation of shipping services. In addition, at this Conference we will be making further provision for narrow band direct-printing services, data systems, all designed to enable more traffic, more intelligence to be conveyed within that part of the spectrum that has been allocated to the maritime mobile service. With the development of services, of course, one has to look at the accounting regulations and these will probably play a larger part in our work than they have done at past conferences. Now last, but by no means least, reference has been made by the Delegate of France to the I.M.C.O. Satellite Panel but it is at this Conference that we will be writing the first regulations that will permit the introduction of a maritime satellite service in the near future. This typifies very much the developments that have taken place over the years and I do not think that many of us in 1967 would have anticipated that within seven years we would be very actively considering the setting up of a satellite service for maritime communications. Such is the demand and such is the rate of progress. We therefore have, as I have outlined, some very important tasks ahead of us and I feel sure that this Conference will be no different to past ones that I have attended where goodwill and cooperation of all has enabled us to complete our work. I feel sure that we will finish with a job well done. I am conscious of the responsibility that you have placed in my hands and I would like to assure all of you that I will do my best to steer this Conference to a satisfactory conclusion.

A N N E X 2

ADDRESS BY MR. M. MILI, SECRETARY-GENERAL OF
THE INTERNATIONAL TELECOMMUNICATION UNION

Mr. Chairman,
Ladies and Gentlemen,

It is my pleasure, on behalf of the International Telecommunication Union, to welcome you to Geneva to take part in this important Conference. I hope that you will have a very pleasant stay here and that your work will be crowned with the greatest success. I should like to assure you that all staff members of the I.T.U. who are seconded to this Conference, whatever the permanent organ to which they belong, will do everything in their power to facilitate your task and to enable you to work in the best possible conditions.

As you know, this the first time that the I.T.U. is using this handsome International Conference Centre in Geneva. I sincerely hope that you will find its facilities well-keyed to your work and that they will help your deliberations to proceed smoothly.

The fact that the Centre is so near to Union headquarters should simplify the organization of the Secretariat's work and, as it is the first time that we are using these conference facilities, I should be grateful if you would draw my attention to any way in which the organization of the meeting could be improved. I say this in all sincerity because there is no doubt that the I.T.U. will have to hire this Centre for quite a lot of conferences in the years to come, and the more we know about the problems you encounter the better we shall be able to provide you with the services you require.

Mr. Chairman,

You have just recalled briefly the various I.T.U. conferences which dealt with the problems directly affecting the maritime mobile service, namely the Berlin Conference in 1906 and afterwards the London Conference in 1912.

"Since the London Conference in 1912, "I said in my speech at the opening of the 1967 Conference, "radiocommunications have become so important that the frequency spectrum has had to be apportioned among the various services that use it. For, with the development of technique, the number of these services has steadily grown until some ten years ago space communications burst upon the scene, upsetting all the established data."

The 1967 Conference to which I just referred and which you, Mr. Chairman, mentioned also was a specialized conference, the first World Conference since 1912 which was devoted entirely to the maritime mobile service.

In my opening address to the 1967 Conference I also pointed out that :

"Since the Administrative Radio Conference in Geneva in 1959 the services have one by one been the subject of 'extraordinary' administrative conferences now called, since Montreux 1965, 'world administrative conferences'.

Thus, in 1963, a 'Space' conference was held, and two sessions of the Aeronautical Conference were held in 1964 and 1966.

This tendency to hold specialized administrative conferences is no doubt due to the importance and complexity of the media used by the various radiocommunication services. Admittedly there may appear to be disadvantages in this apparent dealing with the Radio Regulations piecemeal while telecommunications form a whole and the radio services are interlocked for the very reason that the transmission medium is common to all.

On the other hand there is an undoubted advantage in being able to deal with each problem more thoroughly and leaving general questions to a future world administrative radio conference.

Undoubtedly the changes in maritime radio communications, which were already taking form when the Radio Regulations and the Additional

Radio Regulations were drawn up, have been clearly confirmed since 1959.

For example, in the sphere of merchant shipping, as a result of competition from air travel, we have seen a reduction in the number of passenger liners.

On the other hand, the number and tonnage of cargo ships have increased and they have become much more specialized (petrol tankers, ore ships, methane-tankers and container-carriers), while there has been a spectacular expansion of fishing fleets."

Mr. Chairman,
Ladies and Gentlemen,

In opening this first Plenary Meeting, I should like briefly to evoke some of the fundamental reasons for which this Conference was convened, apart from the detailed proposals which you will be examining in the course of the next seven weeks.

Whereas the purpose of previous I.T.U. administrative conferences has usually been to make provision for future services, the present Conference is being held to recast existing regulations in order to allow for new operating patterns and the increase in the volume of traffic or number of users.

It is accordingly important to stress at the outset that the basic feature of this meeting is that it will be concerned largely with the improvement of operations already in existence and that you will be considering services for which the procedures applied by operating and maintenance staff have already been incorporated in a body of regulations.

The point therefore is to ensure that operators and other staff throughout the world, even in the most remote regions, have a common understanding of the changes they will have to apply when the new Regulations come into force.

Since I have raised this aspect of the work of the Conference, I should mention for the benefit of those who do not have detailed knowledge of the Radio Regulations that these Regulations contain highly explicit provisions on the action which operating staff have to take. So when I tell you that the decisions of this Conference are likely to affect the work of operators and possibly the design of the installations on nearly 60,000 ships and at some 3,000 coast stations, you will have an idea of the far-reaching consequences of even the smallest change introduced in the Regulations.

This Conference will therefore be a turning point in the regulatory activities of the Union as it will be a prelude to an increasing number of administrative conferences whose task will be to amend the maintenance and operating rules applying to existing services in order to increase their efficiency by employing more advanced and more sophisticated techniques.

Typical of the pattern of such future conferences will be the need for a highly detailed agenda such as was drawn up for this Conference.

It is clear that an evolution is taking place in the regulatory and legislative processes of the I.T.U. and it is important that we should make the necessary effort to observe, analyze and understand this development. We should at all times be able to perceive clearly the path before us along which we want to go and we should be guided not by the short-term requirements of one technique or another but rather by the genuine needs of the users of telecommunication services.

What are these needs in the case of the maritime services?
I believe that they can be divided into three general categories :

Firstly, the traffic connected with the safety of navigation and consequently with the safety of life at sea. Although the details of these operations may not be known to persons outside the maritime mobile service, they are - with the notion "SOS" - something which both the man in the street and the telecommunication specialist recognize readily as a necessity. I shall consequently not enlarge on this.

The situation is rather different when we consider the remaining two types of traffic, i.e. communications with the shore required to ensure the efficient commercial operation of ships, and the private traffic of passengers and especially of crews with their family and friends.

The traffic which is required to ensure the commercially efficient operation of ships is of primordial importance. Ships represent a very considerable capital investment and one must also consider crew costs, which often are far from negligible. Their efficient operation consequently implies a high rate of productivity with rapid turn-rounds in ports.

It is imperative therefore to ensure that ships do not stand idle, either awaiting entry into port or for wharf-side discharging operations. Hence the vital importance of messages enabling shipowners to route ships to the most suitable harbours for taking on or unloading cargoes, or for informing importers and exporters of the estimated time of arrival so that they may take the necessary steps to ensure that stevedores and other services for loading and unloading are on the spot almost as soon as the ship docks.

I make special mention of this matter as a very large proportion of the world's trade is carried by sea, especially between the developing and industrialized countries. The cost of the raw materials which the former export and the capital goods which they have to import to further their development is affected to a greater or lesser extent by transport costs. Consequently, the developing countries have a strong incentive to ensure that their maritime radio communication facilities are as efficient and comprehensive as possible.

In view of the importance of maritime telecommunications for the efficiency of harbour operations and for the safety of life at sea, we in I.T.U. decided to send an identification mission to 14 African coastal countries. At the conclusion of this mission, which was organized jointly with I.M.C.O. at the end of 1972 and the beginning of 1973, specific recommendations for the improvement of the radio-maritime services were submitted to each of the countries concerned, since it had been found that the maritime radiocommunication services of many of these countries were in a poor or even critical state.

With U.N.D.P. assistance, experts will be sent to these countries to help them improve their services, and a seminar on the subject will be held in 1975.

Similar action will be taken in the South-American continent.

The third category of traffic - the private traffic of passengers and crews - is also very important, especially that of crews, for here we are dealing mainly with a working population which depends on radiocommunications for its continuous link with home.

Unlike the large body of expatriate workers which are a fairly common feature of modern society, merchant navy personnel can only hope to receive mail sporadically at ports of call. Yet the bigger the ship the less likelihood of intermediary ports of call and consequently the greater the reliance on radio for urgent news.

Few of us appreciate just how large this seafaring population is. In this connection I was very interested to read a recent Norwegian estimate which stated that, at any one time, there were as many as 50,000 Norwegians serving at sea, which is the equivalent in fact of the entire working population of a sizeable town.

I have emphasized the three broad categories of traffic handled by the maritime mobile service, but it is also useful to say something about the context in which this activity takes place.

Most significant from the regulatory point of view is the fact that we are dealing with a strictly international service. Ships are forever on the move and consequently a substantial number of them have to

contact coast stations other than those of their own country. It is immediately evident that any restriction limiting communication between stations of this service would markedly diminish its usefulness.

This brings me to a very important feature of the maritime mobile service. We are dealing with a service in which at least one of the partners is not an administration but a company or private person. Furthermore, it is a service built entirely on trust, on the assurance that the shipowner or the organization or person responsible for settling the accounts will honour the debts incurred.

Without this trust and the discipline necessary to ensure that the trust is deserved, the service runs the risk of becoming less effective because ultimately one would reach a point where certain coast stations might only accept traffic from known ships. It is not difficult to imagine the disastrous effects that this could have.

Furthermore, if traffic is to pass into the world telecommunication network through the nearest or most easily attainable coast station for onward routing, then it is necessary to do everything possible to foster this atmosphere of trust. I am glad to say that this trust has been consistently honoured everywhere, and I have no doubt that it will continue to be so in the future.

Nevertheless, we must realize the magnitude of the challenge, given the number and kinds of ships involved. The users of the maritime service are extremely diverse, ranging from small fishing vessels or private yachts to tankers of nearly half a million tons. Apart from this aspect there is also the steady increase in the number of ships. The following figures are eloquent.

When I spoke to you at the opening of the 1967 Maritime Conference, I mentioned that the number of ships in the I.T.U. List of Ship Stations had risen between 1960 and 1966 by nearly 20% from 33,200 to 39,500. The increase between 1966 and 1973 has, however, been even greater. In both cases the period is about seven years, but in the last seven years the number rose by 15,500 to almost 55,000, in other words, by almost 40%.

On the technical side, the maritime mobile service has been at the forefront of progress by instituting the changeover from double sideband to single sideband operation.

I note now, from the proposals before you and the discussions that have taken place in I.M.C.O., that you are once again looking towards the future and going ahead with your plans for modernization. You are about to establish - as you said yourself Mr. Chairman - the first regulations applicable to satellite communication within the service, especially with a view to providing direct interconnection between ships and the international automatic telephone network.

There is also the work that is going on in connection with the introduction of teleprinters on board ships. I am certain you will work out not only the technical and operational arrangements but also the necessary administrative provisions to make this a viable service.

Before concluding, I should like to mention a function incumbent on the General Secretariat with respect to the maritime mobile service. It is perhaps not widely known that the I.T.U. is a very large publisher of information of service to shipping in the form of the List of Coast Stations, the List of Ship Stations, the List of Radiodetermination and Special Service Stations and the Alphabetical List of Call Signs Used by Stations in the Maritime Mobile Service.

To illustrate this point, I need only mention that last year a total of over 230,000 copies of these lists or their supplements were dispatched to subscribers. I am convinced that this number would be even greater if all administrations ensured that the information contained in these lists was up-to-date and if the provisions regarding the compulsory carriage of these publications set out in Appendix 11 were more rigorously adhered to.

Mr. Chairman,
Ladies and Gentlemen,

I have tried in these few introductory words to outline some of the deeper issues on which you will be legislating in the coming seven weeks. The institution constituted by an administrative conference provides the Members of the Union with a very efficient tool for legislating in those areas where regulations having treaty force in relations between Members are required, and I am convinced that all of you here, in a true spirit of international cooperation, will strive to ensure that the outcome of this Conference will be to endow the maritime mobile service with the regulations necessary for its expansion and adaptation to changing patterns of operation in the years to come.

I wish you every success in your efforts.

A N E X O 3

Declaración del Sr. M.K. Basu (India)

"Sr. Presidente:

Le ruego me permita formular algunas observaciones relativas a la Conferencia Administrativa Mundial de Radiocomunicaciones Marítimas que se inaugura hoy en Ginebra. La Conferencia promete ser un acontecimiento que hará época en la historia de las comunicaciones marítimas. Todos confiamos en que las decisiones de esta conferencia contribuirán notablemente al mayor desarrollo y rápido perfeccionamiento de las telecomunicaciones marítimas, cuyas bases fueron echadas hace setenta y cinco años cuando el transatlántico americano St. Paul, aparentemente el primer barco que llevó a bordo una estación de radiotelegrafía, recibió un mensaje de Needles, Isla de Wight, de la que se hallaba a 105 kilómetros de distancia. Desde entonces la radiotelegrafía se extendió por los mares. Todos los barcos fueron dotados de equipos radiotelegráficos y en la actualidad desde el mayor transatlántico a la más pequeña balsa de salvamento, no hay embarcación que no esté provista de instalaciones de radiocomunicaciones y de radionavegación.

El tráfico y el comercio marítimos son indispensables actualmente en el mundo y experimentan un muy rápido aumento. La botadura de nuevos barcos a un ritmo acelerado plantea necesidades imperiosas en las instalaciones de radiocomunicación y navegación. Pero al mismo tiempo, el espectro radioeléctrico es un recurso natural limitado y se torna esencial recurrir a nuevos métodos para utilizarlo más eficiente y racionalmente, aplicando las técnicas más modernas. Con este motivo nos hemos reunido hoy aquí. Sr. Presidente, celebramos que presida Ud. esta Conferencia. Dirigió usted nuestros trabajos de la manera más eficiente en 1967, en tarea similar. Las dificultades pueden ser actualmente mucho mayores, pero bajo su dirección confiamos en que podremos encontrar las soluciones que nos satisfarán a todos.

Sr. Presidente, en el trabajo que hemos de realizar tenemos que someternos a graves limitaciones. La primera de ellas es que, con el espectro radioeléctrico limitado de que disponemos, tendremos que satisfacer las necesidades marítimas cada vez mayores. Hasta que la próxima Conferencia Administrativa Mundial de Radiocomunicaciones Generales que se celebrará en 1979 amplíe las atribuciones de frecuencias al servicio móvil marítimo, y de hacerlo así con éxito, hasta que volvamos a reunirnos para planear la utilización racional y eficaz por los servicios móviles marítimos de las nuevas bandas atribuidas, tendremos que contentarnos con

lo que se decida durante las siete semanas próximas. Tendremos que elaborar un nuevo plan radiotelefónico, prever disposiciones en relación con el incremento de la telegrafía de banda estrecha de impresión directa, la transmisión de datos y la llamada selectiva, aumentar la seguridad marítima, mejorar las operaciones de socorro, búsqueda y salvamento y las comunicaciones de a bordo, e intensificar el uso de las bandas de ondas métricas y decimétricas para reducir la presión en las bandas hectométricas y en las bandas inferiores de ondas decamétricas, siempre con las limitaciones mencionadas. Tremendo desafío que debemos enfrentar y vencer, con nuestro tradicional espíritu de cooperación y entendimiento mutuos. Debemos también recordar que si la Conferencia logra estos objetivos, sólo atenderemos a las necesidades más urgentes de la demanda actual de medios de radiocomunicaciones móviles marítimas para al cabo de seis o siete años, tener que volver a examinar qué es necesario realizar.

Sr. Presidente, se nos habla de que habrá comunicaciones por satélite para los servicios móviles marítimos dentro de los seis o siete próximos años. Esto constituirá un inmenso adelanto y será necesario aunar todo el esfuerzo e ingenio posibles para que lo antes posible se convierta en realidad un servicio marítimo mundial operacional por satélite, que proporcione servicios de alta calidad de comunicaciones y navegación. Con nuestra experiencia del servicio fijo de comunicaciones por satélite, la adaptación de las técnicas espaciales al servicio móvil marítimo no debería presentar dificultades insuperables. Este nuevo servicio por satélite contribuiría a aliviar la congestión de las bandas móviles marítimas en ondas decamétricas y a poner dichas bandas a disposición de los países nuevos y en desarrollo, para las necesidades, en continuo aumento, de sus comunicaciones marítimas.

Durante la presente Conferencia aunaremos nuestros esfuerzos para completar la tarea inmediata que hemos de realizar, teniendo en cuenta la perspectiva total en que trabajamos, a fin de que podamos encaminar las acciones futuras de la U.I.T. de la manera que más beneficie al servicio móvil marítimo y contribuya a la más eficiente utilización del espectro radioeléctrico. Con esta finalidad, deberíamos encarecer a la próxima Conferencia administrativa mundial de radiocomunicaciones generales, que se celebrará en 1979, que ponga a disposición del servicio móvil marítimo más espectro de ondas decamétricas y que actúe de modo a fomentar el rápido desarrollo e implantación de un servicio móvil marítimo operacional por satélite, si es posible antes de 1980. La Conferencia puede asimismo decidir volver a reunirse en 1981 ó 1982, para considerar las nuevas necesidades del servicio móvil marítimo, con vistas a fundamentar aún más sólidamente las bases en que este servicio vital pueda desarrollarse sin trabas hasta finales de este siglo.

Sr. Presidente, nos hemos reunido en esta sala con grandes esperanzas. Su presencia en la Presidencia nos inspira . El ritmo acelerado de conquistas científicas logradas durante los últimos cien años ha sido posible gracias a la constante cooperación entre las naciones salvando las fronteras naturales y las trazadas por la mano del hombre. El espíritu de cooperación internacional y comprensión mutua ha aliado a los Miembros de nuestra Unión en la consecución de objetivos comunes. Estamos seguros que los resultados de esta Conferencia abrirán las vías y proporcionarán los medios para llevar a la realidad los sueños de la humanidad en materia de comunicaciones marítimas. El príncipe surcará los siete mares en sus siete flotas, con seguridad absoluta y llegará hasta la Bella Durmiente manteniéndose en pleno contacto por radio, durante toda la travesía, con el resto del mundo.

Muchas gracias, Sr. Presidente."

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Corrigendum to
Document No. 254-E
6 May 1974
Original : French

PLENARY MEETING

MINUTES

OF THE

SECOND PLENARY MEETING

Page 7 :

Replace the beginning of the page by the following :

The Head of the Italian delegation thanked the United Kingdom delegation and the plenary meeting for the tribute paid to Marconi and read the following message to the Conference from the Italian Minister of Posts and Telecommunications, Senator G. Togni :



MARITIME CONFERENCE

GENEVA, 1974

Document No. 254-E

2 May 1974

Original : English

PLENARY MEETING

MINUTES

OF THE

SECOND PLENARY MEETING

Thursday, 25 April 1974, at 0930 hrs

Chairman : Mr. R.M. BILLINGTON (United Kingdom)

Subjects discussed

Document No.

1. Presentation on the occasion of the 100th anniversary of the birth of Guglielmo Marconi
2. List of candidates for the election of the I.F.R.B.

194



1. Presentation on the occasion of the 100th anniversary of the birth of Guglielmo Marconi

The Head of the United Kingdom delegation made the following statement :

"Mr. Chairman, Mr. Secretary-General, Delegates, Ladies and Gentlemen.

One hundred years ago today Guglielmo Marconi was born in Bologna, Italy, the son of an Italian father and an Irish mother. Thus with this fusion of celtic imagination and Latin logic was created this genius, this Mozart of the Hertzian waves. Axel Munthe in "The Story of San Michele" held that Mozart plucked harmonies from Heaven and converted them into melodies for lesser men to understand and appreciate. Marconi, another of the immortals, plucked Hertzian waves out of the laboratory and used them to form communication systems for the benefit of the ordinary people of his time.

For a genius to be recognized and to succeed he must be born in the right time and place. Had suitable technology been available to sustain powered flight, I have no doubt that Leonardo da Vinci would have invented the aeroplane. In the early nineteenth century Thomas Telford, the great English canal and bridge builder, experimented with self-propelled road transportation but made no headway because the technology of the internal combustion engine was not available to him. But fortunately for the world Marconi, a Mozart with a business sense, was born at a time when twenty years later his vision could be matched with a technology that could serve to open up the way to the foundation of commercial communication systems. This at a time when engineering and other technical developments were bringing about a revolutionary change in transportation by road, sea and air. Marconi was indeed a man of his time.

In 1895 this young stripling, this visionary amateur with a business sense, had achieved radio transmission of the morse code over $1\frac{3}{4}$ miles. A year later he had come to England and filed the world's first patent application for a system of telegraphy using Hertzian waves. This young unknown, with his revolutionary ideas was introduced to a man who was then already in an established position at the top of his profession, William Preece, the Engineer in Chief of the British Post Office. Preece, accustomed to the growth and development of wired telegraphy, like many men before him in positions of great authority, could have been forgiven for brushing aside the ideas of the young visionary. To Preece must go the credit for recognizing that here was a young man whose concepts of thought were unique, who needed and would justify the support and encouragement

that only he, in the United Kingdom at that time, could give. Preece, later Sir William Preece, gave Marconi every encouragement and made available to him the technical resources of his great department. Experiment succeeded experiment and success succeeded success. The very next year, 1897, as the Post Office struggled to send a message 8 miles across the Bristol Channel by inductive methods, this stripling, Marconi, like a young god, threw his radio signal, like a Silver Javelin, clear across. Four years later Marconi was to send his signal like a weak fluttering bird 2,000 miles across the vast lonely reaches of the Atlantic to be caught in the frail net of his aerial to the astonishment of the world and the bewilderment of the learned sceptics of the day. Transatlantic wireless communication was born. Marconi, through his brilliant intuition, had tapped the limitless pool of knowledge that lay beyond man's understanding and to which only the genius has the key. Those brilliant men, who could rely only upon existing data, knew nothing of the ionosphere. The next year another message from Cornwall, England, was captured at a slightly greater distance and, this time not by an ear-piece, but by morse-inker on the SS Philadelphia, 2099 miles away. The sceptics were finally silenced.

By this time the world had already realized the potential of Marconi's discoveries. One of his greatest dreams had been the breaking down of the isolation of the sailor at sea. By the end of the nineteenth century already, ships of the Italian and British navies had been fitted with Marconi equipment, and the first sea rescue through wireless involving the Goodwin Lightship had already taken place. Land mobile wireless experiments were to follow in 1901 and before the first World War wireless telegraphy from aircraft had been effected. In that decade and a half before the First World War nothing perhaps had captured the public imagination so much as the use of wireless telegraphy both to capture the murderer Crippen, escaping from England to America by sea, and to save life at sea following the loss of the Titanic.

At his time too, the predecessor of the I.T.U. was not slow to recognize the potential of this new form of communication as the first International Conference on Wireless Telegraphy was held in Berlin in 1903.

The First World War provided the crucible from which emerged a veritable spate of developments that would be too numerous to relate : the vast extension of wireless telegraphy at sea and the supply of wireless telegraphists from Marconi's training college that he had had the foresight to set up over a decade before to meet the needs of his newly formed Marconi International Marine Communication Company; the introduction of aeronautical radio telephony; radio direction-finding techniques and all the time the rapid and steady build-up of his communication systems.

The story of the beginning of broadcasting is well known. Experiments in telephony range tests in which amateurs enthusiastically participated were relieved from boredom by the introduction of music as a change from the reading of railway timetables. Spurred on by this appreciation the Marconi Company sent out a published broadcast programme in which Dame Nellie Melba broadcast a song recital. This irresponsible use of wireless telephony intended for the purpose of serious experiment was promptly stopped by the authorities. However the glorious band of unseen amateurs, summarily deprived of their entertainment, set up such a mighty shout of protest that the authorities gave in and broadcasting for entertainment had arrived. With his customary foresight, Marconi had seized on the need for broadcasting receivers and so the broadcasting industry was born. The introduction of world-wide communication wireless systems followed and, like all true creators, Marconi never content with his past achievements was forever probing, innovating and developing - shortwaves, microwaves, radar - until he died in 1937, in the land of his birth.

And all this, Mr. Chairman, was achieved without the help of the I.F.R.B.!

From this solid base of achievement has been built the manifold and multitudinous radio networks from the single radio paging system to world satellite systems like INTELSAT : radio services on which the complex civilisation that we know today completely depends. Marconi was unique in the harnessing of his visionary greatness to his unrivalled capacity for the technological and commercial exploitation of his discoveries.

It is fitting, Mr. Secretary-General, that this great world Conference on Maritime Mobile Communications of the International Telecommunication Union should have been held at the very time of the centenary of the birth of this great man to whom the whole world owes a debt of gratitude, and not the least those thousands upon thousands of men and women whose lives have been saved at sea. The fact that nearly 90 countries are present at this Conference testifies to the great importance to the world of shipping and its communications.

The United Kingdom is proud that it was to England that Marconi, as a young man of 21, came with his invention and it was there that he received help and encouragement and carried out most of his work.

To celebrate the centenary of his birth - 25 April 1874 - it gives gives the United Kingdom delegation great pleasure to present you Mr. Secretary-General, with this bust on behalf of the Marconi Companies for installation in the I.T.U. Building."

The Secretary-General of the I.T.U. made the following statement :

"Mr. Chairman, Ladies and Gentlemen,

Allow me, on behalf of the I.T.U., to thank the United Kingdom delegation and the Marconi Companies most warmly for this very handsome bust of Guglielmo Marconi, the centenary of whose birth is being celebrated throughout the world today.

It was only natural for your Conference to join in this international tribute to one of the pioneers of radiotelegraphy, who, like Popov and Branly - to cite only two names - made most of the great achievements of our century possible.

Whether the occasion concerned was the launching of the first artificial earth satellite, the journeys of astronauts around the globe, or the exploration of the Moon and the planets, each of these experiences has been an opportunity to witness a veritable festival of telecommunications.

Nearer home, and affecting us more personally, the importance assumed by radiocommunications in our daily lives has grown steadily to the point where it is now inconceivable that we could live for a single moment in a world of complete radio silence.

Mr. Baptiste has given a brilliant outline of the major turning points in Marconi's life. Referring to the facts that he has just recalled, I would like to point out the lessons for us of that real adventure that was the great scientist's career, in its complete dedication to the development of radiocommunications.

While Marconi enjoyed the support of fervent supporters, he had against him the usual scepticism which greets the work of innovators, a scepticism which, unfortunately, well-meaning people tend only too often to share.

In this connection, certain passages in a work entitled "Les applications pratiques des ondes électriques" (The Practical Applications of Electrical Waves), published by Albert Turpain, D. Sc., in 1901, come to my mind.

While appreciating the great usefulness that wireless telegraphy could have for short-range communications (for example, with off-shore islands), the author writes :

"To sum up, while wireless communication by Hertzian waves may be said to be practical over short distances, it is rash to claim that, without the aid of any conductor, it can permit the exchange of signals at any distance, however great.

"The ingenious contrivance of Mr. Marconi, if he neglects the area of truly practical applications that it can justly claim as its own, would risk certain failure by claiming to be applicable to telegraphy at any distance."

Ladies and Gentlemen,

Those words were written in 1901 - in the very same year that saw the famous experiment during which the first transatlantic signal was transmitted by radio waves.

Yet Mr. Turpain was undoubtedly putting forward scientific arguments that he believed to be valid.

However, Marconi had on his side, in addition to his extraordinarily inventive genius and his brilliant intellect, a remarkably venturesome spirit and unshakeable faith in the future of radio technique. He was the very incarnation of the pioneering spirit that is vital to the success of any human and technical venture of importance.

We are now obviously past the dawn of radiotelegraphy and we have left far outstripped many of the most optimistic forecasts that were being made at the beginning of the century.

However, there is at least one lesson we can learn from the past and that is that science does not stand still and that what we think is impossible to achieve today may be feasible tomorrow.

This counsels a judicious mixture of caution and boldness : caution in claiming certainties, boldness in conceiving and building the future. Such, in fact, is the philosophy which has always ensured the success of the I.T.U., keeping our Union constantly renewed and constantly rejuvenated by contact with the latest developments, ensuring that it follows the work of the pioneers prudently but confidently and that it prepares conditions favourable to the practical use of the techniques and equipment that result.

In this work of drafting regulations whose entry into force may be spread over periods of varying length, it is essential to take into account not only the economic needs and technical facilities of the present, but also their foreseeable developments.

Mr. Chairman, Ladies and Gentlemen,

What I have just said is based on the proposals which you will be discussing during this Conference. Without a doubt the final acts that you will sign in a few weeks will show once again that the lessons of Marconi have not been forgotten in the I.T.U.

Mr. Chairman, Ladies and Gentlemen, thank you."

The Head of the Italian delegation made the following statement :

"Mr. Chairman, Ladies and Gentlemen,

I have the honour to greet you on behalf of the Italian government and, in particular, of its Posts and Telecommunication Administration.

On this day, 25 April 1974, the centenary of the birth of Guglielmo Marconi, I would like to associate myself with the tributes paid by your assembly to this great man of science and citizen of the world who opened new horizon for human progress.

The important task you have only just embarked upon also follows in the work of Marconi, who from the outset worked for the benefit of navigators and to safeguard human life at sea.

The rapid progress made over the years, particularly in air and space travel, has extended the concept of navigation from seafaring to realms of much greater dimensions, which, from outer space, open on the infinite.

The distances in these new dimensions surpass all imaginable proportions and, in man's exploration of the solar system, he is once again discovering how essential radiocommunications are.

Your assembly, like all work dealing with telecommunications, continues along the path pointed out by Guglielmo Marconi, and bears the stamp of what was the noblest trait in his character : that of making a fundamental contribution to ever closer relations between the countries and peoples of the world.

I wish every success to your conference and to all the activities of the International Telecommunication Union."

2. List of candidates for the election of the I.F.R.B. (Document 194)

The Secretary-General said that the five regions referred to in Document 194 had been laid down by the Plenipotentiary Conference. The Secretariat would provide any information on them that might be required.

The delegate of India said that the name of the Indian candidate under Region E should read "Mr. M.K. Basu". The words "and corr." under Annex 5 should be replaced by the words "and addendum".

The meeting rose at 1005 hrs.

The Secretary-General :

M. MILI

The Chairman :

R.M. BILLINGTON

MARITIME CONFERENCE

GENEVA, 1974

Document No. 255-E

2 May 1974

Original : English

WORKING GROUP 6A

REPORT OF AD HOC WORKING GROUP 6A-1 TO WORKING GROUP 6A

At its first meeting Working Group 6A established ad hoc Working Group 6A-1 with the following terms of reference :

Radiocommunication Operators' General Certificate for the Maritime Mobile Service

To consider all Proposals relating to this subject with a view to reconciling differences in these Proposals.

To prepare, if possible, consolidated draft paragraphs of the Radio Regulations relating to this subject for the further consideration of Working Group 6A.

The ad hoc Working Group has held two meetings and is able to report unanimous agreement on the principle that in the Final Acts of the present Conference the Radiocommunication Operator's General Certificate for the Maritime Mobile Service should be provided for in the main body of the Radio Regulations instead of, as at present, in Resolution No. Mar 16. There was also unanimous agreement on the qualifications for the Radiocommunication Operator's General Certificate differing in minor respects only from that in Resolution No. Mar 16, and on the changes in Articles 23 and 24 that would be necessary to give effect to both the transfer from Resolution No. Mar 16 and to the changes in the qualifications. Accordingly the ad hoc Group is able to present to Working Group 6A a single document (see Annex) which Working Group 6A may care to use as a basis for further discussion of this subject.

