

Documents of the Administrative Radio Conference (CAR-59)

(Geneva, 1959)

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- The complete set of conference documents includes Document No. 1 915,
 DT No. 1 875 (incomplete).

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

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Documents of the Administrative Radio Conference (Geneva, 1959)

The following DT documents are not available:

- 76 Add 1 (available in Spanish)
- **76** (page 2-31 available in French and Spanish)
- 91 (available in French)
- 96 Add 2
- 113
- 132 (available in French and Spanish)
- 169
- 257
- 325 Rev Annex 1 (page 2-5) (available in French and Spanish)
- 325 (available in French and Spanish)
- **339 Rev** (available in French)
- 345
- 355 (available in French)
- 356 (available in French)
- 362
- 363
- 428 (available in French)
- 437
- 458 (available in French)
- 471
- **524 Add 1** (available in French and Spanish)
- 559
- **567 Rev 1** (Rev 2 available in Spanish)
- 567
- 571
- **586** (Rev available in Spanish)
- 588
- 637 (available in French and Spanish)
- 660 (available in Spanish)
- 661
- 678 (available in French and Spanish)
- 694
- 763 (available in Spanish)
- 824
- 834
- 868 Rev (available in Spanish)

WORKING GROUP 6A

REPORT

by Sub-Vorking Group 6A7 to Working Group 6A

Sub-Working Group 6A7 met on 23 October and agreed on the terms or definitions Nos. 60, 63a and footnote 61.1, which it submits to Working Group 6A.

The definitions Nos. 61 and 63 which were already adopted by Working Group 6A, are included in this document, to enable their consideration in connection with footnote 61.1.

60. Necessary Qualification of the term "Power"

Whenever the power of a radio transmitter etc. is spacified, it shall be expressed in one of the forms: "peak envelope power" (or Pp), "mean power" (or P_m) or "carrier power" (or P_c). In the following paragraphs these terms are used for the definition of the power of a radio transmitter.

61. Peak Envelope Power of a Radio Transmitter 1)

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

63. Mean Power of a Radio Transmitter 1)

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

63a. Carrier Power of a Radio Transmitter 1)

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

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

W. Kronjager

Chairman

Document No. DT 602-E 24 October, 1959

SUB-WORKING GROUP 5A1

APPENDIX 1

Form of Notice

For use when notifying to the International Frequency Registration Board, in accordance with Article 11, a frequency assignment or a change to an assignment recorded in the Master International Frequency Register.

(Form)

GENERAL INSTRUCTIONS

- 1. A separate notice shall be sent to the I.F.R.B. for notifying:
 - Each new frequency assignment,
 - Each change in any characteristics of a frequency assignment recorded in the Master International Frequency Register,
 - Each total or partial deletion of a frequency assignment recorded in the Master International Frequency Register.
- 2. Frequencies prescribed by the Radio Regulations for common use, such as 500 kc/s, 2,182 kc/s, should not be notified. (See No. 316).
- 3. Separate entries, in Columns 6 to 10, should be made for the various kinds of radiocommunications, such as telegraph, telephone, programme transmission, facsimile transmissions, etc., including all particulars related thereto.

GENERAL NOTES

- (a) The name of the notifying Administration should be indicated.
- (b) Indicate in this box by the letter "X" when the notice reflects:
 - the first use of a frequency by a station,

or

- the use of an additional frequency by a station.
- (c) Indicate in this box by the letter "X" when the notice reflects a change in the characteristics of a frequency assignment recorded in the Master International Frequency Register.
 - (1) In the case where existing particulars are changed, the new characteristics in the appropriate place should be underlined; the original characteristics which have been changed should be shown between parenthesis underneath.

- (2) In the case where the change is an addition to existing particulars, the additional characteristics should be shown in the appropriate place and should be underlined.
- (3) In the case where the change is a cancellation of a particular characteristic or characteristics, this should be shown in the appropriate place by a dash and, underneath, the characteristics which have been cancelled should be shown between parenthesis.
- (d) Indicate in this box by the letter "X" when the notice reflects a deletion of an assignment, in all of its notified characteristics.
- (e) A reference number of the notice and the date the notice is sent to the Board shall be shown here.