Dr. G. ZICKWOLFF
Chairman

Annex : 1



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A N N E X

AD HOC WORKING GROUP 6A-1

RADIO OPERATOR'S CERTIFICATES

ARTICLE 23

Operators' Certificates for Ship and Aircraft Stations

Section I

General Provisions

NOC 848 - 858
(including 850.1)

MOD

Section II

Classes and Categories of Certificates except
for Ship stations

NOC 859

NOC 860

SUP 860A

MOD 861 § 6 (1) The holder of a first or second class radio-
telegraph operator's certificate may carry out the radiotelegraph
or radiotelephone service of any ~~ship-or~~ aircraft station.

MOD 862 (2) The holder of a radiotelephone operator's
general certificate may carry out the radiotelephone service
of any ~~ship-or~~ aircraft station.

NOC 859.1

NOC 863

SUP 863A

MOD 864 (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.

MOD 865 (5) ~~The radiotelegraph-service-of-ships-for-which a-radiotelegraph-installation-is-not-made-compulsory-by international-agreement,-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.

NOC 866

Reasons : To state the classes and categories of certificates for aircraft stations separately from those for ship stations.

ADD

Section IIA

Categories of Certificates for Ship Stations

ADD 866AA § 7A (1) There are four categories of certificates for radiotelegraph operators¹.

These are :

- the radiocommunication operator's general certificate
- the first class radiotelegraph operator's certificate
- the second class radiotelegraph operator's certificate
- the radiotelegraph operator's special certificate.

- ADD 866AB (2) There are two categories of radiotelephone operator's certificates, general and restricted¹.
- ADD 866AA.1¹
866AB As regards the employment of operators holding the different certificates, see Article 24.
- ADD 866AC § 7B (1) The holder of a radiocommunication operator's general certificate, or of a first class or second class radiotelegraph operator's certificate, may carry out the radiotelegraph or radiotelephone service of any ship station.
- ADD 866AD (2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any ship station.
- ADD 866AE (3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship station, / when working on the frequencies of the maritime mobile service / provided that the operation of the transmitter requires only the use of simple external controls, and excludes 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 peak envelope power of the transmitter does not exceed 1 kilowatt.
- ADD 866AF (4) 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 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.
- ADD 866AG § 7C 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 cases the certificate shall be suitably endorsed.

NOC

Section III

Conditions for the Issue of Operators' Certificates

NOC 867

NOC 868

NOC 869

NOC 870

MOD

A. Radiocommunication Operator's General Certificate
for the Maritime Mobile Service

ADD 870AA § 9A The radiocommunication operator's general certificate for the maritime mobile service is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

ADD 870AB a) Knowledge of the principles of electricity and the theory of radio and of electronics sufficient to meet the requirements specified in 870AC, 870AD and 870AE below.

ADD 870AC b) Theoretical knowledge of modern radio-communication equipment, including marine radiotelegraph and radiotelephone transmitters and receivers, marine aerial systems, automatic alarm devices, radio equipment for life-boats and other survival craft, direction-finding equipment, together with all auxiliary items including power supply (such as motors, alternators, generators, inverters, rectifiers and accumulators), as well as a general knowledge of the principles of other apparatus generally used for radionavigation, with particular reference to maintaining the equipment in service.

ADD 870AD c) Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in 870AC above, including the taking of direction-finding bearings and knowledge of the principles of the calibration of radio direction-finding apparatus.

ADD 870AE d) Practical knowledge necessary for the location and remedying (using appropriate testing equipment and tools) of faults which may occur during a voyage in the apparatus mentioned in 870AC above.

- ADD 87OAF e) 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 receiving shall be, as a rule, five minutes.
- ADD 87OAG f) Ability to send and to receive correctly by radiotelephone.
- ADD 87OAH g) Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.
- ADD 87OAI h) A sufficient knowledge of world geography, especially the principal shipping and the most important telecommunication routes.
- ADD 87OAJ i) 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.
- MOD ~~-A-~~ B. First Class Radiotelegraph Operator's Certificate
~~-B-~~ C. Second Class Radiotelegraph Operator's Certificate
~~-C-~~ D. Radiotelegraph Operator's Special Certificate
~~-D-~~ E. Radiotelephone Operator's Certificate
- NOC 871
to
906

NOC Section IV

Qualifying Service

- MOD 907 § 17 (1) An operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932).

MOD 908 (2) Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A), an operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate shall have had, as operator on board ship or in a coast station, at least six months' experience of which at least three months shall have been on board ship.

MOD 909 (3) Before becoming chief operator of a ship station of the first category (see No. 930), an operator holding a radiocommunication operator's general certificate or a first class radiotelegraph operator's certificate shall have had, as operator on board ship, or in a coast station, at least one year's experience of which at least six months shall have been on board ship.

ARTICLE 24

NOC Class and Minimum Number of Operators for
Ship and Aircraft Stations

NOC 912

NOC 913

MOD 914 a) ship stations of the first category, except in the case provided for in No. 918 : a chief operator holding a radiocommunication operator's general certificate or a first class radiotelegraph operator's certificate;

MOD 915 b) ship stations of the second and third categories, except in the case provided for in No. 918 : a chief operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate;

MOD 916 c) ship stations of the fourth category, except in the cases provided for in Nos. 917 and 918; one operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate;

MOD 917 d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements; one operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate, or a radiotelegraph operator's special certificate.

NOC 918

NOC 919

and

920

(including 920.1)

SUP

RESOLUTION No. Mar 16

including Annexes 1 - 3.

In the course of the ad hoc Group's work, a number of suggestions were made by one or more participants that relate to Articles 23 and 24, but are clearly outside the terms of reference of ad hoc Working Group 6A-1. The Group considered that Working Group 6A would wish to be informed in this report of these matters, which are as follows :

- a) In the course of discussion of that part of the qualifications which relates to knowledge of one of the working languages of the Union, it was suggested that consideration be given to adoption of a single international language. In this connection, it was noted that the Maritime Safety Committee of I.M.C.O. unanimously agreed that, where language difficulties exist, one common language should be used for navigational purposes and that this language should be English.
 - b) In the course of discussion of Regulation 863A,
 - i) it was suggested that an addition might be considered permitting, at the discretion of administrations, limitation of certain Radiotelephone Operator's Restricted Certificates to the maritime mobile VHF service; and
 - ii) it was suggested that terms should be set under which holders of Radiotelephone Operator's Restricted Certificates might be permitted to use frequency synthesized equipment with proper safeguards;
 - c) In the course of considering Regulation 907, it was suggested that a three-months shipboard experience requirement be added to apply to a ship station of the fourth category.
-

MARITIME CONFERENCE

GENEVA, 1974

Document No. 256-E

2 May 1974

Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

THIRD MEETING OF COMMITTEE 4

Thursday, 25 April 1974, at 1500 hrs

Chairman : Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed :

General discussion on proposals concerning narrow-band
direct-printing telegraphy

ADD Article 28C

AP 20B

Document No.

HOL/28/152-156

S/121/28

HOL/28/170

CAN/55/126

G/57/237

USA/54/236

D/16/29

HOL/28/171-174

101



General discussion on proposals concerning narrow band direct-printing telegraphy (HOL/28/152-156, S/121/28, HOL/28/170, CAN/55/126, G/57/237, USA/54/236, D/16/29, HOL/28/171-174, Document 101)

The Chairman felt that there were two possible courses of action : requirements for direct-printing systems could be set forth in detail as an appendix to the Radio Regulations, or there could simply be a reference in the Radio Regulations to the relevant C.C.I.R. Recommendation as it exists at present bearing in mind that this Regulation might be modified at the forthcoming Plenary Assembly of the C.C.I.R. and subsequent Interim Meetings of C.C.I.R. Study Group 8. At the previous meeting, some delegations had expressed a preference for the latter course of action. However, this could give rise to legal problems in the future with regard to possible modifications which would be on the basis of C.C.I.R. Recommendations and therefore not mandatory. It was a matter of designing appropriate follow-up machinery to ensure that such modifications would be valid, for example on the lines of Resolution Spa2 - 6. The Conference should make provisions to avoid mandatory use of modified systems which were not regulated on an international basis.

The Working Group could consider these points and if there was a consensus of opinion the matter could be raised in committee at a later date.

The delegate of the U.S.S.R. said that reproduction of detailed specifications would make the Radio Regulations too bulky. He would prefer a reference to the relevant C.C.I.R. Recommendation. This would also make it easier to deal with modifications to C.C.I.R. Recommendations in the future.

The delegate of the United Kingdom stated that his delegation would not like to see anything in the way of specifications liable to change in the course of the validity of a convention or the lifetime of a set of Radio Regulations. Specifications should be fixed so that further amendments would not affect the Radio Regulations in force at the time. He felt that the Working Group should consider the matter further.

Replying to certain points raised by the delegate of France, the Chairman stated that if reference was made to technical specifications in an Appendix of the Radio Regulations it would have to be on the basis of the existing C.C.I.R. Recommendation, which would be subject to final approval by the Plenary Assembly of the C.C.I.R. However, the problem was somewhat theoretical as the existing Recommendation was fairly exhaustive and there should be no changes over the next 10 years.

The representative of the I.F.R.B. felt that the Radio Regulations should contain the minimum provisions to permit intercommunication between stations on the understanding that other specifications would be contained in a specific C.C.I.R. Recommendation of a specific date.

The Chairman asked the Chairman of Working Group 4B to look into the allocation of VHF channels for direct-printing requirements and to prepare a document which would be passed on to Committee 5. There had been proposals to use channels 80 or 81 but adjacent channels might have to be used for frequency economy. Some channelling arrangements should be made before the next World Administrative Radio Conference. There could be a recommendation or resolution to that effect.

The Chairman of Study Group 4B said that this question would be on the agenda for the first meeting of Study Group 4B.

The delegate of the United States of America said that his delegation was not prepared to designate a specific channel solely for this purpose.

The delegate of the U.S.S.R. said that for the moment it would not be appropriate to designate channels exclusively for direct-printing purposes. The matter could be decided if and when the need arose. Individual administrations could use certain channels which could be identified.

The delegate of Denmark, supported by the delegate of Norway, doubted that it would be necessary to allocate specific frequencies for direct-printing purposes during the validity of the Convention or the lifetime of the new Radio Regulations. The Working Group could discuss the matter in general terms but it should not presuppose that there was a need to allocate specific frequencies.

The delegate of Sweden foresaw a need to introduce direct-printing systems in VHF channels. It would therefore be necessary to make channelling arrangements which would ensure the most efficient use of the spectrum available. He felt that the Appendix should indicate this, perhaps by a footnote or a rearrangement in priority which would anticipate such future utilization.

The Chairman felt that it would be wise to make provisions for direct-printing purposes at the present stage in the process of reducing the frequency spacing from 50 to 25 kHz. He asked the delegations which had not been in favour of reserving channels at present to give careful consideration to this matter and perhaps make further statements in the Working Group.

The delegate of the United Kingdom agreed with the delegate of the Netherlands that it would be necessary to introduce narrow band direct-printing in the VHF band in the course of the Radio Regulations under consideration. The United Kingdom proposal (Document G/57/237) suggested that channels 80 and 81 should be given some form of priority. Experience on HF bands showed that radiotelephony and direct-printing were

incompatible. When a substantial amount of direct-printing was being carried out on VHF, these two channels could be taken into use on the basis of an ad hoc channelling arrangement if necessary.

The delegate of France supported the Netherlands and United Kingdom proposals.

The delegate of the United States of America said that his country fully supported the principle of providing for direct-printing telegraphy on VHF frequencies. However, all 25 kHz channels were already being used for radiotelephony in the United States. His major objection was to the designation of channels for direct-printing purposes exclusively. His delegation did not feel that specific frequencies should be reserved at this time.

The Chairman said that it was important to deal with this matter on an international basis before channels were so extensively used that it would no longer be possible to do so.

The delegate of the U.S.S.R. considered that it would be premature to allocate specific channels for direct-printing purposes at the present time. Channels 80 and 81 were being used for other purposes in the U.S.S.R. The matter could be dealt with at the next conference.

The delegate of Denmark envisaged two stages in the development of this service. In the first stage direct-printing would be permitted on all existing public correspondence channels at the discretion of individual administrations in a given area. The second stage, in the relatively distant future, would be a situation in which direct-printing had increased to such an extent as to make it necessary to use sophisticated channelling arrangements. His delegation would agree to all measures concerning future arrangements. In view of the tremendous increase in radiotelephone traffic, frequencies should not be set aside for direct-printing purposes only at the present time. One solution could be on the basis of priority as suggested by Sweden.

The delegate of Norway said that his delegation would agree to provision being made for the use of direct-printing in the VHF band but would not like to see one, two or more channels reserved exclusively for this purpose because of the pressure on available channels for radiotelephony. He would favour some indication of priority in the use of channels for direct-printing.

The delegate of the United Kingdom said that his delegation's proposals did not provide for exclusive direct-printing channels. Its purpose was to clear the way for a number of narrow-band direct-printing channels when the need arose. There was no intention to deprive radiotelephony services of the use of these channels at the present time.

The Chairman said that there might be a need for special tighter tolerance transmitters and receivers when narrow bands were available for direct-printing. For the present, it was important that all international bodies concerned should work on the same basis.

The Chairman of Committee 4B noted the remarks made during the meeting and felt that the Working Group could come up with proposals.

The representative of the I.F.R.B. outlined the details of the I.F.R.B. report to the Conference on the implementation of Resolution MAR 8 of the Maritime Conference, 1967 as contained in Document 101. He stated that since 31 December 1973 there had been a further 30 notifications to the Board. The relevant extract from the Master Register would be made available to the Conference.

The meeting rose at 1600 hours.

The Secretary :

M. SANT

The Chairman :

Capt. V.R.Y. WINKELMAN

MARITIME CONFERENCE

GENEVA, 1974

Document No. 257-E

3 May 1974

Original : English

PLENARY MEETING

MINUTES

OF THE

THIRD PLENARY MEETING

Monday, 29 April 1974, at 1000 hrs.

Chairman : Mr. R.M. BILLINGTON (United Kingdom)

Subjects

1. Death of the Minister of Communications and Posts of the Hungarian People's Republic
2. Oral report by the Chairman of Committee 2
3. Election of the members of the I.F.R.B.



1. Death of the Minister of Communications and Posts of the Hungarian People's Republic

The Chairman announced with regret the sudden death on Saturday, 27 April 1974, of Prof. Dr. Chanadi György, Minister of Communications and Posts of the Hungarian People's Republic. On behalf of all the participants he offered his condolences to the leader of the Hungarian delegation.

2. Oral report by the Chairman of Committee 2

The Chairman of Committee 2 said that the Committee had adopted the report of its Working Party to the effect that the transfer of powers from Luxembourg to Belgium and from the Group of Territories represented by the French Overseas Post and Telecommunications Agency to France were accepted and the transfer of powers from the Central African Republic to Cameroon, Niger to Dahomey, Ukraine to the Hungarian People's Republic, Byelorussia to the U.S.S.R. and Egypt to Morocco were found unacceptable under No. 643 of the Convention (transfer of powers sent by telegram). As Egypt was now represented at the Conference the last-named transfer was no longer necessary.

The delegate of Cameroon said that the delegation of the Central African Republic was also present at the Conference; the delegate of the Central African Republic confirmed that he had registered and that his credentials would be handed in very shortly.

The Chairman stated that the Colombian Administration had ratified the Montreux Convention and was therefore eligible to vote.

3. Election of the members of the I.F.R.B.

The delegate of Cameroon informed the meeting that the candidature of Cameroon had been withdrawn; he thanked those who had supported it and hoped that their support could be transferred to the candidature of Dahomey.

The Chairman invited the delegations of Brazil, Denmark, the German Democratic Republic, Ivory Coast and Australia to provide tellers.

The Secretary-General noted that the candidature of Cameroon should be deleted from the voting form, and explained the voting procedure.

The ballot then proceeded and the following delegations were called upon to vote :

The People's Republic of Albania, the Algerian Democratic and Popular Republic, the Federal Republic of Germany, the Kingdom of Saudi Arabia, Argentine Republic, Australia, the People's Republic of Bangladesh, Belgium, Republic of Bolivia, Federative Republic of Brazil, People's Republic of Bulgaria, United Republic of Cameroon, Canada, Central African Republic, Chile, People's Republic of China, Republic of Cyprus, Republic of Colombia, People's Republic of the Congo, Republic of Korea, Costa Rica, Republic of the Ivory Coast, Cuba, Republic of Dahomey, Denmark, Arab Republic of Egypt, Republic of El Salvador, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Ecuador, Spain, United States of America, Finland, France, Gabon Republic, Ghana, Greece, Guatemala, Republic of Upper Volta, Republic of Honduras, Hungarian People's Republic, Republic of India, Republic of Indonesia, Iran, Ireland, Iceland, State of Israel, Italy, Jamaica, Japan, Republic of Kenya, Khmer Republic, State of Kuwait, Lebanon, Republic of Liberia, Libyan Arab Republic, Luxembourg, Malaysia, Malagasy Republic, Kingdom of Morocco, Mauritius, Islamic Republic of Mauritania, Mexico, Monaco, Nepal, Nicaragua, Federal Republic of Nigeria, Norway, New Zealand, Pakistan, Republic of Panama, Republic of Paraguay, Kingdom of the Netherlands, Peru, Republic of the Philippines, People's Republic of Poland, Syrian Arab Republic, German Democratic Republic, Socialist Republic of Roumania, United Kingdom of Great Britain and Northern Ireland, Republic of the Senegal, Republic of Singapore, Republic of Sri Lanka (Ceylon), Sweden, Confederation of Switzerland, Czechoslovak Socialist Republic, 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, Togolese Republic, Tunisia, Turkey, Union of Soviet Socialist Republics, Oriental Republic of Uruguay, Republic of Venezuela, Republic of Viet-Nam, Socialist Federal Republic of Yugoslavia.

The Secretary-General announced that 96 countries had taken part in the vote.

The meeting was suspended to allow the votes to be counted and was resumed at 1230 hrs.

The Chairman announced the results of the ballot :

For Region A	Mr. Perrin (Canada)	56
	Mr. Dellamula (Argentina)	39
	Blank votes	1
For Region B	Mr. Sowton (United Kingdom)	47
	Mr. Pardo Horno (Spain)	36
	Mr. Terzani (Italy)	13
	Blank votes	0
For Region C	Mr. Gromov (U.S.S.R.)	78
	Blank votes	18
For Region D	Mr. Berrada (Morocco)	69
	Mr. Bouraima (Dahomey)	25
	Blank votes	2
For Region E	Mr. Fujiki (Japan)	65
	Mr. Basu (India)	30
	Blank votes	1

There were no invalid papers.

The Chairman declared Mr. Perrin, Mr. Sowton, Mr. Gromov, Mr. Berrada and Mr. Fujiki elected members of the Board.

The Chairman congratulated the newly-elected members on behalf of all delegations present and welcomed the new members whom he was sure would prove worthy successors to those who were retiring. He thanked Mr. Petit and Mr. Dellamula who had been instrumental in setting up the machinery for efficient management of the frequency spectrum since the inception of the I.F.R.B. in 1948 and Mr. Nishizaki, a more recent member, who had nevertheless made a valuable contribution.

The Chairman offered his sympathy to the unsuccessful candidates and wished the new members a successful term of office.

The Secretary-General added his congratulations on behalf of the Coordination Committee to the members of the I.F.R.B. who had just been elected or re-elected.

The delegate of Canada thanked the Conference for the honour paid to his country by the election of Mr. Perrin and was sure that Mr. Perrin would do his utmost to merit the confidence shown in him. He thanked the present members of the Board for their excellent work and wished every success to the retiring members.

Mr. Berrada thanked the Conference for its continued confidence and expressed his particular appreciation of Mr. Bouraima and his excellent work for the Union as telecommunication expert. In 1947 the international community had not only stated that the frequency spectrum should be exploited on an equal basis by all countries but had laid down a system for its international management based on a Board of persons representing neither a given country nor a given region, which was in itself an innovation which other international organizations were now considering. He paid tribute to the retiring members for their work and their efforts to defend the independence of the Board, in full awareness of their international mandate.

Mr. Gromov, current Chairman of the I.F.R.B., thanked all his colleagues and paid respect to the senior members of the Board whose experience had been so valuable. He welcomed the new members and hoped the Board would have a successful future.

Mr. Petit, speaking also for Mr. Dellamula and Mr. Nishizaki, expressed his gratitude for the kind words spoken; they had spent many happy years in the service of the Union and had always been fully conscious of the confidence placed in them by its members. They were sure that the new Board would maintain the tradition of integrity and independence it had always shown.

The delegate of the United Kingdom said he appreciated the honour done to the United Kingdom, congratulated the new members of the I.F.R.B. and expressed sympathy for those not successful on this particular occasion. He also wished to record the gratitude of the United Kingdom for the experience, expertise and helpfulness of the Board over many years.

The delegate of Japan considered that Mr. Fujiki would be able to make a valuable contribution to the work of the I.F.R.B. and wished the newly-elected members every success in the performance of their duties.

Mr. Bouraima (Dahomey) also congratulated the newly-elected members and said how much he was moved by the kind words of Mr. Berrada who would certainly continue his activities with great success. He thanked those who had supported his candidature.

The delegate of India added his congratulations to the new Board members and assured them of India's full cooperation in the carrying out of their duties.

The delegate of Italy and the delegate of Spain congratulated the newly-elected members and were confident that they would work successfully in the interests of the Union. The delegate of Spain regretted that there was no Spanish-speaking Board member but that was no reflection on the merit of those just elected.

The meeting rose at 1250 hours.

The Secretary-General :

M. MILI

The Chairman :

R.M. BILLINGTON

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 258-E(Rev.1)

15 May 1974

Original : English

COMMITTEE 5

Papua-New Guinea

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of Papua-New Guinea in the Revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 MOD) are as follows :

Frequency band MHz	4	6	8	12
Number of single sideband channels	3	1	3	1

This document is an extract from Document 134.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 258-E

3 May 1974

Original : English

COMMITTEE 5

Papua - New Guinea

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of Papua - New Guinea in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 MOD) are as follows :

Frequency band MHz	4	6	8
Number of single sideband channels	1	1	1

This document is an extract from Document 134.

Note by International Chamber of Shipping

USE OF HF TELEPHONE FREQUENCIES FOR INTER-SHIP WORKING AND, IN
CERTAIN CASES, FOR SHIP SHORE WORKING

1. I.C.S. submits, for Conference consideration, the following reasons why flexible use of HFRT frequencies should continue to be permitted on the duplex and simplex HFRT frequencies at the discretion of the ship or coast station when appropriate :
 - a) Ionospheric reflective patterns often take on a different character in the shore to ship path compared to the ship to shore path. Thus under some propagation conditions, crossband working is the only feasible method of establishing an efficient and speedy contact. The prohibition of such working could, under these circumstances, lead to unduly long occupation of available HF frequency spectrum.
 - b) Ships with crystal controlled transmitters rarely fit all the 52 crystals needed to work all DSB channels available in the original Appendix 17. With the increase in channels due to the change-over to SSB it is likely these ships will carry only those crystals necessary to communicate in areas where they trade regularly. It will frequently occur, however, that individual ships will wish to make contact with coast stations for which they do not have the appropriate channel crystal. This is most likely to occur in the developing areas of the world. Crossband or crosspair working would enable a ship in this situation to make timely and effective contact with the desired coast station and thereby avoid prolonged occupation of a duplex channel while attempts are made to establish communication via the possibly distant coast station(s) for which she carries crystals. A judicious choice of frequency band and channel would prevent interference.
 - c) Cross band working on simplex frequencies can allow ships wishing to communicate with other ships on matters of an urgent operational or technical nature the necessary 'duplex' facility to connect for example the Gas Liquification Plant Control Room on one ship with the similar Control Room on the other via their internal telephone systems. Simplex operation is not suitable for these links as the ability to interrupt the conversation is vital.
2. In these circumstances I.C.S. request that very careful consideration is given to the subject before any proposals to abolish crossband and crosspair working are approved.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 260-E

2 May 1974

Original : English

COMMITTEES 5 AND 6

Federative Republic of Brazil *)

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 5

Section IV

B/260/4

MOD

Table of Frequency Allocations

10 kHz to 275 GHz

kHz

Region 1	Region 2	Region 3
4 063-4 438		
MARITIME MOBILE		
208 209 <u>209A</u>		

B/260/5

ADD 209A

In the zone lying below the parallel 33° North, the frequency 4 136.3 kHz is the distress frequency in the HF band for radiotelephony, in addition to its normal use for call, reply and safety purposes (see No. 1351C).

*) This Document cancels and replaces Document 165.



ARTICLE 6

Special rules for the assignment and
use of frequencies

B/260/6 MOD 421 § 7. Any emission capable of causing harmful interference to distress, alarm, urgency or safety signals on the international distress frequencies of ~~500 kc/s~~ kHz or ~~2 182 kc/s~~ kHz is prohibited (see Nos. 187, 201, 1112 and 1325). This provision also applies to the frequency 4 136.3 kHz, designated the distress frequency in the HF band for radiotelephony, in the zone lying below the parallel 33° North, in accordance with No. 1351C.

ARTICLE 28

Conditions to be observed by mobile stations

After 987 :

B/260/7 ADD Bands between 4 000 and 23 000 kHz

B/260/8 ADD 987A In the zone lying below the parallel 33° North, all ship stations equipped with radiotelephone apparatus to work in the authorized bands between 4 000 and 23 000 kHz should be able to send and receive class A3H emission, and, optionally, class A3A or A3J with the carrier frequency of 4 136.3 kHz. However, after 1 January 1978, it is no longer authorized to send A3H emissions.

B/260/9 ADD 996A In the bands between 4 000 and 23 000 kHz, in the zone below parallel 33° North, be able to transmit with the carrier frequency of 4 136.3 kHz, using class A3H emissions and, optionally, class A3A or A3J emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3H emission and, optionally, class A3A or A3J emissions.

- B/260/15 ADD 1351D (2) In the zone lying below the parallel 33° North, before transmitting on the carrier frequency 4 136.3 kHz, a station in the mobile service should listen on this frequency for a reasonable period to make sure that no distress traffic is being sent (see No. 1717).
- B/260/16 ADD 1351E (3) The provisions of No. 1351D do not apply to stations in distress.
- B/260/17 MOD 1352.1 ¹ In Region 2, above the parallel 33° North, the frequency 4 136.3 ~~ke/s~~ kHz is also authorized for common use by coast and ship stations for single sideband radiotelephony on a simplex basis, provided the peak envelope power of such stations does not exceed 1 kW (see also No. 1352A.2).
- B/260/18 MOD 1352B § 15 (1) In the zone lying below between the parallel 33° North and 57° South, the carrier frequency 4 136.3 ~~ke/s~~ kHz is designated for call, reply and safety purposes. It may also be used for call and distress messages and for messages preceded by the urgency or safety signals and, if necessary, for distress messages (see No. 1351C).
- B/260/19 MOD 1353A (3) Stations using the frequencies 4-136.3-ke/s-and frequency 6 204 ke/s kHz in the conditions specified in ~~Nos. 1357B~~ and No. 1353 may continue to use class A3H emissions beyond 1 January 1978.
- B/260/20 ADD 1354A § 16A (1) In the zone lying below the parallel 33° North, 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 4 136.3 kHz.
- B/260/21 ADD 1354B (2) These stations shall maintain this watch by means of an operator using some aural method, such as headphones, split headphones or loudspeaker.
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MARITIME CONFERENCE

GENEVA, 1974

Document No. 261-E

3 May 1974

Original : English

COMMITTEE 5

Republic of the Philippines

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda item No. 318 : Revision of Article 35.

PHL/261/4 MOD 1349.1 In Region 3, this regulation does not
apply to Japan.

Reasons : To provide effective observation of the
silent period on 2 182 kHz on a world-wide
basis.



COMMITTEE 6

Norway

PROPOSAL FOR THE WORK OF THE CONFERENCE

ARTICLE 40

Referring to Document 262 is herewith presented a continuation in form of proposals to revised provisions of Section II and III of Article 40 of the Radio Regulations.

Section II.

Establishment of Accounts for Radiotelegrams

NOR/262/20 SUP 1510

Reasons : Provisions laid down in Nos. 1505A and 1510A.

NOR/262/21 ADD 1510A § 5 (I) In the event of the following optional special services being admitted by the administrations concerned :

- the total charge collected for prepaid replies,
- the charges for collation,
- the charges for copies of multiple telegrams,
- the charges due to intermediate ship or aircraft stations (direction from land),
- the charges collected for delivery by express as well as supplementary charges for delivery by post or by air mail (direction to land)



shall be included in the accounts according to the provisions of No. 1505A as for the direction from a mobile station to land, and of No. 1505C as for the direction from land to a mobile station (on the assumption that the radiotelegram has been transmitted to the mobile station).

NOR/262/22 SUP 1511

Reasons : Laid down in No. 1509B.

NOR/262/23 SUP 1512

Reasons : Laid down in No. 1509C.

NOR/262/24 SUP 1513

Reasons : Of no relevance in this connection

NOR/262/25 SUP 1514

Reasons : Provisions laid down in No. 1505B.

NOR/262/26 SUP 1515

Reasons : Provisions laid down in No. 1505F.

NOR/262/27 SUP 1516

NOR/262/28 SUP 1517

NOR/262/29 SUP 1518

Reasons : Provisions laid down in Nos. 1505C and 1510A.

NOC 1519 § 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.

NOR/262/30 SUP 1520

NOR/262/31 SUP 1521

Reasons : Provisions laid down in No. 1505E.

NOR/262/32 SUP 1522

Reasons : Laid down in No. 1505D.

NOR/262/33 SUP 1523

Reasons : Laid down in No. 1505D.

NOR/262/34 SUP 1524,
1525
and 1526

Reasons : See Document 18 (D), pages 11 to 14,
and Document 32 (HOL) page 35.

or

NOC 1524 § 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 :

NOR/262/35 MOD 1525 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. 1522 and 1523~~ No. 1505D (second radiotelegraph transmission);

NOR/262/36 MOD 1526 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. 1521 to 1523~~ 1505D and 1505E (first radiotelegraph transmission).

Section III.

Establishment of Accounts for Radiotelephone Calls

NOR/262/37 SUP 1527

Reasons : Provisions laid down in Nos. 1505A and 1505F.

NOR/262/38 SUP 1528

Reasons : Provisions laid down in No. 1505C.

NOR/262/39 SUP 1529
and 1530

Reasons : Provisions laid down in Nos. 1505B and 1505C.

NOR/262/40 SUP 1531

Reasons : Provisions laid down in No. 1505F.

NOR/262/41 SUP 1532

Reasons : Provisions laid down in Nos. 1505D and 1505E.

NOR/262/42 MOD 1533 § 14. For accounting purposes, collect radiotelephone calls; if admitted, be regarded as originating in the country or mobile station of destination.

COMMITTEE 6

Norway

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 40

Accounting for radiotelegrams, radiotelephone and
radiotelex calls

Section I

General

As a result of the preparation of revised provisions of Sections II and III and the efforts in putting a finishing touch on the proposed provisions of Section I, the following amendments should be made :

- NOR/262/15 ADD 1505A Add after "- the supplementary charges ..." the following :
- the ship and aircraft station charges, if any, when stations of destinations are mobile stations,
- NOR/262/16 ADD 1505B Delete sub-paragraph 2 ("- the accessory or ...").
- NOR/262/17 ADD 1505C Insert as a new 7th line :
- accessory charges, if any,
- NOR/262/18 ADD 1505D 1) Insert in sub-paragraph 2 after the word "No. 1505A" :
- (except for the land-line charges)



2) Insert between sub-paragraphs 2 and
3 :

- two land stations in the same country, provisions of No. 1505A and, if necessary, of No. 1505C, shall apply,

NOR/262/19 ADD 1505F

Insert as a last sentence :

These provisions shall also apply for accessory charges for special services in radiotelegrams. A table showing proposed accounting procedures in relation to the existing provisions is annexed.

Annex : 1

A N N E X

ILLUSTRATION TO THE PROPOSED ARTICLE 40, Nos. 1505A, 1505B AND 1505C

Administrations : A, B and C

Charges : L = land-line charge
CS = coast station charge
S = ship (or aircraft) station charge

Coast station :

Sender, calling party, etc. :

Category of radio traffic :	I Ship to shore	II Shore to ship (From country of the land station)	III Shore to ship (From a foreign country)
Illustration :			
Accounting Debits	B debits A (CS + L)		B debits C (CS + S, if any)
credits :		B credits A (S, if any)	B credits A (S, if any)
Proposed provisions :	1505A		1505B
		1505C	1505C
Existing provisions :			
Section II :	1510	1516 and 1517	1514, 1516, 1517
Section III :	1527	1528	1529 and 1530

Result : ADD 3 new provisions

SUP 8 existing provisions. Furthermore there is no need for
4 additional provisions relative to radiotelex accounts.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 262-E

4 May 1974

Original : English

COMMITTEE 6

Norway, Denmark, Sweden, France

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 40

To lighten the work of Committee 6 and its Working Group 6C and also to devise more up-to-date and practical provisions pending the implementation of the Final Acts of the next World Administrative Radio Conference to be held in 1979, the delegations of the above-mentioned countries present a redraft of the General section of Article 40 of the Radio Regulations.

This redraft is based upon Document No. 18 (Federal Republic of Germany) and Document No. 32 (Netherlands), taking into account contributions from other countries, and should thus represent a sort of common denominator of the viewpoints of several countries.

If the redraft finds support in the Working Group and the Committee, it could result in the adoption of concise general provisions covering the most important items of accounting in the maritime mobile service. In sections II and III only provisions for a few specialities would be left. If the reaction of Working Group 6C is favourable a redraft of the rest of Article 40 could be submitted within a short time.

The following amendments and additions are proposed :



ARTICLE 40

Accounting for radiotelegrams
and radiotelephone and
radiotelex calls

NOR/DNK/ MOD 1505 § 1. (1) In principle, land station and
S/F/262/1 ship and aircraft station charges shall not be
entered in the international telegraph and
telephone and telex accounts.

NOR/DNK/ ADD 1505A (2) In the case of radiotelegrams and
S/F/262/2 radiotelephone and radiotelex calls originating
from mobile stations :

- the land station charges,
- the land-line charges,
- the accessory charges to be considered
in the accounting, if any, and
- the supplementary charges for radio-
telephone calls with special facilities
to be considered in the accounting, if
any,

shall be included in the accounts of the maritime
mobile service by the administration of the land
station to the debit of the administration which
issued the licence for the mobile station.

NOR/DNK/ ADD 1505B (3) In the case of radiotelegrams and
S/F/262/3 radiotelephone and radiotelex calls to mobile
stations from a country other than that of the
land station :

- the land station charges,
- the accessory or supplementary charges
to be considered in the accounting,
if any, and
- the ship and aircraft station charges,
if any,

shall be included in the accounts of the maritime mobile service by the administration of the land station to the debit of the administration of the country of origin.

NOR/DNK/
S/F/262/4 ADD 1505C (4) In the case of radiotelegrams and radiotelephone calls passing through a land station and destined for a mobile station of another nationality :

- the ship or aircraft station charges, if any,

shall be included in the accounts of the maritime mobile service by the administration of the land station to the credit of the administration which issued the licence for the mobile station.

NOR/DNK/
S/F/262/5 ADD 1505D (5) In the case of radiotelegrams and radiotelephone and radiotelex calls exchanged between two mobile stations through

- one land station, the provisions of No. 1505A and, if appropriate, of No. 1505C shall apply,
- two land stations in different countries, the provisions of No. 1505A shall be applied by the administration of the first land station, and No. 1505B and, if appropriate, 1505C by the administration of the second land station.

NOR/DNK/
S/F/262/6 ADD 1505E (6) In the case of radio traffic exchanged between two mobile stations without the intervention of land stations, the charges, if any, shall not be included in the accounts of the maritime mobile service.

NOR/DNK/
S/F/262/7 ADD 1505F (7) The land-line charges shall be included in the international telegraph, telephone and telex accounts and shall be accounted for according to the provisions of the Telegraph Regulations and Telephone Regulations, with due regard to C.C.I.T.T. Recommendations.

Reasons : More precise version of the
appropriate provisions of Nos. 1515
1527
1531
and extended to cover the telex accounts.

NOR/DNK/ SUP 1506
S/F/262/8

NOR/DNK/ SUP 1507
S/F/262/9

Reasons : It seems unnecessary to retain these
provisions as the accounting system
described in No. 1506 is not in use at
present and it is very unlikely that it
will be used in the future.

NOR/DNK/ MOD 1508 § 4 2 Where the enterprise operating the land
S/F/262/10 station is not the administration of the country,
this enterprise may replace the administration of
that country as far as accounts maritime mobile
accounting are is concerned. In this event the
provisions of ~~Nos. 1510 to 1559~~ Article 40 shall
apply to such enterprise in the same manner as to
an administration.

NOR/DNK/ MOD 1509 § 3 (2) The administration which issued
S/F/262/11 the licence for a mobile station, is in principle
bound to accept and settle the accounts.

Reasons : To meet the need for provisions specifying
the competence and liability of
administrations for the acceptance and
settlement of accounts.

It should be obvious that it must be the
responsibility of the administration
which issued the licence and not of the
administration to which the land station
is subject, to take over the further
work of collection and also to bear any
financial loss in case the shipowner
(or his accounting agency) cannot be
traced, or is insolvent, etc.

NOR/DNK/ ADD 1509A § 4 (1) The country on whose territory
S/F/262/12 is established a land station serving as inter-
mediary for the exchange of radiotelegrams and
radiotelephone and radiotelex calls between a
mobile station and another country, is considered,
as far as application of land-line charges, is
concerned, as the country of origin or destination
and not as a transit country.

Reasons : This general provision is taken from
No. 2032 in the Additional Radio
Regulations where it applies to
radiotelegrams, and in this extended form
will give the necessary coverage for
radiotelephone and radiotelex calls.

NOR/DNK/ ADD 1509B (2) So far as concerns transmission of
S/F/262/13 radiotelegrams and radiotelephone and radiotelex
calls over the general international network of
telecommunication channels, the provisions of the
Telegraph Regulations and the Telephone
Regulations shall apply with due regard to
C.C.I.T.T. Recommendations.

Reasons : More precise version of the appropriate
provision of No. 1511 and extension to
radiotelephone and radiotelex calls.

NOR/DNK/ ADD 1509C (3) The land-line charges for
S/F/262/14 international radiotelegrams and radiotelephone
and radiotelex calls between ships and countries
other than that of the land station shall be the
same as those applied to telegrams and telephone
and telex calls in the international relation
concerned.

Reasons : More precise version of the appropriate
provision of No. 1512 and extension to
radiotelephone and radiotelex calls.

If adopted, this systematic and concise statement of the basic principles for accounting in the maritime mobile service for radiotelegrams and radiotelephone and radiotelex calls would make it possible to delete Nos.

1510, 1518, 1523, 1530,
1514, 1520, 1527, 1532,
1516, 1521, 1528,
1517, 1522, 1529,

and to avoid the inclusion of new paragraphs for the radiotelex service.

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 263-E

6 May 1974

Original : French,
English,
Spanish

COMMITTEE 5

FIRST REPORT OF WORKING GROUP 5D TO COMMITTEE 5

The attached definitions concerning on-board communications (MOD 36 and ADD 39A) have been adopted unanimously by the Working Group 5D.

Annex : 1



PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

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A N N E X

- MOD 36 Maritime Mobile Service : A mobile service between coast stations and ship stations, or between ship stations, in which survival craft stations may also participate, or between on-board communications stations.
- ADD 39A On-Board Communication Station : A low-powered mobile station in the maritime mobile service intended for use for internal communications on board a ship, or between a ship and its lifeboats and liferafts during lifeboat drills, or for internal communication within a group of vessels being pushed or towed, as well as for line handling and mooring instructions.
-

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 264-E
6 May 1974
Original : English

WORKING GROUP 5B

SECOND REPORT OF SUB-WORKING GROUP 5B-1

TO WORKING GROUP 5B

1. Terms of reference

The Sub-Working Group adopted the Terms of Reference shown in the Annex.

2. General considerations

It was agreed that any limit imposed on the power of ship or coast station transmitters should be regarded as an upper limit. Ship and coast stations, at all times, should use only the minimum power necessary.

3. Ship station transmitters

The Sub-Working Group reached the unanimous view that an unqualified limit of 1.5 kW peak envelope power should be imposed on all ships' transmitters emitting SSB signals in the maritime mobile HF radiotelephone bands.

4. Coast station transmitters

A small overall majority favoured the adoption of an unqualified limit of 5.0 kW peak envelope power whilst the other delegates stated that higher powers (ranging from 10 to 20 kW PEP) were essential to the provision of a satisfactory service.

Other views expressed were :

- that different limits should be applied to each band;



- that calling frequencies, on which omnidirectional antennae are normally used, should have a higher limit than working frequencies;
- that one limit should be applied generally but that provision should be made for exceeding the limit on certain difficult paths;
- that the use of exceptionally long propagation paths should be avoided, wherever possible, by using a suitable coast station nearer the ship;
- that the relationship between ship and coast station transmitter power limits should take account of the difference in noise levels;
- that the equivalent powers of A3, A3A and A3J emissions had been published in C.C.I.R. Document A/1027 annexed to Conference Document 126.

5. Sharing potential

The existing channel-sharing potential would be considerably increased by :

- the full use of SSB emissions to the exclusion of DSB;
- the greater use of directional antennae;
- the adoption of improved operating procedures.

Unfortunately, in none of these cases could the resulting improvement be quantified.

Annex : 1

A N N E X

CONTINUATION OF THE TERMS OF REFERENCE
OF SUB-WORKING GROUP 5B-1

2. To consider a possible power limitation for both coast and ship station transmitters in the HF radiotelephony channels of Appendix 17 without jeopardizing a satisfactory service quality in either direction of the circuit, taking into account
- the environmental conditions on board the ship as well as on the coast;
 - the possible use of directional antennae, especially at the coast station;
 - variations in receiving conditions due to the frequency and geographical location;
 - the improvement in sharing possibilities achievable by imposing power limitations.
-

COMMITTEE 5

Note by the Secretary-General

EXTRACT OF RADIOTELEPHONE FREQUENCIES (4 000 to 27 500 kHz)

LISTED IN THE LIST OF COAST STATIONS

The General Secretariat prepares and publishes the List of Coast Stations in accordance with Article 20 of the Radio Regulations. Several delegations have, in the course of the work of Committee 5, expressed the wish to have made available the data on the frequencies notified in the HF band (4 000 - 27 500 kHz) for radiotelephone stations shown in this List.

The General Secretariat has, for the purposes of checking and coordinating the data contained in the List of Coast Stations with that in other lists (Radio Regulation 815), prepared a frequency index for the stations shown in the Vth Edition which has just been issued.

An extract from this index (up-dated to include notifications received for inclusion in the forthcoming first supplement) for the frequency band 4 000 - 27 500 kHz is attached, together with a key to the columns and symbols utilized.

The data is shown both in frequency order and stations order. It should be noted that the frequencies shown are carrier frequencies.

M. MILI

Secretary-General

Annex : 1*)

*) Distribution : 1 per delegation in the interest of economy.



COMMITTEES 4, 5 AND 6Australia

PROPOSALS FOR THE WORK OF THE CONFERENCE

ADD

B. Distress

AUS/266/88
Rev.

ADD 1351C

In the zone of Regions 1 and 2 south of the parallel 20° north and in the zone of Region 3 south of the parallel 25° north to enable the frequency (4 136) kHz to be used to supplement the frequency 2 182 kHz, for distress purposes, stations of the aeronautical and maritime mobile service even after 1 January 1982 may use the class of emission A3H on this frequency. (Although it would be in their own interests for all international ships and aircraft entering the above zones to be provided with facilities for the use of (4 136) kHz, for distress and safety purposes, it should be noted that such provision is not mandatory.)

AUS/266/89

ADD 1351D

In
..... the zone of Region 3 south of the parallel 25° north to enable the frequency 6 204 kHz to be used to supplement the frequency 2 182 kHz, for distress purposes, stations of the aeronautical and maritime mobile service even after 1 January 1982 may use the class of emission A3H on this frequency. (Although it would be in their own interests for all international ships and aircraft entering the above zone to be provided with facilities for the use of 6 204 kHz, for distress and safety purposes, it should be noted that such provision is not mandatory.)



MARITIME CONFERENCE

GENEVA, 1974

Document No. 266-E(Rev.1)

8 May 1974

Original : English

COMMITTEES 4, 5 AND 6

Australia

PROPOSALS FOR THE WORK OF THE CONFERENCE

ADD

B. Distress

AUS/266/88
Rev.

ADD 1351C

In the zone of Regions 1 and 2 south of the parallel 20° north and in the zone of Region 3 south of the parallel 25° north to enable the frequencies (4 136) and 6 204 kHz to be used to supplement the frequency 2 182 kHz, for distress purposes, stations of the aeronautical and maritime mobile service even after 1 January 1982 may use the class of emission A3H on these frequencies. (Although it would be in their own interests for all international ships and aircraft entering the above zones to be provided with facilities for the use of (4 136) and 6 204 kHz, for distress and safety purposes, it should be noted that such provision is not mandatory.)



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 266-E

7 May 1974

Original : English

COMMITTEES 4, 5 AND 6

Australia

PROPOSALS FOR THE WORK OF THE CONFERENCE

B. Distress

AUS/266/88 ADD 1351C To enable the frequencies (4 136) and
6 204 kHz to be used to supplement the frequency
2 182 kHz, for distress purposes, stations of the
aeronautical and maritime mobile service even after
1 January 1982 may use the class of emission A3H on
these frequencies.



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Corrigendum No. 1 to
Document No. 267-E
23 May 1974
Original : English

COMMITTEE 5

Iceland

PROPOSALS FOR THE WORK OF THE CONFERENCE

In response to the request of the Sub-Working Group 5C-3/F, as addressed to the meeting of the Sub-Working Group on 22 May 1974, the Icelandic delegation has reconsidered the frequency requirement of Iceland in the HF radiotelephony band and has arrived at the following revised figures for the minimum present requirements :

Frequency bands in MHz	Number of required frequencies
4	4
6	2
8	4
12	4
16	4
22	2



MARITIME CONFERENCE

GENEVA, 1974

Document No. 267-E

7 April 1974

Original : English

COMMITTEE 5

Iceland

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of Iceland in the revised Frequency Allotment Plan for Coast Radiotelephone Stations (Appendix 25 to the Radio Regulations) will be as follows :

Frequency bands in MHz	Number of required frequencies
4	4
6	3
8	4
12	4
16	4
22	2

MARITIME CONFERENCE

GENEVA, 1974

Document No. 268-E

7 May 1974

Original : English

PLENARY MEETING

FIRST REPORT OF COMMITTEE 6

(OPERATION)

Article 24

MOD Title
MOD 912
MOD 913

Article 28, Section III

MOD 970

Article 25

ADD 927A

Article 36

Section V

MOD 1429
MOD 1430

Section VI

MOD 1449
ADD 1449A
MOD 1450
MOD 1451

Section VIIIA

MOD 1476L

Section IX

MOD 1478
MOD 1482A

Section X

MOD 1492

Appendix 13A

Q code

Article 40, Section I

ADD 1504A

Resolution

1. All proposals relating to the above paragraphs were considered.
2. The Committee unanimously adopted the annexed texts for the paragraphs and the resolution.

W.W. SCOTT
Chairman



Article 24

- | | | |
|-----|-------|--|
| MOD | Title | Class and Minimum Number of Operators for Stations on board Ships and Aircraft |
| MOD | 912 | § 1. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships and aircraft of its own nationality have personnel adequate to perform efficient service. |
| MOD | 913 | § 2. The personnel of ship and aircraft stations in the public correspondence service shall, having regard to the provisions of Article 23, include at least: |

Article 28, Section III

- | | | |
|-----|-----|--|
| MOD | 970 | § 12. Ship stations equipped with radiotelegraph apparatus intended to be used for normal traffic by Morse telegraphy 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. |
|-----|-----|--|

Article 25

- | | | |
|-----|------|---|
| ADD | 927A | c) making a general call to all stations announcing the closing down of the service and advising the time of re-opening, if other than its normal hours of service, |
|-----|------|---|

ARTICLE 36

Section V

MOD 1429

(a) Radiotelegraphy :

- the distress signal;
- 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.

MOD 1430
Mar

(b) Radiotelephony :

- the distress signal;
- the call sign or other identification of the station sending the distress message, spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- the call sign or other identification of the station acknowledging receipt, spoken three times;
- the word RECEIVED (or RRR spoken as ROMEO ROMEO ROMEO in case of language difficulties);
- the distress signal.

Section VI

MOD 1449 § 34. (1) When distress traffic has ceased, 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" (CQ) indicating that normal working may be resumed.

ADD 1449A When complete silence is no longer necessary on a frequency which is being used for distress traffic, the station controlling the traffic shall transmit on that frequency a message addressed "to all stations" (CQ) indicating that restricted working may be resumed.

MOD 1450 (2) (a) In radiotelegraphy, the message referred to in No. 1449 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.

(b) In radiotelegraphy, the message referred to in 1449A 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 is in distress;
- the service abbreviation QUZ.

MOD 1451

(3) (a) In radiotelephony, the message referred to in 1449 consists of :

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- 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".

(b) In radiotelephony, the message referred to in 1449A consists of :

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- 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 is in distress;
- the words PRU-DANCE pronounced as the French word "prudence".

Section VIIIA

- MOD 1476L (9) Equipment designed to transmit emergency
Mar position indicating radiobeacon signals on the frequencies
121.5 MHz and 243 MHz shall be in agreement with the
recommendations and standards recommended by the organizations
mentioned in Resolution No. Mar 7.

Section IX

- MOD 1478 (2) In radiotelephony, the urgency signal consists
of three repetitions of the group of words PAN PAN, each word
of the group pronounced as the French word "panne". The urgency
signal shall be transmitted before the call.

- MOD 1482A (2A) However, in the maritime mobile service, the
Mar message shall be transmitted on a working frequency -

(a) in the case of a long message or a
medical call or

(b) in areas of heavy traffic in the case of
the repetition of a message transmitted in accordance with the
provision as laid down in No. 1482.

An indication to this effect shall be given at
the end of the call.

Section X

- MOD 1492 (3) The safety message which follows the call
should be sent on a working frequency. A suitable announcement
to this effect shall be made at the end of the call.

APPENDIX 13A

After QUY :

	Abbreviation	Question	Answer or advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In sub-section "Suspension of Work", after QUM :

	Abbreviation	Question	Answer or advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In sub-section "Distress" after QUM :

	Abbreviation	Question	Answer or advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In sub-section "Search and Rescue" after QUY :

	Abbreviation	Question	Answer or advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

ARTICLE 40

Section I

ADD 1504A In the Maritime Mobile Service, the
 following are definitions of certain terms used
 in Article 40 :

Land-line charges

Charges relating to transmission over the general
national and international network of
telecommunication channels.

/Note to the Editorial Committee : It is expected
that other definitions will be added as
consideration of Article 40 proceeds./

DRAFT

RESOLUTION No. Mar ...

Relating to the accounting for maritime mobile public
correspondence service

The World Administrative Radio Conference, Geneva, 1974,
considering

- a) that the existing methods of accounting for public correspondence in the maritime mobile service are complex and expensive for administrations and recognized private operating agencies concerned with maritime accounting;
- b) that proposals were made to the World Administrative Radio Conference, Geneva, 1974 to amend the existing regulations relating to methods of accounting and particularly not to include ship charges in the maritime accounts exchanged between administrations and recognized private operating agencies concerned with maritime accounting;
- c) that modern accounting aids are available which could possibly improve and expedite the preparation and exchange of accounts;
- d) that, for example, there is already a need for improved accounting methods to provide for:
 - automatic access between ship and shore; and
 - direct access by telex and telephone, from subscribers in one country, to ships via coast stations in another country;
- e) that there may be a future need for an accounting system common to both terrestrial and satellite maritime mobile services; or, at least, two systems based on the same principles;

resolves

that a study should be undertaken with a view to improving the present accounting methods in the maritime mobile service and providing for foreseeable developments;

invites the C.C.I.T.T.

1. to undertake a study of the annexed question as a matter of urgency with a view to achieving, as soon as possible, a reduction of the work load upon administrations and recognized private operating agencies concerned with maritime radio accounting;
2. to ask administrations to send delegates particularly concerned with maritime accounting to the relevant Study Group meetings;
3. to ensure that the results of the study are included in the Study Group Reports to the Sixth Plenary Assembly in 1976 and that these Reports, as approved by the Plenary Assembly, are distributed to the administrations of all Members of the Union before 1 January 1977 to enable them to prepare proposals for the World Administrative Radio Conference foreseen in 1979;

invites

administrations and recognized private operating agencies concerned with such accounting, pending the results of this study, to take all steps calculated to mitigate, as far as possible, the inconvenience caused by accounting for ship charges.

Annex : 1

/ex - DT/28
page 2
resolves 1.7

/ex - DT/28
page 3
resolves 2.7

A N N E X

What amendments are necessary to the principles and methods of the accounting of the maritime mobile public correspondence service to improve present methods including accounting for ship charges and to provide for foreseeable future developments?

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Corrigendum No. 1 to
Document No. 269-E
15 May 1974

COMMITTEE 4

SUMMARY RECORD
OF THE
FOURTH MEETING OF COMMITTEE 4

On page 5, replace the third sentence in the statement by the delegate of the U.S.S.R. by the following :

"The new digital selective calling system was not yet recommended by the C.C.I.R., practical trials had not yet been carried out on it and its technical features were still under study by the C.C.I.R."



MARITIME CONFERENCE

GENEVA, 1974

Document No. 269-E

8 May 1974

Original : French

COMMITTEE 4

SUMMARY RECORD

OF THE

FOURTH MEETING OF COMMITTEE 4

Friday, 26 April 1974, at 1500 hrs

Chairman ; Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed

Document No.

1. General discussion on proposals concerning
selective-calling systems
ADD Article 28B - HOL/26/81, USA/54/76
Appendix 20C - D/13/16
ADD Appendix 20D - HOL/26/89, USA/54/237
2. Document No. DT/7

-

DT/7



1. General discussion on proposals concerning selective-calling systems

Since various technical bodies such as C.C.I.R. and I.M.C.O. had been considering the question of selective calling for the past fifteen to twenty years, the Chairman felt that it would be worthwhile to give a short historical introduction to the subject. He defined the function of this type of calling system as follows: to give a particular mobile or coastal station the requisite indication informing it that there was a message waiting for it which would be transmitted. Additional information should give details such as the identification of the calling station, the position of the ship and command functions. The 1967 Maritime Conference (W.A.R.C.) had adopted a sequential single-frequency code (SSFC) for selective-calling. This had been brought into practice with certain reservations. It is rather a basic system and is used so far to a fairly limited extent. He found it incredible that at the present time with present-day techniques available it was not possible to contact ship or coastal stations without using human intermediaries, i.e. operators who listened-in. This method is restrictive and did not guarantee adequate provisions as far as safety was concerned. There was therefore an urgent need to establish a new system which would be efficient and reliable, and would not involve human intermediaries so that the type of maritime disasters which had occurred lately could be avoided.

With the SSFC system it was possible to call ships but there was no means of giving indications as to the exact nature of the call. In order to make satisfactory provision for safety in certain confined sea areas e.g. the North Sea within this system it could be that ships will have to listen in to between 100 and 200 calls a day which was materially impossible.

He quoted certain points from the text of a document drawn up by I.M.C.O. dealing with the required operational characteristics, among others individual selective calling, ship-to-shore, shore-to-ship and ship-to-ship use, additional information and the need to give the order of priority of calls, identification of the transmitting station and certain command functions, and finally an efficient alert system for ships in distress by making the relevant information concerning them available to all stations.

He pointed out that C.C.I.R. Study Group 8 had given detailed consideration to the problem of selective calling. It had examined a system using C.C.I.T.T. International Alphabet No. 5 for passing alphanumerical information and also another system using C.C.I.T.T. International Alphabet No. 2.

Japan had also proposed a type of system using Alphabet No. 5 based on a constant-ratio time-diversity code of transmission. From this evolved a unified system, on which there was general agreement.

The technical characteristics for this system were laid down in an Annex to a C.C.I.R. Report 501 (Rev. 74) contained in Doc. 8/1033. The operational characteristics are contained in a C.C.I.R. draft recommendation as in C.C.I.R. Doc. 8/1028.

In conclusion, he stressed the need to find a way to introduce the system for use in the Maritime Mobile Service before the next M.W.A.R.C. in 1982.

The representative of the Intergovernmental Maritime Consultative Organization (I.M.C.O.) said that his Organization's viewpoint was set forth in detail in Document No. 179, which contained a draft supplementary regulation together with proposals on, inter alia, selective calling systems. On pages 4 and 5 it was made clear that :

- i) introduction of a binary digital system should await the outcome of C.C.I.R. studies on the subject;
- ii) the selective calling system should have an important function in distress alerting and for safety purposes;
- iii) the system should be able to serve as an automatic alerting device in distress cases and should transmit, receive and record an initial alerting signal followed by additional information such as the position of the ship in distress;
- iv) the system should also be employed for urgency and safety traffic without restrictions on the use of the "all stations" call;
- v) the system should be sufficiently moderate in price to encourage widespread installation in ships fitted with radio equipment, in accordance with the current provisions of Chapter IV of the Convention on Safety of Life at Sea.

The delegate of the Netherlands, introducing his administration's proposals, said that the system evolved in his country was an integral part of a narrow-band, direct-printing radiotelegraph system. His country's views were set forth in Document No. 26 of the Conference. The device advocated had long been used in its simplex TOR form, was particularly useful to airlines, and had been tested with 100% reliability in VHF satellite trials via ATS-3. These proposals should however be brought in line with the C.C.I.R. documents as stated by the Chairman. He fully endorsed the Chairman's remarks on the limitations of the present SSFC system adopted in 1967.

The delegate of the United States, introducing his delegation's proposals, agreed with the representative of I.M.C.O. and the delegate of the Netherlands, adding that the Chairman's very full introduction had answered several questions in advance. Because of the great limitations of the system adopted in 1967, the United States had not encouraged its use. The system did not, for instance, meet the needs of merchant shipping. The United States had therefore given careful consideration to the possibility of using a digital selective calling system, which had already been successfully tested in that country, and was in line with work done by other countries including Japan and the Netherlands.

In conclusion, he hoped that a satisfactory digital system could be applied without delay in the Maritime Mobile Service.

The delegate of the Federal Republic of Germany briefly introduced the proposal submitted by his country with respect to Appendix 20 C, the purpose of which was in line with C.C.I.R. Recommendation 257-1 in considering that the total duration of the "all ships call" signal should be at least five seconds.

In reply to questions from the delegate of Greece, the delegate of the United States explained that commercial operation of a selective calling system should follow from the results of the present Conference.

The delegate of the Netherlands pointed out that the basic system developed in his country would not be very expensive.

The delegate of the U.S.S.R. considered that although the SSFC system adopted in 1967 had given satisfactory results it did not meet all the needs of the Maritime Mobile Service. At present, a simplex call system for direct-printing telegraphy links was also available, but it was essential as well to introduce a new system with greater possibilities, capable of meeting present and future requirements in the Maritime Mobile Service. The new digital selective calling system recommended by the C.C.I.R. had not yet given any practical results, and was at present at the stage of having its characteristics listed in C.C.I.R. texts. He felt that the Conference should take the necessary steps to ensure that this digital system was brought into service quickly and its performance under actual operating conditions observed. It would be premature to seek to include the technical characteristics of such a system in the Radio Regulations at present.

Following a remark by the Chairman, the delegate of the U.S.S.R. agreed that it would be useful if the Conference set up machinery to enable the new digital selective calling system to go into operation as soon as possible.

The delegate of the United Kingdom in turn recognized that a selective calling system superior to the SSFC system should be applied, but was against trying to go ahead too quickly. In his opinion it was necessary to wait for the C.C.I.R. to make further progress in its work before envisaging the introduction of the digital selective calling system, and no Recommendation of the C.C.I.R. could be included in the Regulations before first undergoing careful study by the Conference.

The delegate of Sweden considered that the introduction of a digital selective calling system would lead to a radical improvement of maritime communication. He was in favour of adopting modifications to the Radio Regulations whereby the above-mentioned system could be introduced in the near future.

The delegate of Japan supported the view just expressed and thought it urgent to adopt such a system, which would also be useful in the case of distress calls. It was therefore important for the present Conference to take the necessary measures to meet the urgent requirements of the Maritime Mobile Service and to prepare a text designed to become Appendix 20 D.

The delegate of the Federal Republic of Germany shared the viewpoints of the delegates of the United Kingdom and the U.S.S.R., and hesitated before immediately including in the Radio Regulations the technical characteristics of a system which had not yet been tested under actual conditions.

The Chairman thought it wise to entrust the thorough study of the question to Working Group 4B, which would have the task of finding a means of introducing the proposed digital selective calling system in the not too distant future, after the C.C.I.R. has completed its tasks in this respect.

In the absence of comments, it was agreed that Working Group 4B should examine the various relevant proposals and should envisage the possibility of instituting machinery to authorize the entry into operation of a digital selective calling system as soon as the C.C.I.R. had completed its work on that question.

2. Document DT/7

The Secretary of the Committee presented the document and indicated the names of the secretaries of the various Working Groups, as follows :

- Group 4A: Mr. M. Sant (Box No. 1015),
- Group 4B: Mr. W. Timofeev (Box No. 1029),
- Group 4C: Mr. M. Frachet (Box No. 1024).

He also pointed out that the following text should be added, in parentheses, at the end of the first paragraph of the terms of reference of Working Group 4A (cf. Document DT/7) : "(This work will be done jointly with Working Group 5E)".

The meeting rose at 1600 hours.

Mr. M. SANT

Secretary

Capt. V.R.Y. WINKELMAN

Chairman

MARITIME CONFERENCE

GENEVA, 1974

Document No. 270-E(Rev.1)

21 May 1974

Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

FIFTH MEETING OF COMMITTEE 4

Wednesday, 1 May 1974, at 1505 hrs

Chairman : Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed

Document No.

- | | |
|--|---|
| 1. Summary record of the first meeting | 224 |
| 2. Summary record of the second meeting | 225 |
| 3. Reports by the Chairmen of Working Groups 4A and 4B and matters arising therefrom | - |
| 4. Proposals on the use of calling frequencies | AUS/34/57, 58, 59
G/57/83, 84, 85
87, 88, 89
HOL/27/136, 137
138, 139
NOR/185
NZL/86(Rev.)/51, 52, 53 |
| 5. Examination of Document No. DT/7(Rev.) | DT/7(Rev.) |
| 6. Designation of the Chairman of Working Group 4C | - |
| 7. General discussion on the proposals assigned to Working Group 4C | DT/7(Rev.) |



1. Summary record of the first meeting (Document 224)

Pages 1 to 6

Approved.

Page 7

The delegate of Italy said that the following phrase should be added at the end of his statement : "... provided the consequent reduction of frequencies available for radiotelegraphy was offset by better spectrum utilization to meet the requirements of radiotelegraphy".

Page 8

Approved.

Document 224 was approved as amended.

2. Summary record of the second meeting (Document 225)

Approved.

3. Reports by the Chairmen of Working Groups 4A and 4B and matters arising therefrom

The Chairman of Working Group 4A said that there was little to report on the meetings held jointly by his Group and Working Group 5E and that it would be difficult to reach any final conclusions on the space to be made available for radiotelephony until the rearrangement of Appendix 15 and other related allocations was completed.

The Chairman of Working Group 4B said that the Group had set up three sub-groups to draft texts relating to narrow-band direct-printing telegraphy, one to prepare a new Article 28C and Appendix 20B, a second on the use of VHF for direct-printing and a third on notification and registration procedures for narrow-band direct-printing.

The Working Group was anxious to have the Committee's guidance with regard to an administrative issue concerning the technical characteristics of direct-printing equipment to be set out in Appendix 20B. It would be seen from the summary record of the second meeting of Committee 4 (Document 225) that the consensus had been not to reproduce C.C.I.R. Recommendation 476(Rev.72) in that Appendix, so as not to overload the Radio Regulations, but merely to refer to the Recommendation;

but it had been pointed out in the Working Group that that procedure might not be formally acceptable, since C.C.I.R. Recommendations, being subject to change, did not have the status of Regulations, which could only be drawn up by the competent world administrative conferences, in accordance with No. 267 of the Montreux Convention.

The Deputy Secretary-General confirmed that new Regulations could only be prescribed by world administrative conferences, which were attended by government representatives, whereas C.C.I.R. Plenary Assemblies were meetings of representatives of administrations adopting recommendations.

If it wished, the Conference could adopt the text of the current draft C.C.I.R. Recommendation and this would need to form part of the Final Acts of the Conference, either as an annex to the Regulations or some other suitable reference in the Final Acts. A similar problem has occurred at the 1971 Space Conference which had adopted Resolution Spa2 - 6 on the technical criteria recommended by the C.C.I.R. from time to time for sharing frequency bands between certain space services. Administrations were always free to implement C.C.I.R. Recommendations by agreement provided that no interference was caused thereby to other administrations which did not wish to have a new recommendation applied to considerations involved in their services. Thus, Spa2 envisaged application of certain criteria recommended by the C.C.I.R. after agreement between administrations by a referendum conducted by the Secretary-General; the resolution made it clear that administrations wishing to do so would continue to have applied the existing Regulations, including for coordination purposes by the I.F.R.B. An alternative might be to have some basic principles concerning this matter in the Regulations with other criteria to be covered by the general clause "taking account of C.C.I.R. Recommendations..." - a method which had been useful in the past to ensure some flexibility for change, and if necessary the resolution to contain the specific matters representing agreement at this time, but which might be changed after C.C.I.R. Recommendation and consultation of the Members concerning implementation.

The representative of the I.F.R.B. agreed that the best solution would be to follow the course set out in Resolution Spa2 - 6. Under Nos. 667 and 668 of the Radio Regulations countries could choose equipment based on the most recent technical advances, provided they did not thereby infringe the rights of any other administration.

The Chairman pointed out that the Space Conference had been concerned mainly with geographical considerations, whereas the problem at issue related to equipment already installed on certain ship stations. Accordingly, it would seem wise to reproduce the C.C.I.R. Recommendation in the Appendix.

The delegates of the United States of America and New Zealand said that the course advocated by the Chairman seemed to be unduly restrictive, since it would be difficult to introduce the necessary modifications in the equipment if its technical parameters were explicitly stated in the Radio Regulations. Some less mandatory way of referring to C.C.I.R. Recommendation 476 should be devised, on the basis of Article 12 of the Radio Regulations or of Resolution Spa2 - 6.

The Chairman said he hoped that the discussion would provide Working Group 4B with sufficient guidance in the matter.

4. Proposals on the use of calling frequencies (Documents AUS/34/57-59, G/57/83-85, 87-89, HOL/27/136-139, NOR/185, NZL/86(Rev.)/51-53)

The Chairman invited the Committee to consider the general issue of whether the existing calling system, based on the orderly division of calling frequencies between ships, should be retained, or whether the special calling frequencies proposed at the 1967 Maritime Conference should be introduced, on the basis of an expanded division of calling frequencies between ships and coast stations. The idea was to reduce the amount of searching in the calling band and to enable coast stations to keep watch on fixed frequencies so as to improve access to coast stations, to reduce calling to a minimum and to spread the volume of traffic more evenly over twenty-four hours. Working Group 6A would be unable to consider the question for some time and had requested Committee 4 to hold a preliminary discussion on it. The outcome of that debate might be the establishment of an ad hoc Working Group to consider a new calling system, on the understanding that Joint Working Group 4A/5E would continue to work on the basis of the existing calling frequencies.

The delegates of the United Kingdom, Australia, the United States of America and France said that they would prefer to postpone discussion of the proposals on the subject until Committee 6 had completed its consideration of calling band requirements.

The Chairman pointed out that the proposals in question related directly to Article 32 of the Radio Regulations, which had been assigned to Committee 4. Moreover, a clarification of the issue would help Joint Working Group 4A/5E with the sub-division of Appendix 15.

The delegates of Greece, India, New Zealand, Norway and the Netherlands supported the Chairman's suggestion that a discussion on the question of principle should be held in Committee 4.

The delegate of the United Kingdom said that the proposed ad hoc Working Group should be a joint body of Committees 4 and 6.

The delegate of Australia said that his delegation would not press its proposals (AUS/34/57-59), since it had found that some of the others submitted to the same end were broader than its own and would probably be more beneficial.

The delegate of the United Kingdom, introducing his delegation's proposals (G/57/83-85, 87-89), said that the main inadequacies of the existing system were that the number of calling frequencies was too great for coast stations to monitor efficiently and that the volume of signalling on the calling frequencies was too great. The United Kingdom proposed to remedy those shortcomings by reducing the calling bands from 17 to 12 frequencies, allocating two series of frequencies for use under Nos. 1178 and 1013E of the Radio Regulations, dividing the remaining 10 frequencies in each band into two groups of 5 allocated to groups of countries according to size of fleet, geographical position and other criteria, assigning an appropriate common frequency and at least one primary frequency to each ship - on the understanding that coast stations would guard the common frequencies at all times - and reducing the length of calls.

The delegate of the Netherlands said that the new calling arrangements proposed by his delegation (HOL/27/136-139) would retain a calling band of 17 frequencies with the existing spacing. Since most ship station transmitters could accommodate only two calling frequencies in each band and since coast stations could only listen to spot frequencies outside busy hours, it was proposed to divide the 17 frequencies into two parts, each containing 8 frequencies with a centre frequency (9) designated as national or common or general calling frequency. Watch keeping for any coast station would thus be restricted to 9 frequencies during busy hours and to two during quiet hours. The frequency division between countries in Annex 5 to the Netherlands proposal had been chosen arbitrarily and was open to discussion and adjustment.

It should be noted that the frequencies 4 182, 6 273, 8 364, 12 546, 16 728 and 22 245 kHz would no longer be guarded by all coast stations, but only by those in the first group during busy hours and outside those hours by a few designated coast stations preferably selected along the Atlantic and Pacific coasts. With regard to the other frequencies in harmonic relationship with frequency 8 364 kHz, his delegation believed that they could become available as normal calling frequencies, since they had not been widely used by the aeronautical mobile service to which they had been allotted.

Finally, although his delegation had submitted no proposals concerning the length of calls, it considered that some reductions should be made.

The delegate of Norway introduced Document 185 proposing a revised assignment of calling frequencies so as to eliminate the defects of the present system. The Norwegian proposal combined with the proposal for a new Article 29 (Document 231) would reduce calling considerably.

Tests had indicated that it would be possible to reduce loading in calling bands to about one-tenth.

As would be seen from the Annex in Document 185, 17 channels were proposed in the 4 to 16 MHz bands. Fewer calling channels were proposed in higher bands, namely 10 in the 22 MHz band and 5 in the 25 MHz band. All were within the present calling bands. A slight reduction in the total bandwidth was proposed, e.g. 2 kHz in the 4 MHz and 25 kHz in the 22 MHz band. The frequency bands from 4 to 16 MHz were harmonically related and had a channel width of 400 Hz in the 4 MHz band increasing to 1600 Hz in the 16 MHz band.

The series 5/6 constituted general or common or international calling channels designed for use by all ships and to be guarded at all coast stations. The other 15 series in the 4 to 16 MHz bands could be allocated to countries and in the higher bands, 22 and 25, where fewer channels were proposed, more countries would have to share fewer individual channels.

Mid-frequency in each channel could be assigned to ships using crystals where frequency tolerance requirements are met and frequencies on either side of the mid-frequency could be assigned to ships with synthesized transmitters thus obtaining even distribution through the channels. Frequency 8 364 was in the middle of the general calling series and would not be allocated to any station but would be guarded by all stations so that any emergency signal would be picked up. The frequencies in Regulation 1178 which could be used by aircraft fell within the general calling channels and aircraft could therefore contact any coast station.

The procedure would allow ships to call their own coast station also on the general calling channels. In busy hours watch would be kept on the national and the general calling channels. During quiet hours watchkeeping could be reduced to the general (common) calling channels.

The main difference between the Norwegian and the United Kingdom proposals was that the former eliminated scanning and used fixed frequency receivers at all coast stations.

A tolerance of 50 parts per million was not quite enough and it should be 40 parts per million. For synthesized transmitters a frequency tolerance of 100 Hz was sufficient but 50 Hz might be preferable.

In the A1 working bands it would be possible to sub-divide the working frequencies in a similar manner and thereby obtain a more efficient utilization in these bands, for example by using 100 Hz increments throughout the bands. Such a distribution could be made without changing the present crystals and without any change in the frequency tolerance.

The delegate of New Zealand said that New Zealand was proposing (Document 86) a limited number of calling channels with an abbreviated calling system. There would be 5 national calling frequencies in each band plus one in each band designated as an international calling frequency and one in each band for aircraft.

Each group of 5 national frequencies would be assigned according to the Table in Appendix 15A in the New Zealand proposal to ensure equal loading and the number of frequencies to be watched by the coast station would depend on traffic needs. The list of administrations in Appendix 15A was not exhaustive. Where the traffic warranted it an administration could assign a frequency reserved for aircraft except for frequency 8 364 kHz. Coast stations must keep watch on one international calling frequency and one national calling frequency in each band. The special calling frequency provided for in Regulation 1013E was no longer necessary.

Since the New Zealand proposal had been formulated others had been studied and it was now thought that the number of frequencies proposed by New Zealand was too small but the idea was to provide a non-scanning type of watch with one international frequency and one or more national frequencies.

The delegate of the United Kingdom said that some frequency savings in the calling band could be made and improvements in the calling procedure were possible. He viewed the Norwegian proposal with favour and considered that on the question of the frequency space required it came near to the United Kingdom proposal. The calling frequencies in the Netherlands proposal were inadequate for busy stations.

The Joint Working Group 4A/5E ought to proceed on the basis of an average between the Norwegian and United Kingdom proposals.

The delegate of the United States of America said that as Committee 6A was overburdened, it would be desirable for Committee 4 to tackle calling frequencies, at least at the outset.

All proposals provided for only one common international frequency which would not suffice for his country which operated with many foreign ships.

The delegate of India thought that the Norwegian proposals were good but some further consideration would need to be given to arrive at an acceptable number of national and international calling frequencies. He thought that Working Group 6A can look at this question in more detail.

The delegate of the U.S.S.R. said that there was no objection to Committee 6 dealing with calling frequencies but Committee 4 would have to decide on the number of channels.

"In his country the proposed method of organizing calling channels and of spot frequency watchkeeping for ship calls by coast stations had been used for some years and had proved its effectiveness. The time taken for establishing communications with ships had been considerably reduced.

At the same time, the changeover from frequency band watchkeeping for ship calls to watchkeeping by coast stations on previously agreed spot frequencies required :

- a rather lengthy process of distributing frequencies among national coast stations. This distribution had taken the country about 17 months to achieve;
- the use of a large number of calling frequencies so as to avoid mutual interference between coast stations in a given basin. For each sub-band and sea basin it had proved necessary to employ several calling frequencies (a minimum of three).

His delegation considered that if the new method of organizing calling channels were to be adopted 1) the load should be evenly distributed between calling frequencies so as to avoid call overloading on individual frequencies and 2) the overall number of calling frequencies should be increased. The total number of calling channels should in any case be no lower than the present number."

The delegate of France favoured the Norwegian proposal which ensured that the best use would be made of the spectrum and took account of existing and future equipment. The best solution would be to combine that proposal with that of the United Kingdom. He suggested setting up of a Joint Group of Committee 4 and Committee 6 to examine this question.

The delegate of Denmark commended the Norwegian proposal. One problem to be discussed was the possibility of interference by stations of other services operating in the maritime bands. He thought that the operational aspects should be examined by Committee 6.

The delegate of New Zealand said that the Netherlands proposal should also be considered by a joint body of Committees 4 and 6 dealing with calling frequencies.

The delegate of Greece said that he could not agree to a reduction in the number of calling channels which the volume of traffic did not permit. He favoured the principles of the Norwegian proposal. He was in favour of a Joint Working Group of Committees 4 and 6.

The delegate of the Federal Republic of Germany said that the present system was unsatisfactory but any changes in it must be carefully scrutinized. Operational aspects would have to be examined in Committee 6. A compromise between the Norwegian and the United Kingdom proposals would be acceptable. The number of frequencies should be maintained at the existing level.

The delegate of the United Kingdom said that a compromise regarding the frequency space required should be possible as between the Norwegian and the United Kingdom proposals. Those proposals and that of the Netherlands would allow some reduction in the amount of calling space required. Operational details should be dealt with by Committee 6 and the Joint Working Group 4A/5E should proceed with the discussion on the basis of the existing calling frequency space required. Any subsequent adjustment would not be great and some increase in working channels was likely.

The delegate of Norway, referring to the United States point, said that two channels had been combined into one general calling channel in the Norwegian proposal. The general calling channel in each band had twice the width of the national channel. It was proposed to maintain the number of channels with a reduction in the total bandwidth. A country could subdivide the channels in conformity with the examples given in Document 185. In the higher bands a considerable number of discrete frequencies could be obtained within each calling channel.

It would be advantageous to allocate specific receiving channels to coast stations. If one channel was interfered with, a coast station would be aware of it and could direct ships to use a lower or higher calling band temporarily, or to use a common channel.

The delegate of the U.S.S.R. said that an increase in the number of channels could be achieved by reducing spacing but that would require greater stability in receivers and a change in the harmonic relationships of receivers and synthesizers.

The Chairman observed that there seemed to be general agreement on the need to improve the calling system by reducing or eliminating scanning.

He might consult the Steering Committee about the possibility of an ad hoc working group being set up with Committee 6 to deal with calling frequencies.

It was so agreed.

In the meantime Joint Working Group 4A/5E should continue its work on Article 7 on the basis of existing calling band provisions. An adjustment could be made later in the light of the outcome of the work of Committee 6 on calling procedures.

5. Examination of Document DT/7(Rev.)

The Committee took note of Document DT/7(Rev.).

6. Designation of the Chairman of Working Group 4C

The delegate of Italy undertook to serve as Chairman of Working Group 4C.

7. General discussion on the proposals assigned to Working Group 4C

The Chairman listed revisions in Annex 3 of Document DT/7(Rev.) according to which certain items would be transferred to Committees 5 and 6. These revisions would appear in a revised version of the document.

The meeting rose at 1815 hours.

The Secretary :

Mr. SANT

The Chairman :

Capt. V.R.Y. WINKELMAN

COMMITTEE 4

SUMMARY RECORD
OF THE
FIFTH MEETING OF COMMITTEE 4

Replace the second paragraph of the intervention by the delegate of the U.S.S.R. by the following :

"In his country the proposed method of organizing calling channels and of spot frequency watchkeeping for ship calls by coast stations had been used for some years and had proved its effectiveness. The time taken for establishing communications with ships had been considerably reduced.

At the same time, the changeover from frequency band watchkeeping for ship calls to watchkeeping by coast stations on previously agreed spot frequencies required :

- a rather lengthy process of distributing frequencies among national coast stations. This distribution had taken the country about 17 months to achieve;
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His delegation considered that if the new method of organizing calling channels were to be adopted 1) the load should be evenly distributed between calling frequencies so as to avoid call overloading on individual frequencies and 2) the overall number of calling frequencies should be increased. The total number of calling channels should in any case be no lower than the present number."



COMMITTEE 4

SUMMARY RECORD

OF THE

FIFTH MEETING OF COMMITTEE 4

Wednesday, 1 May 1974, at 1505 hrs

Chairman : Capt. V.R.Y. WINKELMAN (Netherlands)

Subjects discussed

Document No.

- | | |
|--|---|
| 1. Summary record of the first meeting | 224 |
| 2. Summary record of the second meeting | 225 |
| 3. Reports by the Chairmen of Working Groups 4A and 4B and matters arising therefrom | - |
| 4. Proposals on the use of calling frequencies | AUS/34/57, 58, 59
G/57/83, 84, 85
87, 88, 89
HOL/27/136, 137
138, 139
NOR/185
NZL/86(Rev.)/51, 52, 53 |
| 5. Examination of Document No. DT/7(Rev.) | DT/7(Rev.) |
| 6. Designation of the Chairman of Working Group 4C | - |
| 7. General discussion on the proposals assigned to Working Group 4C | DT/7(Rev.) |



1. Summary record of the first meeting (Document 224)

Pages 1 to 6

Approved.

Page 7

The delegate of Italy said that the following phrase should be added at the end of his statement : "... provided the consequent reduction of frequencies available for radiotelegraphy was offset by better spectrum utilization to meet the requirements of radiotelegraphy".

Page 8

Approved.

Document 224 was approved as amended.

2. Summary record of the second meeting (Document 225)

Approved.

3. Reports by the Chairmen of Working Groups 4A and 4B and matters arising therefrom

The Chairman of Working Group 4A said that there was little to report on the meetings held jointly by his Group and Working Group 5E and that it would be difficult to reach any final conclusions on the space to be made available for radiotelephony until the rearrangement of Appendix 15 and other related allocations was completed.

The Chairman of Working Group 4B said that the Group had set up three sub-groups to draft texts relating to narrow-band direct-printing telegraphy, one to prepare a new Article 28C and Appendix 20B, a second on the use of VHF for direct-printing and a third on notification and registration procedures for narrow-band direct-printing.

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but it had been pointed out in the Working Group that that procedure might not be formally acceptable, since C.C.I. Recommendations, being subject to change, did not have the status of Regulations, which could only be drawn up by the competent world administrative conferences, in accordance with No. 267 of the Montreux Convention.

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4. Proposals on the use of calling frequencies (Documents AUS/34/57-59, G/57/83-85, 87-89, HOL/27/136-139, NOR/185, NZL/86(Rev.)/51-53)

The Chairman invited the Committee to consider the general issue of whether the existing calling system, based on the orderly division of calling frequencies between ships, should be retained, or whether the special calling frequencies proposed at the 1967 Maritime Conference should be introduced, on the basis of an expanded division of calling frequencies between ships and coast stations. The idea was to reduce the amount of searching in the calling band and to enable coast stations to keep watch on fixed frequencies so as to improve access to coast stations, to reduce calling to a minimum and to spread the volume of traffic more evenly over twenty-four hours. Working Group 6A would be unable to consider the question for some time and had requested Committee 4 to hold a preliminary discussion on it. The outcome of that debate might be the establishment of an ad hoc Working Group to consider a new calling system, on the understanding that Joint Working Group 4A/5E would continue to work on the basis of the existing calling frequencies.

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The delegate of the United Kingdom, introducing his delegation's proposals (G/57/83-85, 87-89), said that the main inadequacies of the existing system were that the number of calling frequencies was too great for coast stations to monitor efficiently and that the volume of signalling on the calling frequencies was too great. The United Kingdom proposed to remedy those shortcomings by reducing the calling bands from 17 to 12 frequencies, allocating two series of frequencies for use under Nos. 1178 and 1013E of the Radio Regulations, dividing the remaining 10 frequencies in each band into two groups of 5 allocated to groups of countries according to size of fleet, geographical position and other criteria, assigning an appropriate common frequency and at least one primary frequency to each ship - on the understanding that coast stations would guard the common frequencies at all times - and reducing the length of calls.

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It should be noted that the frequencies 4 182, 6 273, 8 364, 12 546, 16 728 and 22 245 kHz would no longer be guarded by all coast stations, but only by those in the first group during busy hours and outside those hours by a few designated coast stations preferably selected along the Atlantic and Pacific coasts. With regard to the other frequencies in harmonic relationship with frequency 8 364 kHz, his delegation believed that they could become available as normal calling frequencies, since they had not been widely used by the aeronautical mobile service to which they had been allotted.

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As would be seen from the Annex in Document 185, 17 channels were proposed in the 4 to 16 MHz bands. Fewer calling channels were proposed in higher bands, namely 10 in the 22 MHz band and 5 in the 25 MHz band. All were within the present calling bands. A slight reduction in the total bandwidth was proposed, e.g. 2 kHz in the 4 MHz and 25 kHz in the 22 MHz band. The frequency bands from 4 to 16 MHz were harmonically related and had a channel width of 400 Hz in the 4 MHz band increasing to 1 600 Hz in the 16 MHz band.

The series 5/6 constituted a general or common or international calling channel designated for use by all ships and guarded at all coast stations. The other 15 series in the 4 to 16 MHz bands could be allocated to countries and in the higher bands, 22 and 25, where fewer channels were proposed, more countries would have to share fewer individual channels.

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The procedure would allow ships to call their own coast station on the general calling channel in busy hours when watch would be kept on the national and general calling frequency. During quiet hours watch-keeping could be reduced to the general frequency.

The main difference between the Norwegian and the United Kingdom proposals was that the former eliminated scanning and used fixed frequency receivers at all coast stations.

It was possible to reduce loading in calling bands to about one-tenth. The same could be done with working bands if they were efficiently subdivided.

A tolerance of 50 parts per million was not quite enough and it should be 40 parts per million. For synthesized transmitters a frequency tolerance of 100 Hz or even 50 Hz was sufficient.

The delegate of New Zealand said that New Zealand was proposing (Document 86) a limited number of calling channels with an abbreviated calling system. There would be 5 national calling frequencies in each band plus one in each band designated as an international calling frequency and one in each band for aircraft.

Each group of 5 national frequencies would be assigned according to the Table in Appendix 15A in the New Zealand proposal to ensure equal loading and the number of frequencies to be watched by the coast station would depend on traffic needs. The list of administrations in Appendix 15A was not exhaustive. Where the traffic warranted it an administration could assign a frequency reserved for aircraft except for frequency 8 364 kHz. Coast stations must keep watch on one international calling frequency and one national calling frequency in each band. The special calling frequency provided for in Regulation 1013E was no longer necessary.

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The Joint Working Group 4A/5E ought to proceed on the basis of an average between the Norwegian and United Kingdom proposals.

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All proposals provided for only one common international frequency which would not suffice for his country which operated with many foreign ships.

The delegate of India thought that the Norwegian proposals were good but some further consideration would need to be given to arrive at an acceptable number of national and international calling frequencies. He thought that Working Group 6A can look at this question in more detail.

The delegate of the U.S.S.R. said that there was no objection to Committee 6 dealing with calling frequencies but Committee 4 would have to decide on the number of channels.

In his country a new method of organizing calling channels and of watchkeeping by coast stations had been used for some years on a fixed frequency which had proved efficient. The time taken by the communication had been reduced. At least 3 calling frequencies were needed in one sea basin with a number of coast stations using the HF spectrum. It had taken eighteen months to assign calling frequencies between national stations. An international distribution of calling frequencies must be made so as not to overburden any one station. The total number of calling channels should not be less than the existing number. Adoption of the new method would require more calling channels.

The delegate of France favoured the Norwegian proposal which ensured that the best use would be made of the spectrum and took account of existing and future equipment. The best solution would be to combine that proposal with that of the United Kingdom. He suggested setting up of a Joint Group of Committee 4 and Committee 6 to examine this question.

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The delegate of the United Kingdom said that a compromise regarding the frequency space required should be possible as between the Norwegian and the United Kingdom proposals. Those proposals and that of the Netherlands would allow some reduction in the amount of calling space required. Operational details should be dealt with by Committee 6 and the Joint Working Group 4A/5E should proceed with the discussion on the basis of the existing calling frequency space required. Any subsequent adjustment would not be great and some increase in working channels was likely.

The delegate of Norway, referring to the United States point, said that two channels had been combined into one general calling channel in the Norwegian proposal. The general calling channel in each band had twice the width of the national channel. It was proposed to increase the number of channels with a reduction in the total bandwidth. A country could subdivide as it liked to accommodate at least two more channels. With the present spacing of 2 kHz the number of discrete frequencies could be increased within a smaller total spectrum.

It would be advantageous to allocate specific receiving channels to coast stations. If one channel was interfered with, a coast station would be aware of it and would direct a ship to use a channel above or below.

The delegate of the U.S.S.R. said that an increase in the number of channels could be achieved by reducing spacing but that would require greater stability in receivers and a change in the harmonic relationships of receivers and synthesizers.

The Chairman observed that there seemed to be general agreement on the need to improve the calling system by reducing or eliminating scanning.

He might consult the Steering Committee about the possibility of an ad hoc working group being set up with Committee 6 to deal with calling frequencies.

It was so agreed.

5. Examination of Document DT/7(Rev.)

The Committee took note of Document DT/7(Rev.).

6. Designation of the Chairman of Working Group 4C

The delegate of Italy undertook to serve as Chairman of Working Group 4C.

7. General discussion on the proposals assigned to Working Group 4C

The Chairman listed revisions in Annex 3 of Document DT/7(Rev.) according to which certain items would be transferred to Committees 5 and 6. These revisions would appear in a revised version of the document.

The meeting rose at 1815 hours.

The Secretary :

Mr. SANT

The Chairman :

Capt. V.R.Y. WINKELMAN

MARITIME CONFERENCE

GENEVA, 1974

Document No. 271-E

7 May 1974

Original : English

COMMITTEE 6

SECOND REPORT OF WORKING GROUP 6C TO COMMITTEE 6

Article 40 Section I - Accounting for radiotelegrams and radiotelephone calls

Additional definition for 1504A

NOC 1505	ADD 1505A	ADD 1505B
ADD 1505C	ADD 1505D	MOD 1506
NOC 1506.1	NOC 1507	ADD 1507A
MOD 1508		

All the proposals on the above provisions were considered and Working Group 6C unanimously recommends the adoption of the revised provisions appearing in Annex to the present Report.

Annex : 1



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A N N E X

Article 40

Section I

ADDITIONAL
DEFINITION
FOR

1504A Accounting Authority

Any organisation notified by an Administration to the I.T.U. for inclusion in the list of ship stations as being responsible for settling maritime accounts for some or all of the ships licensed by that Administration. An accounting authority may be the Administration itself, a Private Operating Agency, a shipowner, or an operating enterprise authorized by a shipowner to receive and settle accounts on his behalf. In the general interest of Administrations the number of Accounting Authorities shall be kept to the minimum required for the efficient settlement of accounts.

NOC 1505

ADD 1505A §1A. In the Maritime Mobile Service ¹, the following charges shall be included in the accounts :

(1) In the case of radiotelegrams, radiotelephone calls and direct-printing messages originating on mobile stations

- the land station charges,
- the land-line charges,
- the accessory charges for radiotelegrams which have to be considered in the accounting and
- the supplementary charges for radiotelephone calls with special facilities.

¹ Hereafter, this phrase is indicated by "IMMS".

ADD 1505B (2) In the case of radiotelegrams, radiotelephone calls and direct-printing messages destined for mobile stations and passing through a land station of another country,
- the land and ship station charges.

ADD 1505C §1B (1) As far as the transmission over the general international network of the telecommunication channels is concerned, the provisions laid down in the Telegraph and Telephone Regulations taking into account C.C.I.T.T. Recommendations and Instructions shall apply to radiotelegrams, radiotelephone calls and direct-printing messages.

ADD 1505D (2) The land-line charges shall be included in the international telegraph and telephone accounts and shall be accounted for according to the provisions of the Regulations mentioned in No. 1505C, taking into account C.C.I.T.T. Recommendations and Instructions.

MOD 1506 §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 which the land station and ship and aircraft station charges follow the radiotelegrams and radiotelephone calls * from country to country through the medium of the telegraph and telephone accounts.¹ Such arrangements are subject to previous agreement between the administrations concerned.

* IMMS, and direct-printing messages

NOC 1506.1

NOC 1507

ADD 1507A §3A. The country on whose territory is established a land station serving as intermediary for the exchange of radiotelegrams, radiotelephone calls and direct-printing messages between a mobile station and another country, is considered, as far as the application of land-line charges is considered, as the country of origin or destination and not as a transit country.

MQD 1508 84. (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. 1510 to 1559* shall apply to such enterprise in the same manner as to an administration.

- IMMS, the whole of Article 40.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 272-E
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COMMITTEE 6

SECOND REPORT OF WORKING GROUP 6A
TO COMMITTEE 6

The Working Group 6A during the meeting of 3rd May 1974 and
after consideration of all relative proposals agreed on the attached texts :

ARTICLE 29

MOD RR 1007

Unanimously agreed.
(See Annex 1)

ARTICLE 30

MOD RR 1067

Unanimously agreed
(See Annex 2)

Annexes : 2



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A N N E X 1ARTICLE 29

MOD 1007 § 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. This requirement does not apply to stations where unattended operation is possible through automatic means (see No. 850), on frequencies dedicated to narrow band direct-printing.

A N N E X 2ARTICLE 30

MOD 1067 § 3. (1) In addition, each coast station shall, so far as practical, be, 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 shall be made at specified times fixed by agreement between the administrations concerned and at intervals of not less than two hours and not more than four hours during the working hours of the coast station.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

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COMMITTEE 6

Note by the Secretary-General

NOTE ON I.T.U. TECHNICAL COOPERATION IN THE FIELD
OF MARITIME TELECOMMUNICATIONS

I. Introduction

In his opening address to the World Administrative Maritime Radio Conference (22 April 1974), the Secretary-General of the I.T.U. drew the attention of Conference participants to the need to increase the efficiency of radiomaritime telecommunication services in order to meet the basic needs of users.

He classified these needs in three main categories :

- 1) the safety of navigation and the safety of life at sea;
- 2) the traffic required to ensure the commercially efficient operation of ships in view of the substantial investments made by shipowners; and
- 3) the public correspondence service for passengers and crews.

The developed countries possess modern coast and port stations which can be quickly modernized if the expansion of traffic and the development of telecommunication techniques and rules of operation so require. The same cannot be said of most of the developing countries.

II. Action by the I.T.U.

At the request of SIECA (Secretariat for Economic Integration in Central America), a 6-week mission was carried out by two experts in February/March 1972 in some of the countries bordering on the Caribbean. The purpose of the mission was to identify the most urgent requirements for improving maritime telecommunication services in the whole of the region.

Following a meeting of U.N.D.P. Resident Representatives in Addis Ababa in 1972, a short mission of I.T.U. and I.M.C.O. experts was organized to collect information on the radiomaritime installations of several West and East African countries.



The experts' report reveals that the radiomaritime services in the countries visited are often in an unsatisfactory condition which, in certain cases, is so critical that the safety of shipping can no longer be guaranteed. This situation is partly due to the fact that station installations are largely antiquated and in any case ill-adapted to the present volume and modern conditions of traffic and partly to the fact that the staff has not had sufficient training to be capable of operating these stations efficiently.

Following the I.T.U./I.M.C.O. experts mission, the Secretary-General of the I.T.U. proposed an additional project, to be financed by the U.N.D.P., for an amount of \$ 98,000. The purpose of this project, which is now being studied, is to conduct a survey of the maritime radiocommunication services and installations in the African countries not visited by the experts, to help the countries so desiring to acquire and install the necessary equipment and to train the operational staff of radiomaritime stations. Lastly, it is planned to organize a seminar for the personnel responsible for radiomaritime services in the participating countries in order to provide them with the fullest possible information and guidance about the international regulations and the organization, operation and maintenance of modern coast stations and radiomaritime services.

These projects mark the first attempt made by the I.T.U. to contribute to the development of the radiomaritime services of the countries concerned, but they seem inadequate in view of the extent of these countries' requirements and of the fact that many countries in other regions may be in a similar position.

III. Possible subsequent action by the I.T.U.

A) Objectives

- The aim is to enable all countries which do not at present possess sufficient technical or financial resources to acquire coast and port stations equipped with modern installations and operated and maintained by specialized personnel, with a view to meeting the following requirements :

- safety of life at sea,
- ship-to-shore and shore-to-ship commercial traffic,
- public telephone and telegraph correspondence to or from ships,
- port operations,
- transmission of meteorological bulletins,
- inspection of ship radio stations, and
- the development of shipping.

A network of modern well equipped and efficiently operated stations would also make it possible to apply strictly the instructions given in the Radio Regulations, to make the best use of assigned frequencies, to reduce spurious emissions and harmful interference through the use of suitable antennae, etc.

B) What assistance can the I.T.U. provide?

- 1) Draw up a list of the countries wishing to receive I.T.U. assistance in developing their radiomaritime services. These countries would seem to be situated mainly in the following regions :
 - West and East Africa,
 - Central America and the Caribbean,
 - the Middle East and the Gulf countries,
 - South-east Asia and the Pacific islands.
- 2) Classify the principal and secondary coast stations into a number of categories depending on the volume of actual or foreseeable radiomaritime traffic.
- 3) For each category, determine the complete equipment required to ensure an efficient service.
- 4) Choose the most suitable site and type of building for new stations.
- 5) Help countries to find the financing required to purchase and install the equipment and to erect buildings where necessary.
- 6) Training of personnel :
 - to train the personnel responsible for running, operating and maintaining radiomaritime stations and for inspecting ship stations either in the existing national or regional schools, or in new schools to be established, or again by fellowships in countries possessing modern radiomaritime services.

C) Study of regional projects

Several projects aimed at achieving the objectives listed above may be studied for each region by the I.T.U. Technical Cooperation Department within the framework of the United Nations Development Programme (U.N.D.P.).

It is difficult at present to estimate the size of such projects which would cover several regions and probably involve a large number of countries, but their implementation would be certain to require the collaboration of several experts for two or three years and the total expenditure incurred would therefore be rather high.

As soon as the list of interested countries had been drawn up and the needs of these countries had been estimated by a preliminary mission, an initial report would be submitted to the U.N.D.P. so that the possibilities of financing the various projects could be examined.

The Secretary-General of the I.T.U. would subsequently invite the collaboration of international organizations such as I.M.C.O. and UNCTAD and perhaps of the national services of developed countries in order to ensure the rapid implementation of the projects.

M. MILI

Secretary-General

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

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COMMITTEE 6

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The Secretary-General of the I.T.U. would subsequently invite the collaboration of international organizations such as I.M.C.O. and UNCTAD and perhaps of the national services of developed countries in order to ensure the rapid implementation of the projects.

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 274-E

7 May 1974

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COMMITTEE 6

Sweden

PROPOSALS FOR THE WORK OF THE
CONFERENCE

Agenda item No. 18 : Radio operator's certificate

ARTICLE 33

Sweden withdraws its proposals:

S/239/32 MOD 879 and
S/239/33 MOD 888



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 275-E

7 May 1974

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COMMITTEE 5

Note by the Secretary-General

STATEMENT BY THE CHINESE DELEGATION

I have the honour to transmit to the Conference the text of a letter addressed to me by the Head of the Chinese Delegation to the Maritime Conference.

M. MILI

Secretary-General

Annex : 1



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A N N E X

Mr. M. Mili
Secretary-General,
I.T.U.

Dear Sir,

The Chinese delegation is authorized to make the following statement :

The People's Republic of China had been deprived of her legal seat in the I.T.U. for twenty-two long years. Since the restoration of the lawful rights of our country, we have stated our stand regarding the use and registration of radio frequencies for several times.

Hereby, the Chinese delegation has the honour to inform you that confirmation should be given to the right of using HF radiotelephone frequencies by China and the fact that China has already been using the other frequencies in the maritime service. The relative data will be submitted at an appropriate time later.

Please accept the assurances of our highest consideration.

(Signed) LIU Yun-chou

Head of the telecommunications
delegation of the People's
Republic of China to the
I.T.U. Maritime Conference

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 276-E
7 May 1974
Original : Spanish

WORKING GROUP 5C

REPORT OF SUB-GROUP 5C-1
TO WORKING GROUP 5C

Sub-Group 5C-1 held three meetings which were attended by the delegations designated, which were those which had submitted proposals relating to Appendix 25 MOD. During the last two meetings, other delegations took part in the discussions. In accordance with its terms of reference, reproduced in Annex 1, the Sub-Group discussed the general principles which should serve as a guide to any sub-groups which might be set up to revise Appendix 25 MOD.

The Sub-Group drew up a set of general guidelines to be submitted to Working Group 5C, which are reproduced in Annex 2 to this report. In connection with this Annex, it may be pointed out that :

- paragraph 1.5 refers to assignments of different kinds for each of which it may be necessary to seek an appropriate solution;
- the delegation of Peru drew the Sub-Group's attention to the case of frequency assignments published in List IV which had not been the subject of a notification to the I.F.R.B.

The Algerian delegation submitted to the Sub-Group some proposed amendments to Annex 2. These amendments have not been incorporated in the text given in the Annex and are reproduced, in the form in which they were submitted, in Annex 3 to this report.

J. BARRANCO

Chairman of Sub-Group 5C-1



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A N N E X 1

TERMS OF REFERENCE FOR SUB-GROUP 5C-1

To study the proposals contained in Document No. DT/11, establish the basic principles contained in the documents quoted and define, if possible, an accepted procedure to be applied in implementing a new allotment plan.

A N N E X 2

GENERAL GUIDELINES FOR FUTURE SUB-GROUPS

PROPOSED TO WORKING GROUP 5C

1. Planning of single sideband channels

The Conference should provide :

1.1. An SSB allotment for each DSB allotment mentioned in Appendix 25 MOD which has been put into service.

1.2 An SSB allotment to cover assignments made under Section 3 of Appendix 25 MOD.

1.3 An SSB allotment to cover DSB or SSB assignments made under Note 2 of Appendix 25 MOD. /

1.4 An SSB allotment to cover assignments in service in countries which have no allotments in Appendix 25 MOD.

1.5 An SSB allotment to cover other assignments in service not covered by paragraphs 1.1 to 1.4 above.

1.6.1 An SSB allotment for countries which have indicated their future requirements but which at present have no assignments, taking into consideration, in the first place, the allotments in Appendix 25 MOD which have not been put into service.

1.6.2 An SSB allotment to enable other countries to meet their additional requirements.

2. Sharing

In drawing up the Plan, the Conference should adopt sharing criteria designed to cause the minimum of disturbance.

3. Rights

All stations operating in accordance with the Plan have equal rights.

4. Procedure for meeting requirements announced after the Conference

The Conference should decide on a procedure by which new allotments in existing channels or in the additional channels made available by the Conference can be inserted in the Plan while safeguarding the equal rights of all countries.

A N N E X 3

GENERAL GUIDELINES PROPOSED FOR
WORKING GROUP 5C TO SERVE
AS GUIDE FOR FUTURE SUB-GROUPS

Algerian Proposal

1. General provision

Each country has the right to divide its territory into several regions, up to five in number.

2. Provisions for single sideband channels

1.1 One single sideband allotment for each double sideband allotment shown in Appendix 25 MOD.

1.2 One additional single sideband allotment for countries or regions of countries having a single allotment in Section I of Appendix 25 MOD.

1.3 Two single sideband allotments per band (except for the 6 MHz band) for countries or regions of countries having assignments in use (double or single sideband) and having no allotment in Appendix 25 MOD (Section I).

1.4 Two single sideband allotments per band (except for the 6 MHz band) for countries or regions of countries which possess neither allotments nor assignments in Appendix 25 MOD and which use HF radiotelephony.

1.5 Two single sideband allotments per band (except for the 6 MHz band) for countries or regions of countries which possess neither allotments nor assignments and which do not yet use any frequency for HF radiotelephony.

1.6 All additional needs should be included as assignments in a separate section of the new Plan, according to the procedure defined in Article 9 of the Radio Regulations.

1.7 In the 6 MHz band, points 1.2 to 1.5 are applicable on the basis of one single sideband allotment per country or per region of a country.

Remarks

- Points 1.2, 1.3, and 1.4 of the yellow document (DL/18) are included under point 1.3 in the present proposals.
 - Point 1.5 in the yellow document is cancelled.
 - Point 1.6.1 in the yellow document is included under point 1.5 in the present proposal.
 - Point 1.4 of the present proposals was not provided for in the yellow document.
-

INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 277-E

8 May 1974

Original : English

COMMITTEE 5

FIRST REPORT OF WORKING GROUP 5B

TO COMMITTEE 5

Spacing of radiotelephone channels in the maritime mobile HF bands

The proposals regarding a new channel spacing in the HF R/T bands have been discussed in Working Group 5B and in Sub-Working Group 5B-1, which was established in order to allow for a more detailed discussion on this matter.

After having considered the first report of this Sub-Working Group, as contained in Document No. 246, the Working Group has decided, by a majority decision, to recommend a uniform channel spacing of 3.1 kHz in all the bands between 4 and 27.5 MHz allocated to the maritime mobile radiotelephony service. Until now the Working Group has taken no decision on the date of implementation of this provision. However, it appeared appropriate to have the same date for the introduction of this new channel spacing as well as the implementation of the revised Allotment Plan for HF coast radiotelephone stations, in order to avoid a duplication of equipment recrystallizing.

E. GEORGE
Chairman



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 278-E

8 May 1974

Original : English

COMMITTEE 5

SECOND REPORT OF WORKING GROUP 5B

TO COMMITTEE 5

Advancement of the date for the final implementation
of SSB equipment in the R/T bands between 4 000 and 23 000 kHz

The majority of Working Group 5B was of the opinion that the final date for the implementation of SSB Working in the radiotelephone bands between 4 000 and 23 000 kHz should not be advanced from 1 January 1978 to 1 January 1977, as has been proposed by the delegation of the United States of America and supported by three administrations.

E. GEORGE
Chairman



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 279-E
8 May 1974
Original: English

COMMITTEES 4 AND 5

FIRST REPORT OF THE JOINT WORKING GROUP 4A/5E

1. Having considered all the proposals for rearrangement of frequency bands between 4 and 23 MHz, allocated exclusively to the maritime mobile service in the Radio Regulations, the Joint Working Group 4A/5E

- recommends the distribution of sub-bands to various maritime mobile services as shown in Annexes 1 and 2; the figures in brackets shown in each block in Annex 2 indicate the maritime mobile service described in the legend of Document DT/3. The figures following this figure indicate respectively the number of channels, the channel spacing and the spectrum width allocated to the service concerned;
- proposes the consequential revision to the texts of Nos. 447 to 453 of Article 7 of the Radio Regulations (except 25 MHz band in No. 452), as shown in Annex 3;
- proposes the consequential revision to the text of No. 573 of Article 9 of the Radio Regulations, as shown in Annex 4.

2. The delegates of Greece and Roumania reserved the position of their delegations on this document. The texts of their reservations appear in Annexes 5 and 6.

Annexes : 6



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ANNEXE 1 - ANNEX 1 - ANEXO 1

ATTRIBUTION DE LA LARGEUR DU SPECTRE A CHACUNE
BANDES DES BANDES ATTRIBUEES AU SERVICE MOBILE MARITIME
ENTRE 4 ET 23 MHz

ALLOCATION OF SPECTRUM WIDTH TO EACH OF THE SUB-BANDS OF THE
MARITIME MOBILE BANDS BETWEEN 4 AND 23 MHz

ATRIBUCIÓN DE LA ANCHURA DEL ESPECTRO A CADA UNA DE LAS SUB-
BANDAS DE LAS BANDAS ATRIBUIDAS AL SERVICIO MÓVIL MARÍTIMO
ENTRE 4 Y 23 MHz

BANDE/BAND/BANDA (MHz)	4	6	8	12	16	22
DE/FROM/DE (kHz)	4063	6200	8195	12 330	16 460	22 000
A/TO/A (kHz)	4438	6525	8815	13 200	17 360	22 720
Largeur totale Total width Anchura total (kHz)	375	325	620	870	900	720
1*	80.6	18.6	96.1	99.2	127.1	124
2*	3	6	6.2	10.3	9.3	15.5
3*	19.9	27.9	40	48	60.1	49
4*	3.5	3.5	3.5	3.5	3.5	3.5
5*	10	14	17.2	36	46	35
7* + 14*	39.4	55.4	77.4	125.3	153.4	83.5
9*	130	168.5	269	418.5	337.5	250.5
10*	80.6	18.6	96.1	99.2	127.1	124
12*	-	-	-	-	-	-
13*	8	12.5	14.5	30	36	35
15*	-	-	-	-	-	-
17*	-	-	-	-	-	-
AUTRE/OTHER/OTRA						

- *) Note: Pour l'explication du numéro voir la légende des figures dans le Document N° DT/3.
- *) Note: For explanation of the number see Legend of the Figures in Document No. DT/3.
- *) Nota: Para explicación del número véase la leyenda de las figuras en el Documento N.º DT/3.

ANNEXE 2 - ANNEX 2 - ANEXO 2

4063	RR	Proposition - Proposal - Proposición	4063
	(1) 24 / 3.2 / 76.5	(1) 26 / 3.1 / 80.6	
4139.5	(2) 1 / 3 / 3		
4142.5	(3) 5 / 4 / 20	(2) 1 / 3 / 3	4143.6
4162.5	(4) 10 / 0.3 / 3.5	(3) 4 / 4 / 15.9	4146.6
4166	(5) 12 / 0.5 / 6.25	(4) 10 / 0.3 / 3.5	4162.5
4172.25	(6) 11 / 0.5 / 5.75	(3) 1 / 4 / 4	4166
4178	(7) 17 / 0.5 / 9	(5) / / 8 (P)	4170
4187	(8) 84 / 0.5 / 44	(5) - - - - - 2 (NP)	4178
4231	(9) / / 130	(7) / / 9	4180
	(10) 24 / 3.2 / 77	(14) / / 30.4	4189
4361		(9) / / 130	4219.4
4438		(13) / / 8 (P)	4349.4
		(10) 26 / 3.1 / 80.6	4357.4
			4438

	RR	Proposition - Proposal - Proposición	
6200			6200
	(1) 3 / 3.2 / 10.4	(1) 6 / 3.1 / 18.6	
6210.4			
6216.5	(2) 2 / 3.1 / 6.1		6218.6
		(2) 2 / 3 / 6	6224.6
	(3) 7 / 4 / 28	(3) 5 / 4 / 19.9	6244.5
6244.5	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5	6248
6248		(3) 2 / 4 / 8	6256
	(5) 20 / 0.5 / 10.25		
6258.25		(5) / 12.5 (P)	6268.5
6267	(6) 11 / 0.75 / 8.75	(5) - - - - - / 1.5 (NP)	6270
	(7) 17 / 0.75 / 13.5	(7) / / 13.5	6283.5
6280.5			
	(8) 84 / 0.75 / 65	(14) / 41.9	6325.4
6345.5		(9) 168.5	
	(9) / / 168.5		6493.9
		(13) / / 12.5	6506.4
6514			
	(10) 3 / 3.2 / 11	(10) 6 / 3.1 / 18.6	6525
6525			

	RR	Proposition - Proposal - Proposición	
8195	(1) 27 / 3.2 / 86.2	(1) 31 / 3.1 / 96.1	8195
8281.2	(2) 2 / 3.2 / 6.8		
8288		(2) 2 / 3.1 / 6.2	8291.1
		(5) / / 2.7 (NF)	8297.3
8328		(3) 7 / 4 / 28	8300
8.331.5	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5	8328
	(5) 20 // 0.5 / 10.25	(3) 3 / 4 / 12	8331.5
8341.75	(6) 14 / 1 / 14.25	(5) / / 14.5 (P)	8343.5
8356		(14) - - - / 2 - - -	8358
	(7) 17 / 1 / 18	(7) / / 18	8360
8374			8378
	(8) 84 / 1 / 85.5	(14) / / 57.4	
8459.5			8435.4
	(9) / / 269	(9) / / 269	
		(13) / / 14.5 (P)	8704.4
8728.5	(10) 27 / 3.2 / 86.5	(10) 31 / 3.1 / 96.1	8718.9
8815			8815

	RR	Proposition - Proposal - Proposición	
12 330	(1) 26 / 3.5 / 91	(1) 32 / 3.1 / 99.2	12 330
12 421	(2) 3 / 3.5 / 10.5		
12 431.5	(3) 12 / 4 / 48	(2) 3 / 3.1 / 10.3	12 429.2
12 479.5	(4) 10 / 0.3 / 3.5	(3) 10 / 4 / 40	12 439.5
12 483	(5) 20 / 1 / 20.25	(4) 10 / 0.3 / 3.5	12 479.5
12 503.25	(6) 20 / 1.5 / 30.75	(3) 2 / 4 / 8	12 483
12 534	(7) 17 / 1.5 / 27	(5) / / 6 (NP)	12 491
12 561	(8) 84 / 1.5 / 128	(5) / / 30 (P)	12 497
12 689	(9) / / 418.5	(14) / / 13	12 527
13 107.5	(10) 26 / 3.5 / 92.5	(7) / / 27	12 540
13 200		(14) / / 85.3	12 567
			12 652.3
		(9) / / 418.5	13 070.8
		(13) / / 30 (P)	13 100.8
		(10) 32 / 3.1 / 99.2	
			13 200

	RR	Proposition - Proposal - Proposición	
16 460	(1) 30 / 3.5 / 105	(1) 41 / 3.1 / 127.1	16 460
16 565	(2) 3 / 3.5 / 11		
16 576	(3) 15 / 4 / 60.5	(2) 3 / 3.1 / 9.3	16 587.1
		(3) 10 / 4 / 40.1	16 596.4
16 636.5	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5	16 636.5
16 640	(5) 20 / 1 / 20.5	(3) 5 / 4 / 20	16 640
16 660.5	(6) 25 / 2 / 51.5	(5) / / 36 (P)	16 660
		(5) / / 10 (NP)	16 696
16 712	(7) 17 / 2 / 36	(14) / / 14	16 706
		(7) / / 36	16 720
16 748	(8) 84 / 2 / 169.5	(14) / / 103.4	16 756
16 917.5	(9) / / 337.5	(9) / / 337.5	16 859.4
		(13) / / 36	17 196.9
17 255	(10) 30 / 3.5 / 105	(10) 41 / 3.1 / 127.1	17 232.9
17 360			17.360

Proposition - Proposal - Proposición		
RR		
22 000	(1) 27 / 3.5 / 94.5	22 000
22 094.5	(2) 5 / 3.5 / 17.5	
22 112	(3) 12 / 4 / 48.5	22 124 22 139.5
22 160.5	(4) 10 / 0.3 / 3.5	22 160.5
22 164	(5) 20 / 1 / 20.5	22 164
22 184.5	(6) 18 / 2 / 38	22 192
22 222.5	(7) 17 / 2.5 / 45	22 227
22 267.5	(8) 41 / 2.5 / 106.5	22 253
22 374	(9) / / 250.5	22 310.5
22 624.5	(10) 27 / 3.5 / 95.5	22 561 22 596
22 720	(10) 40 / 3.1 / 124	22 720

ANNEX 3

Proposal for revision of Nos. 447 to 453 of Article 7 of the

Radio Regulations

(Except 25 MHz band in No. 452)

MOD 447 a) Ship stations, telephony, duplex operation (two frequency channels)

4 063 - 4 143.6 kHz

6 200 - 6 218.6 kHz

8 195 - 8 291.1 kHz

12 330 - 12 429.2 kHz

16 460 - 16 587.1 kHz

22 000 - 22 124 kHz

MOD 448 b) Coast stations, telephony, duplex operation (two frequency channels)

4 357.4 - 4 438 kHz

6 506.4 - 6 525 kHz

8 718.9 - 8 815 kHz

13 100.8 - 13 200 kHz

17 232.9 - 17 360 kHz

22 596 - 22 720 kHz

MOD 449 c) Ship stations and coast stations, telephony, simplex operation (single-frequency channels)

4 143.6 - 4 146.6 kHz

6 218.6 - 6 224.6 kHz

8 291.1 - 8 297.3 kHz

12 429.2 - 12 439.5 kHz

16 587.1 - 16 596.4 kHz

22 124 - 22 139.5 kHz

NOC 450 SUP (Mar)

MOD 451 e) Ship stations, wide-band telegraphy, facsimile and special transmission systems

4 146.6 - 4 162.5	kHz
4 166 - 4 170	kHz
6 224.6 - 6 244.5	kHz
6 248 - 6 256	kHz
8 300 - 8 328	kHz
8 331.5 - 8 343.5	kHz
12 439.5 - 12 479.5	kHz
12 483 - 12 491	kHz
16 596.4 - 16 636.5	kHz
16 640 - 16 660	kHz
22 139.5 - 22 160.5	kHz
22 164 - 22 192	kHz

NOC 451A f) Ship stations, oceanographic data transmission (see note a) in Appendix 15)

4 162.5 - 4 166	kHz
6 244.5 - 6 248	kHz
8 328 - 8 331.5	kHz
12 479.5 - 12 483	kHz
16 636.5 - 16 640	kHz
22 160.5 - 22 164	kHz

MOD 451B g) Ship stations, frequency bands for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds, paired with those in No. ADD 452A

4 170 - 4 178	kHz
6 256 - 6 268.5	kHz
8 343.5 - 8 358	kHz
12 497 - 12 527	kHz
16 660 - 16 696	kHz
22 192 - 22 227	kHz

ADD 451C ga) Ship stations, frequency bands for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds.

4 178	-	4 180	kHz
6 268.5	-	6 270	kHz
8 297.3	-	8 300	kHz
12 491	-	12 497	kHz
16 696	-	16 706	kHz

MOD 452 h) Ship stations, A1 Morse telegraphy

4 180	-	4 219.4	kHz
6 270	-	6 325.4	kHz
8 358	-	8 435.4	kHz
12 527	-	12 652.3	kHz
16 706	-	16 859.4	kHz
22 227	-	22 310.5	kHz

NOC 452.1 SUP (Mar)

ADD 452A ha) Coast stations, frequency bands for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds, paired with those in No. MOD 451B

4 349.4	-	4 357.4	kHz
6 493.9	-	6 506.4	kHz
8 704.4	-	8 718.9	kHz
13 070.8	-	13 100.8	kHz
17 196.9	-	17 232.9	kHz
22 561	-	22 596	kHz

MOD 453 i) Coast stations, wide-band and A1 Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems

4 219.4	-	4 349.4	kHz
6 325.4	-	6 493.9	kHz
8 435.4	-	8 704.4	kHz
12 652.3	-	13 070.8	kHz
16 859.4	-	17 196.9	kHz
22 310.5	-	22 561	kHz

A N N E X 4

Proposal for revision of No. 573 of Article 9
of the Radio Regulations

MOD 573 26 (1) Frequency bands :

10	-	2 850	kHz
3 155	-	3 400	kHz
3 500	-	3 900	kHz in Region 1
3 500	-	4 000	kHz in Region 2
3 500	-	3 950	kHz in Region 3
4 219.4	-	4 349.4	kHz
6 325.4	-	6 493.9	kHz
8 435.4	-	8 704.4	kHz
12 652.3	-	13 070.8	kHz
16 859.4	-	17 196.9	kHz
22 310.5	-	22 561	kHz

A N N E X 5

Greece reserves its position regarding the new Appendix 15 as presented in Document DT/39 of 6 May 1974. As the task of other Working Groups has not yet been finished, Greece has not been persuaded that all possibilities for further increasing the number of R/T channels and for some other necessary slight readjustments on the plan have been fully explored. This will reduce the possibilities to satisfy countries with requirements for radiotelephone channels. Greece considers it therefore necessary that this matter has to be re-examined in a higher committee.

A N N E X 6

Statement by the Roumanian Delegation for
the report of Working Group 4A/5E

Since the proposals for the rearrangement of Appendix 15 contained in Document No. DT/39 - particularly in respect of the position of calling sub-bands in the spectrum - is liable to make many of the frequencies at present used by Roumanian ships unusable, the Roumanian Delegation maintains its proposal that the sub-bands in question should be shifted slightly towards the lower end of the spectrum (1 kHz in the 4 MHz band) and reserves the right to revert to the question in Committee 4.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 280-E
8 May 1974
Original : English

COMMITTEE 4

FIRST REPORT OF WORKING GROUP 4B TO COMMITTEE 4

1. ADD ARTICLE 28C - Narrow-band direct-printing telegraphy

Having discussed all the proposals on the ADD Article 28C, Working Group 4B unanimously recommends the adoption of the text given in Annex A to the Report. The provision ADD 999BD is still under discussion in Sub-Working Group 4B-1.

2. MOD APPENDIX 20B - Narrow-band direct-printing telegraph equipment

Working Group 4B recommends the adoption of the new and modified provisions of Appendix 20B appearing in Annex B to the present Report.

3. Use of VHF channels for direct-printing and other purposes (MOD Appendix 18 and ADD Appendix 18A)

3.1 After some discussion the Group agreed on the text presented in Annex C to this Report.

3.2 Concerning proposed ADD Appendix 18A it was agreed that it was premature at this time to introduce into the Regulations the multichannel direct-printing system proposed by the Netherlands for channels 80 and 81.

4. APPENDIX 20C - Selective calling system for use in the International Maritime Mobile Service

The Working Group 4B unanimously recommends the adoption of a modified text of paragraph 3 of Appendix 20C, as presented in Annex D to this Report.

O. LUNDBERG
Chairman

Annexes : A, B, C, D



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A N N E X AARTICLE 28C

Narrow-band Direct-Printing Telegraphy

Section I

- ADD 999BA § 1 The characteristics of the narrow-band direct-printing equipment shall be in accordance with Appendix 20B.
- ADD 999BB Frequencies assigned to coast stations shall be indicated in the List of Coast Stations. This list shall also indicate any other useful information concerning the service performed by each coast station.

Section II

Bands between 405 and 535 kHz

- ADD 999BC § 2 (1) All ship stations equipped with narrow-band direct-printing telegraph apparatus to work in the authorized bands between 405 and 535 kHz shall be able to send and receive class F1 emissions on at least two working frequencies (see No. 1123 Mar).
- ADD 999BD (2) Narrow-band direct-printing telegraphy in this band shall be restricted to distress, urgency or safety traffic.
- ADD 999BE Narrow-band direct-printing telegraphy is forbidden in the band 490 - 510 kHz

Bands between 1 605 and 4 000 kHz

- ADD 999BF § 3 All ship stations equipped with narrow-band direct-printing telegraph apparatus to work in the authorized bands between 1 605 and 4 000 kHz shall be able to send and receive class F1 emissions on at least two working frequencies.

ADD 999BG Narrow-band direct-printing telegraphy is forbidden in the band 2 170 - 2 194 kHz.

Bands between 4 000 and 27 500 kHz

ADD 999BH § 4 All ship stations equipped with narrow-band direct-printing telegraph apparatus to work in the authorized bands between 4 000 and 27 500 kHz shall be able to send and receive class F1 emissions on at least two frequencies in each band as required by their service. [These frequencies are normally associated in pairs, as indicated in Appendix 15A.]

[Bands between 156 and 174 MHz]

[ADD 999BI § 5 All ship stations equipped with narrow-band direct-printing telegraph apparatus may work in the authorized bands between 156 and 174 MHz and shall conform to the provisions of Appendix 18]

A N N E X B

APPENDIX 20B

Mar.

Narrow-band Direct-printing Telegraph Equipment

(see Articles 28, 29 and 32)

The equipment for narrow-band direct-printing telegraph systems in the maritime mobile service shall fulfil the following conditions :

- MOD a) The equipment shall accept signals conforming to International Telegraph Alphabet Code No. 2 at a modulation rate of 50 bauds and shall provide similar signals at its output suitable for extension to the public telegraph network.
- NOC b) The modulation rate over the radio path shall not exceed 100 bauds.
- MOD c) Class F1 emissions shall be used, with a frequency shift of 170 Hz. (Note 1)
- ADD d) The radio frequency tolerance of the transmitted signal shall be ± 40 Hz for ship stations, and shall be ± 15 Hz for coast stations. (Note 2) (Note 3) (Note 4).
- ADD e) The higher of the frequency shift signal shall correspond to "space" (start); and the lower of the frequency shift signal shall correspond to "mark" (stop) in accordance with the relevant C.C.I.R. Recommendation.
- ADD f) Where error control methods are employed the apparatus should be provided with a simple method to by-pass the error control technique to permit transmission and reception of uncorrected signals over the radio path conforming with a) above.

ADD g) When an error-detecting and correcting system is used for direct-printing telegraphy in the international maritime mobile service, a 7-unit ARQ system or a 7-unit forward acting error-correcting and indicating time diversity system, using the same code, shall be employed. Remaining technical characteristics of the error detecting and correcting equipment should be in accordance with the relevant C.C.I.R. Recommendations.

ADD h) A station equipped with a selective calling system in accordance with Appendix 20C and with a direct-printing system in accordance with this Appendix and using a two block call signal shall be given the same identification number in accordance with No. 749A and No. 783H for both systems.

A station, equipped with a direct-printing system in accordance with this Appendix and using a two block call signal, not already assigned a number in accordance with No. 749A and No. 783H should be assigned such a number for the direct-printing system.

The conversion from the numerical identification to the 28-bit (4-character) pattern shall be performed according to the relevant C.C.I.R. Recommendations.

ADD Note 1 : When using the method of generating frequency-shift keying by applying audio signals to the input of a single-sideband transmitter particular care should be taken to adequately suppress the residual carrier of the single sideband modulation process. In addition a suitable choice of the audio centre frequency will minimize the possibility of the residual carrier causing interference to nearby channels. For this reason some administrations have chosen 1 700 Hz as the centre frequency.

ADD Note 2 : For operational purpose the associated receiving equipment should conform to the frequency stability of transmitters.

ADD Note 3 : Applicable to equipment installed after 1 January 1976 and to all equipment after 1 January 1985.

ADD Note 4 : Stricter tolerances may be desirable depending on the method of operation of the service and the equipment employed.

A N N E X CUSE OF VHF CHANNELS FOR DIRECT-PRINTING
AND OTHER PURPOSES (MOD APPENDIX 18)

After some discussion, the following points were agreed :

- a) The use of VHF telephony channels for direct printing, data and facsimile, should, for the present, be permissible since this would allow the existing VHF equipment to be used in conjunction with suitable audio-frequency modulators and demodulators (e.g. a C.C.I.T.T. modem could be used for direct printing or data).
- b) It appeared desirable to nominate specific VHF channels for non-exclusive use for direct printing etc. so as to avoid as far as possible interference to and from telephony services.
- c) It would be preferable to specify channels at the edge of the VHF band and for the channels to be contiguous (adjacent to each other).
- d) The above c) would make it easier to split the 156-174 MHz band into radiotelephony and radiotelegraphy/facsimile should this be considered necessary in the future.
- e) Footnotes to Appendix 18 were suggested :
 - "() The channels of Appendix 18 may also be used for high speed data and facsimile transmissions subject to special agreements between interested and affected Administrations.
 - () The channels of Appendix 18, preferably two adjacent channels from the series ..., may be used for narrow-band direct-printing telegraphy and data transmissions subject to special agreements between interested and affected Administrations."

A N N E X D

APPENDIX 20C

Mar

Selective calling system for use in the
International Maritime Mobile Service

(see Articles 19, 28A, 29 and 33 and Appendix 9)

MOD

3. An "all ships call" to actuate the receiving selectors on all ships, regardless of their individual code number, shall consist of a continuous sequential transmission of the eleven audio-frequencies given in paragraph 1.2.1. The parameters of the audio-frequency pulses shall be in accordance with paragraphs 1.2.3, 1.2.4, 1.2.5 and 1.2.9. The duration of each audio-frequency pulse, measured between the half-amplitude points, shall be 17 ms \pm 1 ms and the interval between consecutive pulses, measured between half-amplitude points, shall not exceed 1 ms. The total duration of this "all ships call" signal should be at least 5 s.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 281-E

8 May 1974

Original : FrenchCOMMITTEE 5Khmer Republic

PROPOSALS FOR THE WORK OF THE CONFERENCE

The requirements of the Khmer Republic to be taken into consideration in the revision of the Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands (MHz)	4	6	8	12	16	22
Number of SSB channels	2	1	2	1	1	1



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 282-E

9 May 1974

Original : French

WORKING GROUP 4C

FIRST REPORT OF WORKING GROUP 4C

TO COMMITTEE 4

1. Working Group's terms of reference

The Working Group adopted the terms of reference in Annex III to Document No. DT/7(Rev.2) except with regard to the proposals relating to Nos. 208, 209, 211 and 213 of the Radio Regulations, which will be considered by Joint Working Group 4A/5E.

2. Proposals concerning Article 5 of the Radio Regulations

2.1 Maritime mobile service

MOD 167 proposals G/152/277

Having examined this proposal, the Working Group recommends the adoption of the revised text for No. 167 of the Radio Regulations given in Annex A to this report.

2.2 Radiodetermination

ADD 367A (2900-3100)	proposals	G/57/8
ADD 367 (2900-3100)		
(9300-9500)	"	F/81/71-2-3
ADD 367B (2900-3100)	"	G/57/9
ADD 385A (5460-5470)	"	G/57/10
ADD 387A (5470-5650)	"	G/57/13
ADD 387B (5470-5650)	"	G/57/14
ADD 399A (9300-9500)	"	G/57/16
ADD 399B (9300-9500)	"	G/57/17

Having considered the above proposals and recognizing the desirability of having relevant provisions included in Article 5 of the Radio Regulations, the Working Group recommends the adoption of the revised provisions for Article 5 given in Annex B to this report.



The delegation of the United States of America opposed the adoption of the text and reserved the right to reopen the matter in Committee 4. It took the view that it was premature, at the present Conference, to include in Article 5 provisions relating to sub-bands for the operation of fixed-frequency radar beacons before the C.C.I.R., I.M.C.O. and the I.A.L.A. had completed their studies. It also feared that harmful interference would be caused by and to radars on board aircraft mainly in the 9 300-9 500 MHz band.

It would have preferred the Conference to confine itself to adopting a recommendation such as that contained in the proposal USA/54/263 ADD Recommendation C.

3. Definition of a radar beacon

The discussions in Working Group 4C revealed the need for a definition of "radar beacon". A small ad hoc group convened for the purpose proposed the definition given in Annex C to this report. Working Group 4C recommends the adoption of this definition.

If this definition is approved, the French and Spanish texts of No. 369 of the Radio Regulations will need to be altered, while the English text will remain unchanged.

The revised texts are given in Annex D.

4. Draft Recommendations

Working Group 4C recommends the adoption of the draft Recommendations given in Annexes E and F to this report, relating respectively to :

- fixed-frequency radar beacons, and
- the conditions to be met for the frequency of shipborne transponders.

A. PETTI
Chairman

A N N E X A

MOD 167 Only classes A1 or F1, A4 or F4 are authorized in the
 Mar band 90-160 kHz for stations of the fixed service and in the
 band 110-160 kHz for stations of the maritime mobile service.
 Exceptionally, class A7J emissions are also authorized in the
 band 110-160 kHz for stations of the maritime mobile service.

A N N E X B

MOD

MHz

Allocation to Services		
Region 1	Region 2	Region 3
2 900 - 3 100		
RADIONAVIGATION		
Radiolocation		
		367 367A 367B

MOD

Allocation to Services		
Region 1	Region 2	Region 3
9 300 - 9 500		
RADIONAVIGATION		
Radiolocation		
		399 367A 367B

ADD 367A In the maritime radionavigation service between
 2 900 - 2 920 MHz and 9 300 - 9 320 MHz, the use of shipborne
 radar other than existing ones is not permitted.

ADD 367B In the maritime radionavigation service between
 2 920 - 3 100 MHz and 9 320 - 9 500 MHz, the use of fixed-
 frequency radar beacons on land or at sea is not permitted.

A N N E X E C - A N N E X C - A N E X O C

ADD 60A Balise de radiodétection (balise-radar à déclenchement)

Récepteur-émetteur utilisé par le service de radio-navigation maritime : lorsqu'il est excité par un radar de veille de surface, il renvoie automatiquement un signal distinctif, qui peut apparaître sur l'écran du radar qui le met en action, et fournir des indications de portée, d'azimut et d'identification.

ADD 60A Radar Beacon (racon)

In the Maritime Radionavigation Service, a receiver-transmitter device, which when triggered by a surface search radar, automatically returns a distinctive signal which can appear on the display of the triggering radar, providing range, bearing and identification information.

ADD 60A Balizas para radar (racon)

Transmisor-receptor utilizado en el servicio de radionavegación marítima que al activarse por la señal procedente de un radar de vigilancia de superficie, emite de forma automática una señal distintiva la cual al aparecer en la pantalla de aquél, facilita información acerca de su distancia, la marcación y su identificación.

A N N E X E D

(MOD) 369 Dans la bande 3 100 - 3 300 MHz, les balises de radiodétection et les appareils de radiodétection actuellement existants à bord des navires marchands sont autorisés à fonctionner à l'intérieur de la bande 3 100 - 3 266 MHz.

A N N E X D

(MOD) 369 In the band 3 100 - 3 300 MHz, existing racons and shipborne radars in merchant ships may operate within the band 3 100 - 3 266 MHz.

A N E X O D

(MOD) 369 En la banda 3 100 - 3 300 MHz, las frecuencias comprendidas entre 3 100 y 3 266 MHz se podrán utilizar por las balizas para radar (racon) y los radares existentes en la actualidad a bordo de los barcos mercantiles.

A N N E X E

ADD

RECOMMENDATION C

Relating to the development of fixed frequency
radar beacons

The World Administrative Radio Conference, Geneva, 1974,
having provided for

the designation of two bands at 2 900-2 920 MHz and
9 300-9 320 MHz for the development of fixed frequency radar
beacons (racons) in the maritime radionavigation service;

considering

- a) that ship's navigation can often be improved and groundings prevented with the proper use of the ship's radar;
- b) that the use of racons to mark aids and hazards to marine navigation has provided a significant improvement in the radar navigation of vessels;
- c) that several administrations presently operating swept frequency racons to mark lighthouses, lightships, buoys and other aids or hazards to marine navigation will continue to do so for an indefinite period of time;
- d) that several administrations also plan to introduce fixed frequency racons at an early date since studies and experiments indicate that for some purposes they are technically and operationally superior to the swept frequency type;
- e) that such racons may require protection from mutual and external interference;
- f) that the selection of the technical characteristics and other parameters of racons should be internationally agreed by the maritime interests and coordinated with other users whose operations might be affected;

recommends .

1. that administrations, the Inter-governmental Maritime Consultative Organization and the International Association of Lighthouse Authorities continue to evaluate the operational benefits which could result from the widespread use of fixed frequency radar beacons;

2. that the C.C.I.R., in consultation with appropriate international organizations, including the I.C.A.O., be invited to recommend the technical parameters to be met by such devices including electromagnetic compatibility with other allocated uses.

A N N E X F

ADD

RECOMMENDATION B

Relating to the Frequency Requirements
for Shipborne Transponders*

The World Administrative Radio Conference, Geneva, 1974,

considering

- a) that merchant ships of the world are increasing in size and speed;
- b) that during the year a significant number of collisions do occur involving merchant vessels with resultant loss of life and property and that collisions have a high potential for endangering the natural environment;
- c) that there is a need to correlate radar targets with vessels making VHF radiotelephone transmissions;
- d) that studies and experiments have shown the potential for shipborne transponders to enhance and supplement radar target images as compared to normal radar images;
- e) that current studies and experimentation relating to shipborne transponders indicate development of equipment can be anticipated in the near future, which will offer adequate radar image enhancement and target identification, and possibly, data transfer capabilities;
- f) that such shipborne transponders may require protection from interference;
- g) that the selection of the frequency bands and other parameters for this purpose should be coordinated with other users whose operations might be affected;

* A receiver-transmitter which emits a signal automatically when it receives the proper interrogation.

recommends

1. that administrations and the Inter-Governmental Maritime Consultative Organization continue to evaluate the operational benefits which could result from the widespread use of transponders on ships and that consideration be given to the merit of adopting an internationally approved system for future implementation;
 2. that the International Radio Consultative Committee in consultation with appropriate international organizations be invited to recommend the most suitable order of frequencies and bandwidth required for this purpose, and the technical parameters to be met by such devices including electromagnetic compatibility with other allocated uses;
 3. that, pending further technical and operational developments and evaluation, administrations be prepared to make the necessary provisions for such devices at the next World Administrative Radio Conference competent to deal with the matter.
-

MARITIME CONFERENCE

GENEVA, 1974

Document No. 283-E

14 May 1974

Original : English

COMMITTEE 5

SUB-WORKING GROUP 5C-3

Information to all delegations

Working Party 5C/3-D will meet with individual administrations to discuss each administration's requirements that will be included in Appendix 25 MOD 2. These discussions will take place on 15, 16, and 17 May. Each administration will be advised of the time and location of their meeting by a list to be posted on the notice board that is adjacent to the magazine and book stall.

Delegations are requested to watch this board for the times of their meetings and to send to the meeting one or two delegates who are knowledgeable on their administration's requirements.

E.D. DUCHARME
Chairman 5C/3-D



INTERNATIONAL TELECOMMUNICATION UNION

MARITIME CONFERENCE

GENEVA, 1974

Document No. 284-E
8 May 1974
Original : Spanish

COMMITTEE 5

Argentina

PROPOSALS FOR THE WORK OF THE CONFERENCE

The Argentine Administration's requirements for additional channels in the Revised Frequency Allotment Plan for radiotelephone coast stations are as follows:

Frequency band in MHz	4	6	8	12	16	22
Number of SSB channels	2	1	2	2	2	2

These channels should be allotted without altering the number of channels which Argentina is already using and which are registered with the I.F.R.B.



MARITIME CONFERENCE

GENEVA, 1974

Document No. 285-E(Rev.1)

24 May 1974

Original : EnglishCOMMITTEE 5Japan

PROPOSALS FOR THE WORK OF THE CONFERENCE

The table below shows the break down of the frequency requirements of Japan as submitted in Document No. 285.

Frequency bands in MHz	4	6	8	12	16	22
Number of channels in use	15	2	15	18	17	15
Number of additional channels required in 1975	2	1	2	1	1	1
Number of additional channels required in 1977	1	-	1	2	2	2
Total requirements	18	3	18	21	20	18

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 285-E

14 May 1974

Original : English

COMMITTEE 5

Japan

PROPOSALS FOR THE WORK OF THE CONFERENCE

The frequency requirements of Japan in the revised Frequency Allotment Plan for Coast Radiotelephone stations operating in the Exclusive Maritime Mobile Bands between 4 000 and 23 000 kHz (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands in MHz	4	6	8	12	16	22
Number of SSB channels	18	3	18	21	20	18



COMMITTEE 6

THIRD REPORT OF WORKING GROUP 6C
TO COMMITTEE 6

Article 40 Section I - Accounting for radiotelegrams and
radiotelephone calls

1509 Note to Editorial Committee :
Still under consideration

Article 40 Section II - Establishment of Accounts for
Radiotelegrams

MOD 1510	MOD 1511	NOC 1512
NOC 1513	NOC 1514	SUP 1515
MOD 1516	NOC 1517	MOD 1518
NOC 1519-1521	MOD 1522	MOD 1523
SUP 1524	SUP 1525	SUP 1526

All the proposals on the above provisions were considered and Working Group 6C unanimously recommends the adoption of the revised provisions appearing in Annex to the present Report.

M.O. MEREDITH
Chairman
Working Group 6C

Annex : 1



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A N N E XArticle 40Section I

1509 Note to Editorial Committee :
Still under consideration

Article 40Section II

MOD 1510 §5. (1) In the case of radiotelegrams originating in ship and aircraft stations, the administration to which the land station is subject shall debit 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 :

(*-* MMS, accounting authority)

- the land station charges,
- the *charges relating to transmission over the general network of telecommunication channels, which will hereafter be called telegraph charges*,

(*-* MMS, land-line charges)

- the total charges collected for prepaid replies,

1) (Note to Editorial Committee : it may be necessary to delete references to special services after review of ARR's)

- 1) [- land station and telegraph charges made for collation,
- 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,

(*-* MMS, taking into account C.C.I.T.T. Recommendations)

- 1) [- charges *fixed by the Telegraph Regulations* for copies of multiple telegrams.

(*-* MMS, taking into account C.C.I.T.T. Recommendations)

MOD 1511 (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.*

(*-* MMS, see 1505C)

NOC 1512

NOC 1513

NOC 1514 Note to Editorial Committee
see note under 1510

SUP 1515

MOD 1516 (2) 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):*

(*-* MMS, accounting authority)

NOC 1517

MOD 1518

b) If occasion arises, with

- the charges due to intermediate ship or aircraft stations,
- the total charges collected for prepaid replies,

1) Note to Editorial Committee
see note under 1510

1)

- the ship or aircraft station charge for collation,
- the charges *fixed by the Telegraph Regulations* for copies of multiple telegrams.

(*-* MMS, taking into account CCITT Recommendations.)

NOC 1519-1521

MOD 1522 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. 1510 and 1511. Thereafter the provisions of Nos. 1514 to 1518 are applied : **

(*-* MMS, accounting authority

- MMS, Thereafter the provisions of 1505B are applied.)

MOD 1523 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. 1510 and 1511. The provisions of Nos. 1514 to 1518 are then applied** the first land station being regarded as the office of origin as far as the accounts are concerned.

(*-* MMS, accounting authority

- MMS, Thereafter the provisions of Nos. 1505B and 1505C are applied.)

SUP 1524) Note to Editorial Committee :

)
SUP 1525) It may be necessary to reinstate these
) provisions after consideration of ARR,
) Article 10.
SUP 1526)

MARITIME CONFERENCE

GENEVA, 1974

Document No. 287-E

8 May 1974

Original : French

COMMITTEE 3

SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE 3

(Budget Control)

Thursday, 2 May 1974, at 1000 hrs

Chairman : Mr. J. SZEKELY (Hungarian People's Republic)

<u>Subjects discussed</u>	<u>Document No.</u>
1. Terms of reference of the Budget Control Committee	138
2. Budget of the Conference	140
3. Contributions of non-exempted recognized private operating agencies and international organizations	145
4. Cost of printing the Final Acts	146
5. Expenditure situation of the Conference at 26 April 1974	227
6. Organization of the Committee's future work	-



1. Terms of reference of the Budget Control Committee (Document 138)

The Chairman reminded the Committee of its terms of reference :

- "- To determine the organization and the facilities available to the delegates; and
- approve the accounts for expenditure incurred throughout the duration of the Conference (General Regulations No. 674)."

With regard to the first point, he drew attention to the address delivered on 22 April 1974 at the inaugural plenary meeting of the Maritime Conference by the Secretary-General of the I.T.U., who had expressed the sincere hope that delegations would find the facilities of the International Conference Centre in Geneva well-keyed to their work and that they would help the deliberations to proceed smoothly and rapidly. Pointing out that the proximity of the Centre to Union headquarters should simplify the organization of the Secretariat's work and that the I.T.U. was using those conference facilities for the first time, the Secretary-General had urged delegations to notify him of any improvements in the arrangements for the current Conference and for others that the Union might hold at the Centre in the future.

It was gratifying to be able to say that the International Conference Centre in Geneva fully met the requirements of conferences of the kind that the I.T.U. was holding there at the time.

The delegate of the United States of America said that he shared the Chairman's views and expressed appreciation of the excellent facilities made available to the Conference. Nevertheless, he suggested that in such a magnificent Centre the arrangement of the pigeonholes made available to delegations and the organization of cloakrooms might be improved.

2. Budget of the Conference (Document 140)

The Secretary of the Committee said that the budgetary situation of the Conference was exceptional in that the Administrative Council at its 1973 session had been able to approve the conference budget on a provisional basis only, owing to the imminence of the Plenipotentiary Conference, which had fixed the ceiling for 1974 and the following years.

In reply to the delegate of the U.S.S.R., the Secretary of the Committee said that the travel costs appearing under item 107 of the Annex to Document 140 related to the supernumerary staff engaged for the Conference. Item 111 - Document production - was closely connected with item 118 - Final Acts of the Conference. It had originally been provided that those documents would be reproduced by outside printers, but it had finally been decided to assign the work directly to the Union's internal reproduction services. That had led to the saving of 140,000 francs in the provisional over the final budget of the Conference for items 111 and 118 taken together ($150,000 + 450,000 = 600,000$ francs - provisional - as against $200,000 + 260,000 = 460,000$ francs - final).

In reply to the delegate of Liberia, the Secretary of the Committee explained that the travel costs covered the return journeys of supernumerary staff recruited outside Geneva between their places of residence and the venue of the Conference.

The amount of 260,000 Swiss francs under item 118 - Final Acts - could be broken down as follows : 50,000 Swiss francs for translation into Chinese and Russian as provided for in the Convention, and 210,000 Swiss francs for printing and publication of the final blue, pink and white texts.

The delegate of the United States of America, pointing out that the I.T.U. was using its own printing services to publish the Final Acts for the first time, expressed the view that the Committee should be kept very regularly informed of the progress of work and of the expenditure that might be expected, particularly with regard to reproduction and possible recourse to outside firms. The Conference should be in a position to take appropriate steps at any time that the proposed credit of 210,000 Swiss francs was exceeded.

The Executive Secretary gave a detailed account of the procedure specially provided for in the Convention with regard to the production, successive readings and adoption of the Final Acts of I.T.U. Conferences. In particular, the volume of work involved in the production and printing of blue, pink and white texts always depended on the progress of the debates and on the speed of successive readings of the documents, as well as on the revision and final drafting of texts.

To save time and money, only one copy of the Final Acts in the form of white documents would be issued to each participant at the time of the signing ceremony.

It was foreseen that the Final Acts would consist of some 300 pages and that during the final stage of publication some offset reproduction work would have to be given to outside printers. The total number of copies reproduced for signature would be about a thousand - 500 in English, 200 in Spanish and 300 in French.

It should be noted that the new working methods would dispense with practically all the traditional typographical operations, thus eliminating the waiting time paid to printers which had cost the I.T.U. so much on other occasions - about 200,000 Swiss francs for the Space Conference.

The delegate of the United States of America said that it would have been clearer to state expressly in Document 140 that, as a precaution, the General Secretariat did not rule out the possibility of having to entrust certain reproduction operations to outside services.

In reply to the delegate of the Philippines, the Secretary of the Committee said that item 108 - Insurance - applied only to supernumerary staff.

The Committee took note of Document 140.

3. Contributions of non-exempted recognized private operating agencies and international organizations (Document 145)

After the Committee Secretary had given various explanations, the Committee took note of the above document.

4. Cost of printing the Final Acts (Document 146)

The Committee took note of the document.

5. Situation concerning expenditure for the Maritime Conference at 26 April 1974 (Document 227)

The Chairman said that according to Article 15, paragraph 3 of the I.T.U. Financial Regulations, the Budget Control Committee had to authorize the transfer of a credit of 210,000 Swiss francs from Chapter III - Other Expenses - to Chapter II - Premises and equipment.

While explaining certain details to the Vice-Chairman, and the delegates of Spain, the United States and Canada, the Secretary of the Committee said that the I.T.U. procedure was for the Secretary-General to submit a draft budget to the Administrative Council for examination and possible amendment before final adoption. However, sometimes owing to changes in salaries, for example, the Council had to approve supplementary credits a posteriori.

The situation as regards the Maritime Conference was a special one since the Council still had to approve its budget at its session in June 1974.

After the delegate of Liberia had asked for some explanations about the transfer of funds mentioned in Chapter III to Chapter II, the Secretary of the Committee explained that item 7.610 comprised technical preparatory work done by the I.F.R.B. for the present Conference. That included inter alia the reproduction of various documents at a cost of 6,580 Swiss francs. Those were tasks belonging to the I.F.R.B. and not documents prepared by that Committee for the Conference itself. The credit estimated at 2,420 Swiss francs would not be used. Only the sums in item 7.611 (Final Acts of the Conference) needed to be transferred to item 7.605 (Document Production); the I.F.R.B.'s preparatory documents did not create any financial problem.

Reverting to the essential question raised in Document 227, the Chairman enquired whether the Committee was prepared to authorize the Secretary-General to transfer the credit of 210,000 Swiss francs in item 7.611 from Chapter III to item 7.605 in Chapter II, given that it was virtually impossible to distinguish between expenditure on preparatory documents and current ones for the Conference and expenditure entailed by the drafting of documents connected with the Final Acts.

In the absence of any objection it was so agreed.

As Chapter I had already been examined in detail by the Committee, the Chairman asked whether the total at the end of that chapter was acceptable.

The Committee replied in the affirmative.

The Chairman then reviewed the various items under Chapter II which were all approved without comment.

The items in Chapter III were also all approved without comment as well as the general total at the end.

The delegate of the U.S.S.R. was concerned about the fact that owing to the transfer of credits from item 7.611 to item 7.605 it would no longer be clear that the sums indicated also appeared in the printing costs of the Final Acts which might provoke questions from some delegates, particularly those which had not been present in Committee 3.

That view was shared by the delegate of the United States who felt bound to add that a line giving the estimated cost of the Final Acts should be added to the report which would be submitted to the Conference.

Replying to these observations, the Secretary of the Committee stated that the first paragraph on page 2 of Document 227 implied that the printing costs of the Final Acts would be included in item 7.605 dealing with document production. At present, it was impossible to form an estimate of that expenditure as would no doubt be the case in the sixth week of the Conference since the last two weeks were usually the heaviest from the budgetary point of view. However, he believed that the Committee's report could clearly indicate that item 7.605 included in addition to the expenditure on the production of current documents expenditure on the publication of the Final Acts of the Conference and could distinguish clearly between the estimates for different types of expenditure.

In the absence of objection, it was decided to act accordingly.

6. Organization of the Committee's future work

The Chairman stated that he would keep in close touch with the Secretary of the Committee so as to follow the development of the budgetary situation and that he would convene another meeting during the fourth week, if that became necessary. Otherwise, the Committee's second meeting would be held during the sixth week of the Conference so that according to the provisions of Rule 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention (Montreux 1965), the Budget Control Committee could prepare the report in which it had to indicate as precisely as possible the estimated total expenditure on the Conference (see No. 676 of the aforementioned Rule 5).

The Chairman sincerely thanked participants for the spirit of collaboration shown during the meeting and the Secretariat. He also expressed his gratitude to the Secretary of the Committee for his valuable help.

The meeting rose at 1150 hrs.

The Secretary :
R. PRELAZ

The Chairman :
J. SZEKELY

MARITIME CONFERENCE

GENEVA, 1974

Document No. 288-E

8 May 1974

Original : English

WORKING GROUP 5D

FIRST REPORT OF SUB-WORKING GROUP 5D-1

TO WORKING GROUP 5D

After considerable discussions, the Sub-Working Group submits the following draft texts relating to on-board communication :

Article 5 : ADD 318B and 318C

Appendix 18 : MOD Note i)

New Appendix 19A

Draft Recommendation No.

H. KIEFFER

Chairman

Annex : 1



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A N N E XARTICLE 5

ADD 318B The frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Such use may be subject to the national regulations of the administration concerned when used in its territorial waters. Equipment for this purpose shall satisfy the characteristics set forth in Appendix 19A.

ADD 318C In the territorial waters of Canada, Philippines and the United States, the preferred frequencies for use by on-board communication stations shall be 457.525 MHz, 457.550 MHz, 457.575 MHz and 457.600 MHz paired, respectively, with 467.750 MHz, 467.775 MHz, 467.800 MHz and 467.825 MHz. Equipment for this purpose shall satisfy the technical characteristics set forth in Appendix 19A.

APPENDIX 18

MOD Note i) Channels 15 and 17 may also be used for on-board communications provided the effective radiated power does not exceed 1 watt and subject to the national regulations of the administration concerned when these channels are used in its territorial waters. (However, see Recommendation No. ...)

ADD APPENDIX 19A

Characteristics of equipment used for on-board communications in the 450-470 MHz bands

(see No. 318B and 318C)

1. The equipment should be fitted with sufficient channels for satisfactory operation in the area of intended use.

2. The effective radiated power shall be limited to the minimum required for satisfactory operation, but in no case exceed 2 watts. Wherever practicable the equipment should be fitted with a suitable device to readily reduce the output power by at least 10 dB.

3. In the case of equipment installed at a fixed point on the ship, the height of its antenna shall not be more than 3.5 metres above the bridge.

4. Only frequency modulation with a pre-emphasis of 6 dB/octave (phase modulation) shall be used.

5. The frequency deviation shall not exceed ± 5 kHz.

6. The frequency tolerance shall be 5 parts in 10^6 or better.

7. The audio-frequency band shall be limited to 3 000 Hz.

8. Control, telemetry and other non-voice signals shall be coded in such a manner as to minimize the possibility of false response to interfering signals.

9. If the use of a repeater station is required on-board a ship, the following frequency pairs shall be used :

457.525 MHz	/	467.525 MHz
457.550 MHz	/	467.550 MHz
457.575 MHz	/	467.575 MHz

(see also No. 318C)

DRAFT RECOMMENDATION MAR No.

Relating to the use of channels 15 and 17 in Appendix 18
by on-board communications stations

The World Administrative Radio Conference, Geneva, 1974,

considering

- a) that channels 15 and 17 were provided by the W.A.R.C., Geneva, 1967, for use for internal operational communications on board ships within territorial waters and with an effective radiated power not in excess of 0.1 W;
- b) that considerable use has been made of those channels by a number of administrations;
- c) that those channels have not been used by some administrations because of the shortage of VHF channels for operational communications;
- d) that, for the same reason, these administrations wish to discontinue the use of those channels;

recognizing

- e) that several common channels for on-board communication stations are necessary internationally to meet world-wide requirements in the future;
- f) that there is a need for frequencies enabling the use of repeaters on large vessels, such as container ships, tankers, etc.;
- g) that there may be additional experience required concerning the application and effectiveness of UHF channels made available by this Conference;

recommends

- 1. that the next World Administrative Radio Conference competent to consider such matters determine if the use of channels 15 and 17 is still necessary for on-board communication stations and, if not, the date by which such use should be terminated;

2. that the same Conference review the UHF channels being used for on-board communication stations to determine if the number of channels and their location in the radio spectrum are satisfactory to meet the requirements of such stations;

3. that the same Conference consider the need for additional allocations available for use by on-board communication stations on a world-wide basis and in the territorial waters of all administrations;

4. that due consideration be given by administrations to the technical standards and functioning of such stations to ensure an effective and mutually compatible international system of operation;

invites

the C.C.I.R. to study the question whether UHF frequencies can meet all the requirements of on-board communication stations and report its findings to the next competent Administrative Radio Conference.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 289-E
10 May 1974
Original : English

PLENARY MEETING

SECOND REPORT OF COMMITTEE 6
(OPERATION)

ARTICLE 29

MOD 1007

ARTICLE 30

MOD 1067

ARTICLE 40, Section I - Accounting for radiotelegrams and
radiotelephone calls

Additional definition for 1504A

NOC 1505	ADD 1505A	ADD 1505B
ADD 1505C	ADD 1505D	MOD 1506
NOC 1506.1	NOC 1507	ADD 1507A
MOD 1508		

1. All proposals on the above provisions were considered.
2. The Committee unanimously adopted the annexed texts.

W.W. SCOTT
Chairman



ARTICLE 29

Section II

Preliminary operations

MOD 1007 § 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. This requirement does not apply to stations where unattended operation is possible through automatic means (see No. 850) on frequencies dedicated to narrow-band direct-printing.

ARTICLE 30

MOD 1067 § 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 shall be made at specified times fixed by agreement between the administrations concerned and at intervals of not less than two hours and not more than four hours during the working hours of the coast station.

ARTICLE 40

Section I

General

Note A

1504A Accounting authority

Any organization notified by an administration to the I.T.U. for inclusion in the list of ship stations as being responsible for settling maritime accounts for some or all of the ships licensed by that administration. An

Note A For the Editorial Committee

Under 1504A the definition of Accounting authority should be added to the definition already reported under this item in the First Report of Committee 6.

accounting authority may be the administration itself, a private operating agency, a shipowner, or an operating enterprise authorized by a shipowner to receive and settle accounts on his behalf. In the general interest of administrations the number of accounting authorities shall be kept to the minimum required for the efficient settlement of accounts.

NOC 1505

Note B ADD 1505A § 1A. In the maritime mobile service¹⁾,
the following charges shall be included in the
accounts:

Note C

(1) In the case of radiotelegrams,
radiotelephone calls and / direct-printing
messages / originating on mobile stations

- the land station charges,
- the land-line charges,
- the accessory charges for radiotelegrams
which have to be considered in the
accounting and
- the supplementary charges for radiotelephone
calls with special facilities.

1) Hereafter, this phrase is indicated by "MMS".

ADD 1505B (2) In the case of radiotelegrams,
radiotelephone calls and / direct-printing
messages / destined for mobile stations and
passing through a land station of another country,

- the land and ship station charges.

Note B For the Editorial Committee

In the footnotes the phrase "in the maritime mobile service" will be
indicated by "MMS".

Note C For the Editorial Committee

The phrase shown in brackets "/ direct-printing messages /" in the
section of this report dealing with Article 40 is subject to change
following further study in Committee 6.

ADD 1505C § 1B (1) As far as the transmission over the general international network of the telecommunication channels is concerned, the provisions laid down in the Telegraph and Telephone Regulations taking into account C.C.I.T.T. Recommendations and Instructions shall apply to radiotelegrams, radiotelephone calls and / direct-printing messages /.

ADD 1505D (2) The land-line charges shall be included in the international telegraph and telephone accounts and shall be accounted for according to the provisions of the Regulations mentioned in No. 1505C, taking into account C.C.I.T.T. Recommendations and Instructions.

MOD 1506 § 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 which the land station and ship and aircraft station charges follow the radiotelegrams and radiotelephone calls*) from country to country through the medium of the telegraph and telephone accounts.¹⁾ Such arrangements are subject to previous agreement between the administrations concerned.

Note D

*) MMS, and direct-printing messages

NOC 1506.1

NOC 1507

Note D For the Editorial Committee

Where a single asterisk "*" appears, the footnote following the paragraph indicates the phrase to be inserted in the case of the maritime mobile service.

ADD 1507A § 3A. The country on whose territory is established a land station serving as intermediary for the exchange of radiotelegrams, radiotelephone calls and direct-printing messages between a mobile station and another country, is considered, as far as the application of land-line charges is considered, as the country of origin or destination and not as a transit country.

MOD 1508 § 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. 1510 to 1559* shall apply to such enterprise in the same manner as to an administration.

Note E

- MMS, the whole of Article 40

Note E For the Editorial Committee

Where a phrase in the text of a paragraph is contained between two asterisks, the sign "* ——— *" appears in footnote together with the phrase which shall replace the words within the asterisks when the paragraph is applied to the maritime mobile service.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 290-E
9 May 1974
Original : English

COMMITTEE 4

Federal Republic of Nigeria

PROPOSAL FOR THE WORK OF THE CONFERENCE

Listed below are the carrier frequencies which, being already recorded in the International Frequency Register or in use, Nigeria has a need to retain for its coast station HF radiotelegraphy services :

No.	Frequency band	Carrier frequencies in kHz
1	6 MHz	6 374
2	6 MHz	6 411
3	8 MHz	8 510
4	8 MHz	8 698
5	12 MHz	12 696.5
6	13 MHz	13 065
7	16 MHz	16 942
8	16 MHz	17 199.2



INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 291-E
9 May 1974
Original : English

COMMITTEES 4 AND 5

Greece

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE 7

1. Reference is made to Document DT/39, 6 May 1974, elaborated by the Working Group 4A/5E.
2. Greece reserved its position regarding this document because the proposed plan for the new Appendix 15 is considered excessively favourable to the narrow-band direct-printing at the expense of the radiotelephony. However, the requirements for narrow-band direct-printing are not as imminent as the the considerable and immediate requirements expressed by many countries for radiotelephone channels. It is therefore deemed necessary that additional radiotelephone channels be made available, which will permit a fair satisfaction of the needs of the world's maritime community.
3. In order to improve this situation, Greece submits a slight modification to the proposed plan, which, if adopted, will increase by 14 the number of radiotelephone channels without affecting either the principles or the construction of the proposed plan.

Annex : (5 pages)



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A N N E X 1

To DT/39 (AS PROPOSED TO BE REVISED BY GREECE)

Band (MHz)	4		6		8			12			16			22		
Power limit (kHz)	4 063		6 200		8 195			12 330			16 460			22 000		
Super limit (kHz)	4 438		6 525		8 815			13 200			17 360			22 720		
Available bandwidth (kHz)	375,0		325,0		620,0			870,0			900,0			720,0		
	3/5/74	6/5/74	3/5/74	6/5/74	3/5/74	6/5/74	Greek Proposal 9/5/74	3/5/74	6/5/74	Greek Proposal 9/5/74	3/5/74	6/5/74	Greek Proposal 9/5/74	3/5/74	6/5/74	Greek Proposal 9/5/74
1	86,2	80,6	23,2	18,6	102,2	96,1	99,2	115,2	99,2	111,6	131,2	127,1	142,6	131,2	124,0	136,4
2	3,0	3,0	6,1	6,0	6,8	6,2	6,2	10,5	10,3	9,3	11,0	9,3	9,9	17,5	15,5	15,5
3	20,0	19,9	28,0	27,9	40,0	40,0	40,0	48,0	48,0	48,6	60,0	60,1	60,0	48,0	48,0	48,6
4	3,5	3,5	3,5	3,5	3,5	3,5	3,1	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5
5	[8,5]	10,0	[12,0]	14,0	[15,0]	17,2	16,5	25,0	36,0	37,0	30,0	46,0	44,0	35,0	35,0	30,0
7 + 14	38,0	39,4	56,0	55,4	70,0	77,4	75,8	117,0	125,3	110,8	153,0	153,4	139,4	101,0	83,5	76,5
9	130,0	130,0	168,5	168,5	269,0	269,0	269,0	418,5	418,5	418,5	337,5	337,5	337,5	250,5	250,5	250,5
10	86,2	80,6	23,2	18,6	102,2	96,1	99,2	115,2	99,2	111,6	131,2	127,1	142,6	131,2	124,0	136,4
12	-	-														
13	[8,5]	8,0	[12,0]	12,5	[15,0]	14,5	11,0	25,0	30,0	19,1	30,0	36,0	20,5	35,0	35,0	22,6
15	-															
17	-															
Total Bandwidth	383,9	375,0	332,5	325,0	623,7	620,0	620,0	877,9	870,0	870,0	887,4	900,0	900,0	752,9	720,0	720,0

A N N E X E 2 / A N N E X 2 / A N E X O 2

AU DOCUMENT N° DT/39-F/E/S (REVISION PROPOSEE PAR LA GRECE)
TO DOCUMENT No. DT/39-F/E/S (AS PROPOSED TO BE REVISED BY GREECE)
AL DOCUMENTO No. DT/39-F/E/S (EN LA FORMA REVISADA PROPUESTA POR GRECIA)

	RR	Proposition - Proposal - Proposición		Nouv. New. Nueva prop.	
8195			8195		8195.0
	(1) 27 / 3.2 / 86.2	(1) 31 / 3.1 / 96.1		32/3.1/99.2	
8281.2					
	(2) 2 / 3.2 / 6.8				
8288		(2) 2 / 3.1 / 6.2	8291.1	2/3.1/6.2	8249.2
		(5) / / 2.7 (NP)	8297.3		
8328		(3) 7 / 4 / 28	8300	7/4/28	8300.4
	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5	8328		8328.4
8.331.5			8331.5	10/0.3/3.1	8331.5
	(5) 20// 0.5 / 10.25	(3) 3 / 4 / 12		3/4/12	
8341.75			8343.5		8343.5
	(6) 14 / 1 / 14.25	(5) / / 14.5 (P)		/ /11.0(P)	
8356		(14) - - - / - - - / 2 - - - -	8358		8354.5
	(7) 17 / 1 / 18	(7) / / 18	8360 /	/5.5(NP)	8360.0
				/ /18	
8374			8378		8378.0
	(8) 84 / 1 / 85.5	(14) / / 57.4		/ /578	
			8435.4		8435.8
8459.5					
		(9) / / 269		/ / 269	
	(9) / / 269				
		(13) / / 14.5 (P)	8704.4	/ /11.0(P)	8704.8
			8718.9		8715.8
8728.5					
	(10) 27/ 3.2 / 86.5	(10) 31 / 3.1 / 96.1		32/3.1/99.2	
8815			8815		8815

	RR	Proposition - Proposal - Proposición		Nouv. New. Nueva prop.
12 330	(1) 26 / 3.5 / 91	(1) 32 / 3.1 / 99.2	12 330	12 330.0
				36/3.1/111.6
12 421	(2) 3 / 3.5 / 10.5			
12 431.5	(3) 12 / 4 / 48	(2) 3 / 3.1 / 10.3	12 429.2	12 441.6
		(3) 10 / 4 / 40	12 439.5	3/3.1/9.3
12 479.5	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5		12 450.9
12 483	(5) 20 / 1 / 20.25	(3) 2 / 4 / 8	12 479.5	7/4/28.6
			12 483	10/0.3/3.5
12 503.25	(6) 20 / 1.5 / 30.75	(5) / / 6 (NP)		12 483.0
		(5) / / 30 (P)		5/4/20.0
12 534	(7) 17 / 1.5 / 27	(14) / / 13	12 491	12 503.0
		(7) / / 27	12 497	18.0(NP)
12 561	(8) 84 / 1.5 / 128	(14) / / 85.3		12 521.0
				19.0(P)
12 689	(9) / / 418.5	(9) / / 418.5	12 527	
		(13) / / 30 (P)	12 540	12 540.0
13 107.5	(10) 26 / 3.5 / 92.5	(10) 32 / 3.1 / 99.2	12 567	27.0
				12 567.0
13 200			12 652.3	83.8
				12 650.8
			13 070.8	418.5
				13 069.3
			13 100.8	19.1(P)
				13 088.4
				36/3.1/111.6
			13 200	13 200.0

	RR	Proposition - Proposal - Proposición	Nouv. New. Nueva prop.
16 460	(1) 30 / 3.5 / 105	(1) 41 / 3.1 / 127.1	16 460 16 460.0
16 565	(2) 3 / 3.5 / 11		46/3.1/142.6
16 576	(3) 15 / 4 / 60.5	(2) 3 / 3.1 / 9.3	16 587.1 16 602.6
16 636.5	(4) 10 / 0.3 / 3.5	(3) 10 / 4 / 40.1	16 596.4 3/3.1/9.9
16 640	(5) 20 / 1 / 20.5	(4) 10 / 0.3 / 3.5	16 612.5
16 660.5	(6) 25 / 2 / 51.5	(5) / / 36 (P)	6/4/24
16 712	(7) 17 / 2 / 36	(5) / / 10 (NP)	16 636.5 16 636.5
16 748	(8) 84 / 2 / 169.5	(14) / / 14	16 640 16 640.0
16 917.5	(9) / / 337.5	(7) / / 36	9/4/36
17 255	(10) 30 / 3.5 / 105	(14) / / 103.4	16 660 16 676.0
17 360		(9) / / 337.5	16 696 20.5
		(13) / / 36	16 706 16 696.5
		(10) 41 / 3.1 / 127.1	16 720 16 720.0
			/36
			16 756 16 756.0
			/103.4
			16 859.4 16 859.4
			/337.5
			17 196.9 17 196.9
			/20.5
			17 232.9 17 329.5
			46/3.1/142.6
			17.360 17 360.0

Nouv. New. Nueva
prop.

22 000	RR	Proposition - Proposal - Proposición	22 000	22 000.0
	(1) 27 / 3.5 / 94.5	(1) 40 / 3.1 / 124		44/3.1/136.4
22 094.5	(2) 5 / 3.5 / 17.5			
22 112	(3) 12 / 4 / 48.5	(2) 5 / 3.1 / 15.5	22 124	22 136.4
		(3) 5 / 4 / 21	22 139.5	22 152.5
22 160.5	(4) 10 / 0.3 / 3.5	(4) 10 / 0.3 / 3.5	2/4/8.6	
22 164	(5) 20 / 1 / 20.5	(3) 7 / 4 / 28	22 160.5	22 160.5
			22 164	22 164.0
22 184.5	(6) 18 / 2 / 38	(5) / / 35 (P)		10/4/40
22 222.5	(7) 17 / 2.5 / 45	(7) / / 26	22 192	22 204.0
			(5) / / 22.5(P)	
22 267.5			(5) / / 7.5(NP)	22 226.5
			22 227	22 234.0
			(7) / / 19	
			22 253	22 253.0
	(8) 41 / 2.5 / 106.5	(14) / / 57.5		/ / 57.5
			22 310.5	22 310.5
22 374	(9) / / 250.5	(9) / / 250.5		/ / 250.5
			22 561	22 561.0
		(13) / / 35 (P)	/ / 22.6	
			22 596	22 583.6
22 624.5	(10) 27 / 3.5 / 95.5	(10) 40 / 3.1 / 124		44/3.1/136.4
22 720			22 720	22 720.0

COMMITTEE 6

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 6
(OPERATION)

Friday, 3 May 1974, at 1500 hrs

Chairman : Mr. W.W. SCOTT (Canada)

Subjects discussed

Document No.

- | | |
|---|---------------|
| 1. Verbal progress report by the Chairman of Working Group 6A | - |
| 2. First report of Working Group 6A | 243 |
| 3. Verbal progress report by the Chairman of Working Group 6B | - |
| 4. First report of Working Group 6B | 242 |
| 5. Verbal progress report by the Chairman of Working Group 6C | - |
| 6. First report of Working Group 6C | 245 and Corr. |

1. Verbal progress report by the Chairman of Working Group 6A

The Chairman of Working Group 6A said that to date it had held four meetings. He hoped that the introduction of joint working group meetings to coordinate matters relating to Working Group 6A would enable the latter to make more rapid progress.

The Working Group had considered a number of sub-items within its competence and had had to pass some of the proposals to other working groups for consideration before dealing with them itself. However, it had been able to prepare a text and considerable progress had also been made in its Sub-Working Group 6A-1 dealing with operators' certificates of proficiency (general class). Another Sub-Working Group would be set up to consider questions relating to working hours of ship stations.

The delegate of the United Kingdom pointed out that Working Group 6A had set up a working group jointly with Committee 4 to consider the calling procedures for manual A1 telegraphy in the high frequency bands.

The Chairman said that the Chairman of Committee 4 had announced that the Joint Working Group 4A/6A would deal with selective calling on completion of the existing work programme.

2. First report of Working Group 6A (Document No. 243)

Page 1

The delegate of the United Kingdom explained his position concerning the modification of the title of Article 24. Article 24 had been one of the earlier items considered by Working Group 6A before there had been some clarification of the propriety of referring in its amendments to stations on board ships and aircraft. He understood there had been a directive on the subject. Would that factor be taken into account either by Committee 6 or by the Editorial Committee?

The Chairman said that that aspect of the question should be dealt with by Committee 6.

The delegate of the United Kingdom said that in his view the only way to deal with the matter was to leave the original title and then to have a new title which was relevant to the Maritime Mobile Service, i.e., to ships, but he was prepared to accept the Chairman's ruling.

The Chairman said that he had considered the question of the title of Article 24 very carefully. Working Group 6A had merely rearranged the order of the words to allow for the possibility of future satellite services. He did not think that any question of substance was involved.

The delegate of the United States said that the comments made by the delegate of the United Kingdom were undoubtedly correct. Now that the question of competency had been resolved, if the new wording of the title and of 912 and 913 were to be changed in any way the decision should be taken forthwith. His delegation had already had to redraft all its proposals relating to satellites in the light of the decisions taken by Working Group 6A, since no one knew how the satellite services would operate, and hoped it would not have to do so again. Either the text should be left as it now was or Working Group 6A should deal with all questions relating to satellites as a package deal.

The Chairman said that, in order to avoid further delay, it would be best to leave the text as it now was.

The delegate of the United Kingdom accepted that suggestion. The sentence reading "U.K. reserves the right to return to this matter in Committee 6 (see Annex 1)" was accordingly deleted from page 1 of the report.

Page 1 was approved.

Page 3

The delegate of Chili pointed out that the wording "Stations on board Ships and Aircraft" used in the amended title of Article 24 and amended 912 was not used in amended 913, where the old terminology was retained. Surely the wording should be identical in the three instances.

The Chairman said that that was a matter for the Editorial Committee to look into.

Subject to that proviso, page 3 was approved.

Page 5

The delegate of Norway said that the word "normal" in the second line served no purpose and in his view should be deleted.

The representative of the International Transport Workers Federation (I.T.F.) said that it would be preferable to revert to the old wording.

The delegate of the United States of America said he would prefer to delete the word "normal".

The delegate of the Netherlands pointed out that in addition to normal Morse telegraphy there was, for instance, high speed Morse telegraphy. Therefore, the word "normal" should not be deleted.

The delegate of Denmark, supported by the delegates of Canada and the United States of America, was in favour of the wording used in 1145, namely manual Morse telegraphy.

The delegate of the United Kingdom said that the word "normal" had probably been used to distinguish between normal and emergency or distress traffic by different apparatus and therefore had a definite significance and should be retained.

The delegates of Argentina, France and Italy endorsed that interpretation.

The delegate of the United Kingdom suggested the wording "used for normal traffic by manual Morse telegraphy".

The delegates of New Zealand and Norway agreed with that suggestion provided the word "manual" was deleted.

The wording "Ship stations equipped with radiotelegraph apparatus intended to be used for normal traffic by Morse telegraphy" was approved.

Page 5, as amended, was approved.

Page 7

The delegate of Chile, said that in the Spanish text the word "sin" should be inserted before the word "hacer", to bring c) into line with a) and b).

The delegate of the United Kingdom said that the word "outside" in the last line presented some difficulty and did not, in his view, fully reflect the intention of the original Indian proposal.

The delegate of Canada said that his understanding was that the delegate of India's intention had been that those calls be made when outside normal hours of service. Most delegations were concerned that general calls for normal periods might congest the frequency.

The representative of the International Transport Workers Federation (I.T.F.) suggested inserting the word "only" before the word "if" in the penultimate line and the words "such re-opening will be" before "outside" in the last line.

The delegate of India said that his original wording had been "if other than its normal hours of service".

The delegates of the United States of America and the United Kingdom supported that wording.

That wording was approved.

Page 7, as amended, was approved.

The Chairman said that Document No. 243 as a whole, as amended, had been approved and would be submitted to the Plenary Assembly via the Editorial Committee.

3. Verbal progress report by the Chairman of Working Group 6B

The Chairman of Working Group 6B said that it had held three meetings to date. The issues which it had resolved by the end of its second meeting were dealt with in Document No. 242. The proposals involved had been accepted unanimously with only very minor changes.

Working Group 6B at present had two active Sub-Working Groups, 6B-1 dealing with a proposal for the additional of a final tone to the radiotelephone alarm signal to identify coast station transmissions and 6B-2 dealing with proposals to designate distress frequencies in the VHF-FM band and at 4 and 6 MHz.

The main Working Group would next examine proposals involving common scene of action frequencies, namely 123.1 MHz, 3 023.5 kHz, 5 680 kHz and VHF-FM, use of VHF-FM by aircraft for safety and distress, and use of A3A and A3J emission on 2 182 kHz.

4. First report of Working Group 6B (Document No. 242)

The Chairman said that in the French text the word "déterminé" in the second line of page 4 should be replaced by "terminé".

The delegate of the United Kingdom recalled his delegation's reservation, already expressed in the Working Group, concerning the words "SUHME SEELONCE" and wondered whether the French-speaking delegations could not find an alternative that would be pronounceable in English.

The delegate of India suggested "MINIMIZE" instead of "SUHME SEELONCE".

The delegate of the United States, supported by the delegate of France, said that since "MINIMIZE" had military applications, he could not accept it.

At the request of the Chairman, the delegate of India withdrew his suggestion.

The delegate of France suggested the word "PRUDENCE" instead of "SUHME SEELONCE".

The delegate of the United Kingdom, supported by the delegate of Australia, approved that suggestion and proposed that the word should be phonetically written "PRU-DANCE".

There was no support for a suggestion made by the representative of I.T.F. for the phonetic writing "PRU-DAWNCE".

It was decided to replace the words "SUHME SEELONCE" by "PRUDENCE", with the phonetic writing "PRU-DANCE".

The delegate of Spain pointed out that the three language versions of Section X (3) did not concord. The Working Group had decided that the possibility of using a working frequency for sending the safety message should be left open. The English and Spanish versions made that point clear, but the French did not.

On the basis of comments made by the representative of the I.F.R.B., the delegate of France proposed that the French text be amended to read "Il convient que le message de sécurité qui suit l'appel soit transmis sur une fréquence de travail".

The delegate of Colombia pointed out that the Spanish version should read "deberá" not "debería".

After a lengthy discussion it was decided to retain the original English text of Section X (3) and to amend the French and Spanish texts as proposed by the delegate of France.

Page 6, as amended, was approved.

Document No. 242, as amended, was approved.

5. Verbal progress report by the Chairman of Working Group 6C

The Chairman of Working Group 6C said that the Working Group had held four meetings. It had been asked by the Committee a) to make a detailed study of the Radio Regulations on accounting in Article 40 and the Additional Radio Regulations; b) to study the possibility of restructuring the Radio Regulations and the Additional Radio Regulations and perhaps of transferring some items to the Telegraph and Telephone Regulations, based on Resolution 37 of the Montreux Plenipotentiary Conference, 1965, and on Recommendation Mar 2.

On the first point the Working Group had agreed upon a resolution to the effect that the subject should be studied in depth by the C.C.I.T.T. during the remainder of the present study period. That resolution and the difficulties encountered with respect to the regulations affecting aeronautical services meant that there would be less progress at the present Conference than some would have wished. It would, however, mean that the subject could be examined more carefully and the very strong interests of shipowners taken into account. The Working Group had, in fact, gone a little further than its report suggested and it was hoped that speedy progress would now be possible.

On the second point the Working Group had discussed the problems in outline and proposed to return to it after the detailed study of Article 40.

6. First report of Working Group 6C (Document No. 245)

Page 1

The delegate of the Federal Republic of Germany, referring to paragraph 2, which read "Working Group 6C unanimously recommends the adoption of the draft Resolution appearing in Annex B to the present Report", made the following statement :

"The Delegation of the Federal Republic of Germany only agreed to the draft Resolution as printed in Annex B of Document 245 because, after discussing the proposals of the Kingdom of the Netherlands and the Federal Republic of Germany concerning the suppression of the accounting of ships charges, we had the impression that it would be impossible for some delegations to accept such a solution at this time.

However, we are still of the opinion that the proposals made by the Kingdom of the Netherlands and the Federal Republic of Germany would have been a good solution."

The delegates of Denmark, Spain and Turkey indicated that they wished to be associated with this statement.

Page 6

The delegate of France pointed out a drafting change to the beginning of paragraphs 1, 2 and 3 in the French text.

Page 6 was approved, with those amendments.

Page 7

The delegate of the United States of America recalled that an earlier version of the Annex to the draft Resolution had had a heading reading "New Question" and that heading should be inserted.

It was so agreed.

The delegate of Spain announced that he would submit a revised version of the Spanish text of the Annex, after consultation with his Spanish-speaking colleagues.

The Chairman of Working Group 6C proposed to delete the words "carry into" from the first line of the Annex.

It was so agreed.

Page 7, as amended, was approved.

Document No. 245, as amended, was thus approved.

The meeting rose at 1730 hrs.

The Secretary :
A. MACLENNAN

The Chairman :
W.W. SCOTT

MARITIME CONFERENCE

GENEVA, 1974

Document N° 293-E

9 May 1974

Original : English

COMMITTEE 6

THIRD REPORT BY WORKING GROUP 6A
TO COMMITTEE 6

The Working Group 6A during the meeting of 9 May 1974 and after consideration of all relative proposals unanimously agreed on the attached texts, with the exception of the text shown in Annex 3 for which the Administration of Norway reserves the right to return to the matter in Committee 6.

Article 33

MOD 1214	(See Annex 1)
ADD 1214A	(See Annex 2)
ADD 1214B	(See Annex 3)
ADD 1214C	(See Annex 4)
MOD 1216	(See Annex 5)

H.S. YOUNG
Chairman

Annexes: 5



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A N N E X 1

ARTICLE 33

MOD 1214 § 4. (1) Devices providing for the emission of a signal to indicate that a call is in progress on a channel may be used in this service on a non interference basis to the service provided by coast stations.

A N N E X 2

ARTICLE 33

ADD 1214A (1) Automatic calling and identification devices are not permitted.

A N N E X 3

ARTICLE 33

ADD 1214B A station may not transmit simultaneously on two or more frequencies, when communicating with another station.

A N N E X 4

ARTICLE 33

ADD 1214C A station shall not emit any carrier on a frequency it is not using for actual communications.

A N N E X 5

ARTICLE 33

MOD 1216 § 5. (1) Stations of the maritime mobile
Mar service equipped for radiotelephony may transmit and receive radiotelegrams by means of radiotelephony. Coast stations providing such service and open for public correspondence, shall be indicated in the List of Coast Stations.

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 294-E
9 May 1974
Original : English

COMMITTEE 6

SECOND REPORT OF WORKING GROUP 6B TO COMMITTEE 6
(OPERATION)

1. Proposal ISR-74/4

This Proposal was considered. The majority of the Group felt that the existing text was adequate.

As a consequence it proposes :

NOC 992

2. Proposal IND-111/68

After consideration of this Proposal, the majority of the Group preferred the existing text.

Therefore it proposes :

NOC 1335

Silence periods on the distress frequency 2 182 kHz

Working Group 6B agreed unanimously to propose the observation of the silence periods on 2 182 kHz on a world-wide basis.

All Proposals relating to that subject were considered.

Working Group 6B unaminously recommends the additional text and consequential suppressions appearing in Annex I to the present Report for adoption by Committee 6.



Article 36, Section VIII

ADD 1466B

ADD 1466C

All proposals relating to the above provisions were considered.

Working Group 6B unanimously recommends the additional texts appearing in Annex II to the present Report for adoption by Committee 6.

CAPT. W.T. ADAMS
Chairman

Annexes : 2

A N N E X I

ADD 1335A § 7A. (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 1 605 and 2 850 kHz shall, during their hours of service, and as far as possible, take steps to keep watch on the international distress carrier frequency 2 182 kHz for three minutes twice each hour beginning at X h.00 and X h.30 Greenwich Mean Time (GMT).

SUP Title H

SUP 1349

SUP 1349.1

SUP 1350

A N N E X 2

ADD 1466B (3A) To reduce unnecessary alarm signal emissions, tests of the radiotelephone alarm signal on the carrier frequency 2 182 kHz are prohibited.
(See 1295A)

ADD 1466C (3B) An exception is permitted for radiotelephone emergency equipment having only the international distress frequency 2 182 kHz, in which case a suitable artificial aerial shall be employed.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 295-E

9 May 1974

Original : FrenchCOMMITTEE 5Republic of the Senegal

PROPOSALS FOR THE WORK OF THE CONFERENCE

The requirements of the Republic of the Senegal that should be taken into consideration in the revision of the Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands (Appendix 25 to the Radio Regulations) are as follows :

Frequency bands in MHz	4	6	8	12	16	22
Number of SSB channels at present	1		1			1
Number of additional SSB channels to be allowed for					1	



COMMITTEE 6

FOURTH REPORT OF WORKING GROUP 6C
TO COMMITTEE 6

Annex 1

Article 40A Section I	1559AA to 1559AM
Section II	1559AN to 1559BA

These provisions are reprinted from the second and third reports of Working Group 6C to Committee 6 (Documents Nos. 271 and 286) with only editorial changes, with the following three exceptions :

ADD 1559AL ADD 1559AM ADD 1559AQ

These three regulations were considered out of sequence in Working Group 6C and the texts have not yet been approved by Committee 6. It was nevertheless thought appropriate to include them in correct sequence in the complete Article 40A.

Annex 2

Article 40A Section III	ADD 1559BB to 1559BI
Section IV	ADD 1559BJ to 1559BQ
Section V	ADD 1559BR to 1559BU
Section VI	ADD 1559BV to 1559BW
ADD Appendix 21A	

All the proposals affecting the above provisions were considered and Working Group 6C unanimously recommends the adoption of the provisions in Annex 2 and 1559AL, 1559AM and 1559AQ in Annex 1.

M.O. MEREDITH
Chairman
Working Group 6C

Annexes : 2



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A N N E X 1

MOD

ARTICLE 40

Accounting for Radiotelegrams, Radiotelephone calls and [] (except in the Maritime Mobile Service-see Article 40A)

ADD

ARTICLE 40A

Accounting for Radiotelegrams, Radiotelephone calls and [] in the Maritime Mobile Service

Section I. General

1559AA §1. The following are definitions of certain terms used in Article 40A :

-Accounting authority

Any organization notified by an administration to the I.T.U. for inclusion in the list of ship stations as being responsible for settling maritime accounts for some or all of the ships licensed by that administration. An accounting authority may be the administration itself, a private operating agency, a shipowner, or an operating enterprise authorized by a shipowner to receive and settle accounts on his behalf.

-Land-line charges

Charges relating to transmission over the general national and international network of telecommunication channels.

1559AB ~~1505~~ §2. In principle, land station and ship ~~and aircraft~~ station charges shall not be entered in the international telegraph and telephone accounts.

1559AC §3. The following charges shall be included in the accounts :

(1) In the case of radiotelegrams radiotelephone calls and [] originating on mobile stations

- the land station charges,
- the land-line charges,
- the accessory charges for radiotelegrams which have to be considered in the accounting and
- the supplementary charges for radiotelephone calls with special facilities.

1559AD (2) In the case of radiotelegrams, radiotelephone calls and [] destined for mobile stations and passing through a land station of another country,
- the land and ship station charges.

1559AE (3) As far as the transmission over the general international network of the telecommunication channels is concerned, the provisions laid down in the Telegraph and Telephone Regulations taking into account C.C.I.T.T. Recommendations and Instructions shall apply to radiotelegrams, radiotelephone calls and [].

1559AF (4) The land-line charges shall be included in the international telegraph and telephone accounts and shall be accounted for according to the provisions of the Regulations mentioned in No. 1559AE, taking into account C.C.I.T.T. Recommendations and Instructions.

1559 AG ~~1506~~ §4. 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 which the land station and ship ~~and aircraft~~ station charges follow the radiotelegrams, ~~and~~ radiotelephone calls from country to country through the medium of the telegraph and telephone accounts.¹ Such arrangements are subject to previous agreement between the administrations concerned.

and []

1559 AG.1 ~~1506-1~~ ¹ 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.

1559 AH ~~1507~~ § 5. In the absence of a different arrangement in accordance with the provisions of No. ~~1506~~, 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.

H-1559 AG

1559AI §6. The country on whose territory is established a land station serving as intermediary for the exchange of radiotelegrams, radiotelephone calls and [] between a mobile station and another country, is considered, as far as the application of land-line charges is considered, as the country of origin or destination and not as a transit country.

1559AJ ~~1508~~ §7. (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. 1510 to 1559~~ shall apply to such enterprise in the same manner as to an administration.

H The whole of Article 40A

1559AK ~~1509~~ (2) When the provisions of No. 1082 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.

1559AL (3) If the appropriate accounting authority does not meet its obligations, the administration which has issued the licence for the ship station should assist, as far as possible, the creditor administration in its efforts to have the accounts settled.

1559AM (4) In the general interest of Administrations the number of accounting authorities shall be kept to the minimum required for the efficient settlement of accounts.

Section II. Establishment of Accounts for Radiotelegrams

1559AN §8. (1) In the case of radiotelegrams originating in ship stations, the administration to which the land station is subject shall debit the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with :

- the land station charges,
- the land-line charges,
- the total charges collected for prepaid replies,
- any charges for special services.

1559AO (2) So far as concerns transmission over the general network of telecommunication channels, see 1559AE and 1559AF.

1559AP ~~1512~~ §9. (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 shall be 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.

1559AQ (2) The land-line charge applicable to radio-telegrams to a country other than that to which the land station belongs may be the collection charge applied by the administration or recognized private operating agency to which the land station belongs.

1559AR ~~1513~~ (3) 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.

1559AS ~~1514~~ § 10.(1) In the case of radiotelegrams addressed to ship ~~and aircraft~~ stations, the administration to which the office of origin is subject shall be 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 of the Additional Radio Regulations, however, the administration to which the office of origin is subject shall be debited with the land station charge by the administration to which the land station is subject.

— special services,

1559AT (2) 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 accounting authority) :

1559AU ~~1517~~ a) with the ship ~~or aircraft~~ station charge;

1559AV ~~1518~~ 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.~~

— any charges for special services

1559AW ~~1519~~ §11. 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.

1559AX ~~1520~~ §12. Radiotelegrams exchanged between stations in ships ~~or aircraft~~.

1559AY ~~1621~~

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 ;

1559AZ

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 accounting authority) with all the charges collected, less the charges due to that mobile station. Thereafter the provisions of 1559AD are applied.

1559BA

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 accounting authority) with all the charges collected, less the charges due to that mobile station. Thereafter the provisions of Nos. 1559AD and 1559AE are applied.

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A N N E X 2

ARTICLE 40A

Section III. Establishment of Accounts for Radiotelephone
Calls

1559BB §13. In the case of radiotelephone calls originating in ship 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 accounting authority) with :

- the land station charges,
- the land-line charges,
- where appropriate, the supplementary charges for radiotelephone calls with special facilities.

So far as concerns transmission over the general network of telecommunication channels, see 1559AE and 1559AF.

1559BC §14. The land-line charge applicable to radiotelephone calls to a country other than that to which the land station belongs is the collection charge applied by the administration or recognized private operating agency to which the land station belongs.

1559BD §15.(1) In the case of radiotelephone calls destined for ship 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 accounting authority) with the ship station charges.

1559BE (2) In the case of radiotelephone calls destined for ship stations and originating in a country other than that to which the land station belongs :

1559BF a) the administration to which the land station is subject :

- debits the accounting authority of the country of origin with the land station and ship station charges,

- 1559BG b) so far as concerns transmission
over the general network of telecommunication channels,
see 1559AE and 1559AF.

H 1559 AX to
1559 BF

1559BI ~~1533~~ § 17. For accounting purposes, collect radiotelephone calls shall be regarded as originating in the country or mobile station of destination.

ARTICLE 40A

Section IV. Establishment of Accounts for []

1559BJ §18. In the case of [] originating in ship stations, the administration to which the land station is subject debits the administration to which the mobile station or origin is subject (or, if appropriate, the accounting authority) with :

- the land station charges,
- the land-line charges.

So far as concerns transmission over the general network of telecommunication channels, see 1559AE and 1559AF.

1559BK §19. The land-line charge applicable to [] to a country other than that to which the land station belongs is the collection charge applied by the administration or recognized private operating agency to which the land station belongs.

1559BL (1) In the case of [] destined for ship 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 accounting authority) with the ship station charges.

1559BM (2) In the case of [] destined for ship stations and originating in a country other than that to which the land station belongs :

1559BN a) the administration to which the land station is subject :

- debits the accounting authority of the country of origin with the land station and ship station charges,
- credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority) with the ship station charges;

- 1559BO b) so far as concerns transmission over the general network of telecommunication channels, see 1559AE and 1559AF.
- 1559BP §20. The provisions of Nos 1559AX to 1559BA relative to the accounting for radiotelegrams exchanged between stations on ships shall be followed in the case of [] exchanged between stations on ships.
- 1559BQ §21. For accounting purposes, collect [] shall be regarded as originating in the country or mobile station of destination.

ARTICLE 40ASection V. Exchange and Verification of Accounts.
Payment of Balances

- 1559BR §22. Exchange and verification of accounts will be carried out in accordance with the Telegraph and Telephone Regulations taking into account C.C.I.T.T. Recommendations, subject to the special rules in Nos. 1559BS, 1559BT and 1559BU.
- 1559BS §23. Radiotelegrams, radiotelephone calls and [] shall be entered individually with all necessary particulars, in the monthly accounts which serve as a basis for the accounting mentioned in this Article. The entries in accounts shall be spaced in such a way that the duplicate of the account can be divided and used by the accounting authority to which the mobile stations are subject, for the accounting with the shipowners. Furthermore the entries shall be grouped under ships name and call sign, with a total charge shown for each ship.
- 1559BT §24. In principle an account shall be considered as accepted without the need for specific notification of acceptance to the accounting authority which sent it. However, any accounting authority shall have the right to question the contents of an account during the period of six months after receipt of the account.
- 1559BU §25. The periods mentioned in Nos. 1559BS and 1559BT 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 accounting authority may refuse the settlement and adjustement of accounts presented more than eighteen months after the date of handing-in of the radio-telegrams or [] or the date of establishment of the radiotelephone calls to which the accounts relate.

ARTICLE 40A

Section VI. Period of Retention of Accounting Records

1559BV ~~1558~~ § 26. (1) The originals of radiotelegrams and documents relating to radiotelegrams, ~~and~~ radiotelephone calls, retained by the administrations and/or recognized private operating agencies shall be 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.

and []

1559BW ~~1559~~ (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.

MOD

APPENDIX 21

Specimen Form of Statement of Account for Radiotelegrams, Radiotelephone Calls and [] (except in the Maritime Mobile Service - see Appendix 21A)

(See Article 40)

ADD

APPENDIX 21A

(see page 15)

APPENDIX 21A

[] in the Maritime Mobile Service

Account between country A and country B

in respect of (radiotelegram
(radiotelephone
(✓ 7

during month of

[illegible]

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE
GENEVA, 1974

Document No. 297-E
10 May 1974
Original : English

COMMITTEE 2

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 2
(CREDENTIALS)

Monday, 29 April 1974, at 0900 hrs

Chairman : Mr. Samuel H. BUTLER (Republic of Liberia)

Subjects discussed

Document No.

- | | |
|--|-----|
| 1. First Report by the Working Party | 216 |
| 2. Second Report by the Working Party (oral report) | - |
| 3. Ratification of the Montreux Convention, 1965,
by Colombia | - |



1. First Report by the Working Party (Document 216)

The first report in Document 216 was approved.

2. Second Report by the Working Party (oral report)

The Chairman made an oral report on the second meeting of the Working Party which had just met prior to the second meeting of Committee 2.

During the Working Party's meeting, transfers of powers not accepted at the first meeting had been reconsidered and new transfers of powers received from Niger to Dahomey, from Byelorussia to U.S.S.R. and from Ukraine to Hungarian People's Republic had been examined.

The Working Party, basing itself on the Montreux Convention, 1965, had decided not to accept the following transfers of powers :

Egypt to Morocco,

Central African Republic to Cameroon,

Niger to Dahomey,

Byelorussian Soviet Socialist Republic to the Union of Soviet Socialist Republics,

Ukrainian Soviet Socialist Republic to the Hungarian People's Republic.

After a discussion on the reasons for the rejection of the transfers in question, in which the Chairman and the delegates of India, Morocco and Ghana participated, the second report was approved.

3. Ratification of the Montreux Convention, 1965, by Colombia

In reply to a question by the delegate of Colombia, the Secretary-General said that Columbia's instrument of ratification of the Montreux Convention, 1965, had just been received and that henceforth Colombia was entitled to vote.

The meeting rose at 0940 hours.

The Secretary :

P.A. TRAUB

The Chairman :

Samuel H. BUTLER

INTERNATIONAL TELECOMMUNICATION UNION
MARITIME CONFERENCE

GENEVA, 1974

Document No. 298-E
10 May 1974
Original : English

COMMITTEE 5

SUMMARY RECORD
OF THE
THIRD MEETING OF COMMITTEE 5

Thursday, 2 May 1974, at 0930 hrs

Chairman : Mr. O.J. HAGA (Norway)

<u>Subjects discussed</u>	<u>Document No.</u>
1. Statement by the Australian Delegation	-
2. Minutes from the first and second meetings of Committee 5	197 and 241
3. Oral reports from the Working Groups' Chairmen	-
4. Drafting of texts of Committee 5	-
5. Any other business	-



1. Statement by the Australian delegation

The delegate of Australia drew attention to the fact that the frequency 6 204 kHz which Australia uses as a safety channel was suffering interference. The channel was usable only between 1200 and 1700 hours local time. The interference appeared to be caused by stations operating in the broadcasting service. He proposed that, in accordance with a previous suggestion by the I.F.R.B., the Committee should revise Resolution Mar 9 or adopt a new draft resolution with regard to the 6 MHz bands in general and the 6 204 kHz band in particular. The resolution should allow the I.F.R.B. to publish details of the interfering services. Because of its special expertise in the matter, the I.F.R.B. should be requested to prepare a draft for the consideration of a small group which would then submit a text to the Committee. The Australian delegation had given the I.F.R.B. details of the interference.

The Vice-Chairman of the I.F.R.B. described the steps being taken to discourage administrations from using bands or frequencies at the limits of bandwidths reserved exclusively for the maritime mobile service. Unfortunately, pirate stations were operating in a number of such frequencies, particularly at the beginning of the 6 MHz band. The I.F.R.B. was prepared to assist the Committee in drafting a new resolution on the subject or in revising Resolution Mar 9.

The delegate of Norway supported the proposal made by the delegate of Australia and urged that the draft resolution should identify all stations broadcasting within the band in question.

The Vice-Chairman of the I.F.R.B. remarked that it was often difficult to identify the offending stations with certainty. He added that any action taken in the matter by the Conference could be effective only on condition of energetic support by the administrations concerned.

The delegate of Australia said that his Administration would give the I.F.R.B. more information, bearings and recordings to assist it to identify the source of the interference.

The delegate of India expressed sympathy with the Australian delegation's concern and agreed that the matter deserved thorough examination. He drew attention, however, to a difficulty - affecting both the Southern and the Northern hemispheres - which arose from the fact that the coast station frequency band for duplex in the 6 MHz band extended only from 6 200.8 to 6 208.6 kHz.

The Chairman, summing up the discussion, suggested that a text should be drafted by the I.F.R.B. with the help of the Australian delegation and possibly others particularly interested in the question. The draft will be considered by the Committee in a later meeting.

It was so agreed.

2. Minutes from the first and second meetings of Committee 5
(Documents 197 and 241)

The summary records of the first and second meetings of Committee 5 were approved without comment.

3. Oral reports from the Working Groups' Chairmen

The Chairman of Working Group 5A said that his group had met once and had examined the items on its agenda. Fairly general agreement had been reached on the question of the designation of radiotelephone frequencies on hectometric waves. That subject also had to be studied by Working Group 5B, and he believed that a joint decision would be arrived at. At its next meeting the Group would continue the study of items on its agenda.

The Chairman of Working Group 5B said that a discussion on the possible reduction of channel spacing had been held at the second meeting of the Group. A divergence of opinion had arisen and it had been decided to set up a sub-group to discuss all aspects of the question, including technical and economic implications and the implementation schedule. The sub-group had held three meetings and, while the divergence of views still persisted, a report had been drafted for consideration at the fifth meeting of the Working Group.

The second question which had been discussed, arising from a proposal by the delegates of Australia and New Zealand, related to supplementary distress frequencies. The operational aspect of that question would be discussed in Committee 6; Working Group 5B had examined it in relation to the guard bands proposed, which, if provided, would have repercussions on Appendix 25 MOD and Appendix 17. Discussion had been interrupted pending the results of the work of Committee 6. Also, in the meantime the Australian delegation had submitted a proposal for a reduced guard band.

A short discussion had been held on the cessation of class of emissions A3-B. No objections had been raised.

The question of a possible power limitation on HF channels had been discussed and it had been agreed that the matter should be examined in detail by sub-group 5B-1.

The new definitions proposed by the delegation of the Federal Republic of Germany had been discussed and it had been agreed to incorporate those definitions in Appendix 17A rather than in Article 1 of the Regulations.

A discussion had been held on the possibility of lowering the intermodulation level and increasing the intermodulation distance from 28 dB to 31 dB. A majority of members felt that such an increase was desirable, and the limit would be changed accordingly. It would, however, take some time before the decision could be implemented, and existing equipment would not have to be modified in the meanwhile.

The Chairman of Working Group 5C reported that at the second meeting of the Group the presentation of documents had been completed. The Group had agreed to work towards the production of a revised allotment plan and to include in such a plan the channels listed in Sections 1, 2 and 3 of Appendix 25 MOD and any additional channels which the Conference might make available. The discussion would continue at the next meeting.

The Chairman of Working Group 5D said that the Group had held two meetings. There had been considerable discussion regarding Article 1 definitions for on-board communications and the inclusion of wording covering on-board communications in the basic maritime mobile service definitions. Both questions had been tentatively resolved, and a draft report to Committee 5 would be considered at the next meeting of the Group. A general discussion would also be held on proposals concerning specific frequencies, both VHF and UHF, for use by on-board communications services.

The Chairman of the Joint Working Group C4/C5 said that the Group was not yet ready to report on the final possibilities of revision of sub-bands in the maritime mobile frequency band. The Group was now engaged in an examination of the various sub-bands in order to determine what frequency bandwidth could be made available for reallocation to other services, such as narrow-band direct printing and radiotelephony. From the progress of the work so far it seemed unlikely that the Group would be able to come to any conclusion before the bands had been reviewed as a whole and the principles of a revised Article 7 had been agreed.

The delegate of the United States of America, referring to the proposal before Working Group 5A to add a footnote to the allocation table for frequency 3 023.5 kHz, said that care should be taken not to omit any important element of the proposal through trying to make the note as brief as possible. The companion note concerning channel 5 680 kHz should be identically worded.

The Vice-Chairman of the I.F.R.B., referring to the report on Working Group 5A, said that the I.F.R.B. would welcome the addition of footnotes to the two tables concerning channels 3 023.5 kHz and 5 680 kHz containing the sort of information proposed. It should be noted that those two frequencies were also covered by Nos. 1326C and 1353B of the Radio Regulations, which referred to Appendix 27 (the Aeronautical Mobile (R) Service). He hoped the Working Group would take up the question of the conditions of use of those frequencies by the Maritime Mobile Service.

The Chairman said the matter would be considered by Working Groups 5A and 5B.

4. Drafting of texts of Committee 5

The Chairman said that after consulting the Editorial Committee he wished to suggest that Committee 5 appoint an ad hoc group of three members, of English, French and Spanish mother tongue respectively, to assist in the drafting of texts by the various working groups and sub-groups and to provide a link with the Editorial Committee. That aim would be most effectively achieved if the members of the ad hoc group were also members of the Editorial Committee.

The delegate of the United Kingdom supported the proposal and offered to provide a member of the group.

The Chairman of Committee 7 said he would be glad to cooperate with the ad hoc group and offered, on behalf of the French delegation, to provide a member. It should be noted, however, that the group would be able to operate efficiently only after the discussion of texts had been completed and the time was ripe for drafting.

The delegate of Spain also agreed to the proposal and offered to participate in the work of the ad hoc group.

The Chairman said he took it that Committee 5 wished to form an ad hoc drafting group along the lines he had suggested, composed of delegates of France, Spain and the United Kingdom.

It was so agreed.

5. Any other business

The delegate of Norway recalled that the I.F.R.B. had been requested to provide each delegation with a list of all maritime frequency assignments recorded in the Master International Frequency Register on behalf of their respective administrations. Those lists were now available and would be extremely helpful. He wished to request further extracts, concerning in particular the information contained in the list of coast stations with regard to HF telephony.

The Deputy Secretary-General said that I.T.U. had prepared a computer programme which could produce the requested information, including new data recently received, within a few days.

The delegate of the United States of America pointed out that the request by the delegate of Norway related to the Norwegian proposal to modify Appendix 25. In that connection, it should be noted that Working Group 5C had not yet decided whether the revision would take the form of a new allotment or a new assignment plan, or a combination of both. While not wishing to deprive any delegation of information, he thought that in the interests of keeping costs to a minimum, an effort should be made to determine whether the information was really required by all administrations before making a full computer run-off.

The delegates of Spain, Greece and the United Kingdom supported the Norwegian proposal.

The Deputy Secretary-General said that the preparatory work had already been carried out to meet other responsibilities of the Secretary-General and that the cost of making the information available would be insignificant.

The Chairman suggested that, in the light of Mr. Butler's comment, I.T.U. should be asked to produce the list requested.

It was so agreed.

The delegate of Algeria, supported by the delegate of the Federal Republic of Germany, asked that at least three meetings be allocated to Working Group 5C in the course of the following week.

The Chairman said he had noted that request.

The representative of I.C.A.O. said that a document containing I.C.A.O.'s comments on the frequencies and services relating to search and rescue operations would shortly be circulated and hoped that the Committee would take those views into account.

The Chairman said that the document would receive full consideration.

The meeting rose at 1050 hours.

The Secretary :

J. BALFROID

The Chairman :

O.J. HAGA

MARITIME CONFERENCE

GENEVA, 1974

WORKING GROUP 6A

FINAL REPORT OF AD HOC WORKING GROUP 6A-1

TO WORKING GROUP 6A

At its first meeting Working Group 6A established ad hoc Working Group 6A-1 with the following terms of reference :

Radiocommunication Operator's General Certificate for the Maritime Mobile Service

To consider all Proposals relating to this subject with a view to reconciling differences in these Proposals.

To prepare, if possible, consolidated draft paragraphs of the Radio Regulations relating to this subject for the further consideration of Working Group 6A.

Later Working Group 6A expanded these terms of reference as follows :

To consider and make recommendations on matters raised in paragraphs a), b) and c) of page 10 of the first report of ad hoc Working Group 6A-1 (Document 255) taking into account such proposals as are relevant to Articles 22, 23 and 24 and report the findings to Working Group 6A.

The Proposals

USA/54/50 Corr. 2,
USA/54/51 Corr. 2,
USA/54/55 Corr. 2

were withdrawn from the consideration of the ad hoc Working Group 6A-1 by the U.S.A. with the consent of the Chairman of Working Group 6A in order to permit them to be considered together with other satellite matters in Working Group 6A.



The ad hoc Working Group has held six meetings and is able to report unanimous agreement on the draft text for new Articles 22, 23 and 24, annexed to this report which supersedes Document 255.

With respect to ADD 907A, the desire was expressed by more than one participant in ad hoc Working Group 6A-1 that Administrations consider the size of ships, their voyages and the effect on safety of ships and efficiency of communications, in exercising their discretion as to the adequacy of experience as operator on board ship.

Annex : 1

A N N E X

TO

FINAL REPORT

OF AD HOC WORKING GROUP 6A-1

CHAPTER VI

MOD Title Personnel of Stations in the Mobile Service
and the Maritime Mobile-Satellite Service

ARTICLE 22

NOC Authority of the Master

NOC 845

NOC 846

NOC 847

ADD 847A The authority and obligations imposed by
Nos. 845, 846 and 847 shall also apply to personnel
of mobile earth stations in the maritime mobile-
satellite service.

ARTICLE 23

NOC Operators' Certificates for Ship and Aircraft Stations

Section I

General Provisions

NOC 848 to 850, including 850.1

MOD 851 [replace Mc/s by MHz]

NOC 852 to 856

ADD 856A (1A) However, in the maritime mobile service the certificates issued after / two years after the date of implementation of the Final Acts /*) shall bear the photograph of the holder and the holder's date of birth

*) Date to be inserted by the Editorial Committee

NOC 857

ADD 857A (3) However, in the maritime mobile service all certificates not in one of the working languages of the Union and issued after /two years after the date of implementation of the Final Acts /*) shall carry in one of the working languages at least the following information:

(a) Name and date of birth of the holder

(b) The title of the certificate and its date of issue

(c) If applicable, number and period of validity of the certificate

(d) Issuing administration

*) Date to be inserted by the Editorial Committee

NOC 858

MOD Title Section II
Classes and categories of Certificates
except for Ship Stations

NOC 859 to 860, including 859.1

SUP 860A
Mar

- MOD 861 § 6 (1) The holder of a first or second class radio-
Mar telegraph operator's certificate may carry out the radiotelegraph
or radiotelephone service of any aircraft station.
- MOD 862 (2) The holder of a radiotelephone operator's
general certificate may carry out the radiotelephone service
of any aircraft station.
- NOC 863
Mar
- SUP 863A
Mar
- MOD 864 (4) 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.
- MOD 865 (5) The radiotelephone service of 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.

NOC 866

ADD

Section IIA

Categories of Certificates for Ship Stations

- ADD 866AA § 7A (1) There are four categories of certificates for
radiotelegraph operators¹.

These are :

- the radiocommunication operator's general certificate
- the first class radiotelegraph operator's certificate
- the second class radiotelegraph operator's certificate
- the radiotelegraph operator's special certificate.

- ADD 866AB (2) There are two categories of radiotelephone operator's certificates, general and restricted¹.
- ADD 866AC § 7B (1) The holder of a radiocommunication operator's general certificate, or of a first class or second class radiotelegraph operator's certificate, may carry out the radiotelegraph or radiotelephone service of any ship station.
- ADD 866AD (2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any ship station.
- ADD 866AE (3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship station, provided that the operation of the transmitter requires only the use of simple external controls, and excludes 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 peak envelope power of the transmitter does not exceed 1 kilowatt.
- ADD 866AEA (3A) The holder of a restricted radiotelephone operator's certificate may carry out the operation of a frequency synthesised transmitter provided that it is programmed to meet all the conditions contained in No. 866AE.
- ADD 866AEB (3B) The restricted radiotelephone operator's certificate may be limited exclusively to one or more of the maritime mobile frequency bands, in which cases the certificate shall be suitably endorsed.

ADD 866AA.1¹ } As regards the employment of operators holding the
ADD 866AB.1¹ } different certificates, see Article 24.

ADD 866AF (4) 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 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.

ADD 866AFA (5) However, where the conditions specified in No. 893A are satisfied, the radiotelegraph service of ships for which a radiotelegraph installation is not made compulsory by international agreements, as well as the radiotelephone service of any ship station, may be carried out by an operator holding a radiotelegraph operator's special certificate.

ADD 866AG § 7C 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 cases the certificate shall be suitably endorsed.

NOC

Section III

Conditions for the Issue of Operators' Certificates

NOC 867

NOC 868

NOC 869

NOC 870

ADD 870A (2A) However, in respect to the maritime mobile service, administrations should also take whatever steps they consider necessary to ensure the continued proficiency of operators while in service.

MOD title A. Radiocommunication Operator's General Certificate
for the Maritime Mobile Service

ADD 870AA § 9A The radiocommunication operator's general certificate for the maritime mobile service is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

ADD 870AB a) Knowledge of the principles of electricity and the theory of radio and of electronics sufficient to meet the requirements specified in 870AC, 870AD and 870AE below.

ADD 870AC b) Theoretical knowledge of modern radio-communication equipment, including marine radiotelegraph and radiotelephone transmitters and receivers, marine aerial systems, automatic alarm devices, radio equipment for life-boats and other survival craft, direction-finding equipment, together with all auxiliary items including power supply (such as motors, alternators, generators, inverters, rectifiers and accumulators), as well as a general knowledge of the principles of other apparatus generally used for radionavigation, with particular reference to maintaining the equipment in service.

ADD 870AD c) Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in 870AC above, including the taking of direction-finding bearings and knowledge of the principles of the calibration of radio direction-finding apparatus.

ADD 870AE d) Practical knowledge necessary for the location and remedying (using appropriate testing equipment and tools) of faults which may occur during a voyage in the apparatus mentioned in 870AC above.

ADD 870AF e) 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 receiving shall be, as a rule, five minutes.

- ADD 870AG f) Ability to send and to receive correctly by radiotelephone.
- ADD 870AH g) Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.
- ADD 870AI h) A sufficient knowledge of world geography, especially the principal shipping and the most important telecommunication routes.
- ADD 870AJ i) 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.
- MOD titles B. First Class Radiotelegraph Operator's Certificate
C. Second Class Radiotelegraph Operator's Certificate
D. Radiotelegraph Operator's Special Certificate
E. Radiotelephone Operator's Certificate
- NOC 871 to 893
- ADD 893A (2A) In the maritime mobile service each Administration concerned shall fix the other conditions for obtaining this certificate. However, except as provided for in No. 866, the conditions specified in Nos. 894, 895, 896, 897 and 898 shall be satisfied in the case of this certificate for ship station operators when issued after the date of implementation of the Final Acts (*)).

*) Date to be inserted by the Editorial Committee.

MOD 894 § 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 Nos. MOD 861, MOD 862, ADD 866AC, ADD 866AD, ADD 866AF and ADD 866AFA) :

NOC 895 to 905

ADD 905A § 15A However, in the maritime mobile service a restricted radiotelephone operator's certificate shall show whether it is limited as provided for in ADD 866AEB.

NOC 906

NOC

Section IV

Qualifying Service

MOD 907 § 17 (1) An operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932).

- ADD 907A However, before becoming chief or sole operator of a ship of the fourth category (see No. 932) which is required by international agreements to carry a radiotelegraph operator, an operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate shall have had adequate experience as operator on board ship at sea.
- MOD 908 (2) Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A), an operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate shall have had, as operator on board ship or in a coast station, at least six months' experience of which at least three months shall have been on board ship.
- MOD 909 (3) Before becoming chief operator of a ship station of the first category (see No. 930), an operator holding a radiocommunication operator's general certificate or a first class radiotelegraph operator's certificate shall have had, as operator on board ship, or in a coast station, at least one year's experience of which at least six months shall have been on board ship.
- NOC 910-911 SUP (Mar)

ARTICLE 24

- MOD title Class and minimum number of operators for stations on board ships and aircraft
- MOD 912 § 1. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships and aircraft of its own nationality have personnel adequate to perform efficient service.
- MOD 913 § 2. The personnel of ship and aircraft stations in the public correspondence service shall, having regard to the provisions of Article 23, include at least:

- MOD 914 a) ship stations of the first category,
except in the case provided for in No. 918 : a chief operator
holding a radiocommunication operator's general certificate
or a first class radiotelegraph operator's certificate;
- MOD 915 b) ship stations of the second and third
categories, except in the case provided for in No. 918 : a
chief operator holding a radiocommunication operator's general
certificate or a first or second class radiotelegraph operator's
certificate;
- MOD 916 c) ship stations of the fourth category,
except in the cases provided for in Nos. 917 and 918;
one operator holding a radiocommunication operator's general
certificate or a first or second class radiotelegraph
operator's certificate;
- MOD 917 d) ship stations in which a radiotelegraph
installation is provided but not prescribed by international
agreements; one operator holding a radiocommunication
operator's general certificate or a first or second class
radiotelegraph operator's certificate, or a radiotelegraph
operator's special certificate.
- NOC 918
- NOC 919
and
920
(including 920.1)

SUP

RESOLUTION No. Mar 16

including Annexes 1 - 3.

MARITIME CONFERENCE

GENEVA, 1974

Document No. 300-E

13 May 1974

LIST OF DOCUMENTS

(201 to 300)

No.	Origin	Title	Destination
201 + Add Corrig	Korea	Proposals (Frequencies for HF radiotelephony)	C. 5
202	F.R. of Germany	Proposals (Agenda Item 1)	C. 5
203	S.G.	Proxy (Group of Territories represented by the French Overseas Post and Telecommunication Agency)	PL
204	Congo (Brazzaville)	Proposals (Frequency requirements)	C. 5
205	S.G.	Chairmen and Vice-Chairmen of the Conference	PL
206	Libya	Proposals (Frequency requirements)	C. 5
207 + Rev	Italy	Frequencies for HF radiotelephony	C. 5
208	Colombia	Proposals	C. 5
209	Dahomey	Proposals (Frequency requirements)	C. 5
210	Nigeria	Proposals (Frequency requirements)	C. 5
211	Nigeria	Proposals	C. 5
212	United Kingdom	Proposals (Recommendation No. Mar D)	PL
213	Argentina	Proposals (Frequency requirements)	C. 5
214	Liberia	Proposals	C. 5
215	I.F.R.B.	Master International Frequency Register	PL C. 4 C. 5 C. 6
216	WG/C.2	First Report by the Working Party of Committee 2 (Credentials)	C. 2



No.	Origin	Title	Destination
217	Norway	Proposals (Agenda Item 7)	C. 4 C. 5
218	U.S.A.	Information Paper : Radiocommunication Operator's General Certificate	C. 6A
219	Mexico	Proposals (Frequency requirements)	C. 5
220	Mauritania	Proposals (Frequency requirements)	C. 5
221	Greece	Proposals (Agenda Item 1)	PL
222	Chile	Proposals (Revision of App. 25 MOD)	C. 5
223	Chairman	Proxy (Czechoslovakia to Bulgaria)	PL
224	C. 4	Summary record of the first meeting of Committee 4	C. 4
225	C. 4	Summary record of the second meeting of Committee 4	C. 4
226 + Add	Turkey	Proposals (Frequency requirements)	C. 5
227	S.G.	Situation concerning expenditure for the Maritime Conference at 26 April 1974	C. 3
228	Tunisia	Proposals (Frequency requirements)	C. 4 C. 5
229 + Rev	Ivory Coast	Proposals (Frequency requirements)	C. 5
230	U.S.S.R.	Proposals (Information concerning the radiotelephone frequencies in use by coast U.S.S.R. stations)	C. 5
231	Norway	Proposals (Art. 29)	C. 6
232	Albania	Proposals (Frequency requirements)	C. 5
233 + Corr.	Yugoslavia	Proposals (Frequency requirements)	C. 5

No.	Origin	Title	Destination
234	Ghana	Proposals (Frequency requirements)	C. 5
235 <i>Rev</i>	Cameroon	Proposals (Frequency requirements)	C. 5
236	Argentina Mexico Paraguay Brazil	Proposals (Art. 5)	C. 5
237	C. 2	Summary Record of first meeting of Committee 2 (Credentials)	C. 2
238	Australia	Proposals for the provision of guard bands for the proposed distress and safety frequencies 4 136 and 6 204 kHz	C. 4 C. 5 C. 6
239	Sweden	Proposals (Agenda Item 18)	C. 6
240	Norway	Proposals (Art. 23)	C. 6
241	C. 5	Summary Record of second meeting of Committee 5	C. 5
242	WG/6B	First Report of Working Group 6B to Committee 6	C. 6
243	WG/6A	First Report of Working Group 6A to Committee 6	C. 6
244	C. 6	Summary Record of first meeting of Committee 6	C. 6
245 + Corr.	WG/6C	First Report of Working Group 6C to Committee 6	C. 6
246	WG/5B-1	First Report of Sub-Working Group 5B-1 to Working Group 5B	WG/5B
247	Sweden	Proposals (Art. 35 and 36)	C. 6
248	I.C.A.O.	Letter No. E 3/5-73/167 from I.C.A.O.	PL
249 <i>Rev</i>	Norway	Proposals (Frequency requirements)	C. 5
250	Norway	Proposals (Art. 36)	C. 6

No.	Origin	Title	Destination
251	I.A.L.A.	Radar transponder beacons for navigational uses	PL
252 Rev	Denmark	Proposals (Frequency requirements)	C. 5
253 + Corr.	PL	Minutes of the 1st Plenary Meeting	PL
254 + Corr.	PL	Minutes of the 2nd Plenary Meeting	PL
255	WG/6A-1	Report of ad hoc Working Group 6A-1 to Working Group 6A	WG/6A
256	C. 4	Summary Record of the third meeting of Committee 4	C. 4
257	PL	Minutes of the 3rd Plenary Meeting	PL
258 rev	Papua-New Guinea	Proposals (Frequency requirements)	C. 5
259	I.C.S.	Use of HF telephone frequencies for inter-ship working and, in certain cases, for ship-shore working	-
260	Brazil	Proposals	C. 5 C. 6
261	Philippines	Proposals (Agenda Item 3.8)	C. 5
262 + Add 1 and 2	Norway, Denmark, Sweden, France	Proposals (Art. 40)	C. 6
263	WG/5D	First report of Working Group 5D to Committee 5	C. 5
264	WG/5B-1	Second report of Sub-working Group 5B-1 to Working Group 5B	WG/5B

No.	Origin	Title	Destination
265	S.G.	Extract of radiotelephone frequencies (4 000 to 27 500 kHz) listed in the list of coast stations	C. 5
266 (Rev.2)	Australia	Proposals (Distress)	C. 4 C. 5 C. 6
267+ <i>Corrig</i>	Iceland	Proposals (Frequency requirements)	C. 5
268	C. 6	First report of Committee 6	PL
269+ <i>Corrig</i>	C. 4	Summary record of the 4th meeting of Committee 4	C. 4
270 + <i>Corrig+Rev</i>	C. 4	Summary record of the 5th meeting of Committee 4	C. 4
271	WG/6C	Second report of Working Group 6C to Committee 6	C. 6
272	WG/6A	Second report of Working Group 6A to Committee 6	C. 6
273 (Rev.)	S.G.	Note on I.T.U. technical cooperation in the field of maritime telecommunications	C. 6
274	Sweden	Proposals (Agenda Item No. 18)	C. 6
275	S.G.	Statement by the Chinese Delegation	C. 5
276	GT/5C-1	Report of Sub-group 5C-1 to Working Group 5C	WG/5C
277	WG/5B	First report of Working Group 5B to Committee 5	C. 5
278	WG/5B	Second report of Working Group 5B to Committee 5	C. 5
279	Joint WG 4A/5E	First report of the Joint Working Group 4A/5E	C. 4 C. 5
280	WG/4B	First report of Working Group 4B to Committee 4	C. 4
281	Khmer Republic	Proposals (Frequency requirements)	C. 5

No.	Origin	Title	Destination
282	WG/4C	First report of Working Group 4C to Committee 4	WG/4C
283	WG/5C-3	Information to all Delegations	C. 5
284	Argentina	Proposals (Frequency requirements)	C. 5
285 <i>Rev</i>	Japan	Proposals (Frequency requirements)	C. 5
286	WG/6C	Third report of Working Group 6C to Committee 6	C. 6
287	C. 3	Summary record of the First meeting of Committee 3	C. 3
288	WG/5D-1	First report of Sub-working Group 5D-1 to Working Group 5D	WG/5D
289	C. 6	Second Report of Committee 6	PL
290	Nigeria	Proposal (Frequency requirements)	C. 4
291	Greece	Proposals (Art. 7)	C. 4 C. 5
292	C. 6	Summary record of the Second meeting of Committee 6	C. 6
293	WG/6A	Third report by Working Group 6A to Committee 6	C. 6
294	WG/6B	Second report of Working Group 6B to Committee 6	C. 6
295	Senegal	Proposals (Frequency requirements)	C. 5
296	WG/6C	4th Report of Working Group 6C to Committee 6	C. 6
297	C. 2	Summary record of the Second meeting of Committee 2	C. 2
298	C. 5	Summary record of the Third meeting of Committee 5	C. 5
299	WG/6A-1	Final report of Ad hoc Working Group 6A-1 to Working Group 6A	WG/6A
300	S.G.	List of documents	PL