NOTES PERTAINING TO INFORMATION TO BE ENTERED IN SPECIFIC COLUMNS OF THE MASTER REGISTER

<u>Column 1 - Assigned Frequency</u>

- 1. Indicate the assigned frequency as defined in Article 1, in kc/s up to 30,000 kc/s inclusive, and in Mc/s above 30 Mc/s.
- 2. This information is a basic characteristic.

Column 2 - Date of putting into use.

- 1. In the case of a new assignment, insert the date (actual or foreseen, as appropriate) of putting the frequency assignment into use.
- 2. Whenever the assignment is changed in any of its basic characteristics as defined in this Appendix, except in the case of a change in Column 3, 4a or 11 of the Register, then the date of use must be that coinciding with the date of the latest change.
- 3. This information is a basic characteristic.

Column 3 - Call Sign (Identification)

- 1. Indicate the Call Sign or other identification used in accordance with Article 19.
- 2. This information is a basic characteristic, except for mobile stations and the stations referred to in number......

Column 4 - Name and Location of Transmitting Station

- 4a. Indicate the name of the locality by which the transmitting station is known or in which it is situated.
- 4b. Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.
- 4c. Indicate the geographical coordinates (in degrees and minutes) of the transmitter site.

However, when the frequency assignment is used for reception by a land station in the circumstances described in No. 315, the indication to be given in Column 4 is as follows:

- 4a. The letter "R".
- 4b. The country in which the receiving (land) station is located.
- 4c. The geographical coordinates (in degrees and minutes) of the site of the receiving (land) station.

The information to be supplied for Columns 4a, 4b and 4c is a basic characteristic.

Column 5 - Class of Station and Nature of Service

- 1. Indicate the class of station and nature of service performed, using the symbols shown in Appendix 7.
- 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the class of station and nature of service applicable to the mobile stations should be indicated.
- 3. This information is a basic characteristic.

- <u>Column 6a</u> Locality(ies) or Area(s) with which communication is established.
 - 1. Indicate in this column the locality(ies) or area(s) in which the receiving stations are located.
 - 2. For the Fixed Service indicate the name of the locality by which the receiving station is known or in which it is situated.
 - a) Reception points may be grouped and entered collectively as areas in this column if all other basic characteristics of the frequency assignment are the same with respect to each such point and provided the area is well-defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view.
 - b) Similarly, in the case of one-way simultaneous transmissions to multiple points, representative points outlining the area being served may be indicated, but it should be specified in the Remarks Column that this is simultaneous transmission.
 - c) In the case of a network composed of stations inter-communicating on the same frequency, the symbol ZN shall be entered in Column 6a. When the same frequency is used for two or more networks of the same Administration, each network should be identified by a separate letter following the network symbol ZN, e.g. ZN-A, ZN-B, etc. However, each station in the network shall be the subject of a separate notice except for those stations of the network which may already be recorded in the Master International Frequency Register.
 - 3. For land, Radionavigation land, Standard frequency,stations, it is not necessary to indicate any information in this column.

- 4. For Broadcasting stations, the areas of reception should be indicated.
 - These areas should be either a country or an area identified in accordance with the CIRAF zones established by the International High Frequency Broadcasting Conference, Mexico City, 1949.
- 5. For reception by a land station in the circumstances described in No. 315, the name of the locality by which the receiving (land) station is known or in which it is situated, should be indicated.
- 6. This information is a basic characteristic, except for paragraph 3 above.

Column 6b - Length of Circuit (kms)

- 1. The length of the circuit in kms should be indicated in this column.
- 2. For reception by a land station in the circumstances described in No. 315, the maximum distance between the mobile stations and the receiving (land) station should be indicated.
- 3. This information is not a basic characteristic except in the case of Paragraph 2 above, and in the case of land, radionavigation land, standard frequency.....stations. In these latter cases, the distances shown shall represent the service ranges.
- Column 7 Class of Emission and Bandwidth necessarily occupied Z and Description of Transmission Z
 - Indicate, for each locality or area of reception shown in Column 6a, the class of emission and bandwidth necessarily occupied, in accordance with Article 2 and Appendix 5.

- 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the particulars to be indicated are those applicable to the mobile stations.
- 3. This information is a basic characteristic.

Column 8 - Power (in kW)

- 1. Indicate the power supplied to the antenna
- 2. The power used to each locality or area of reception shown in Column 6a shall be indicated.
- 3. When the frequency assignment is used for reception in the circumstances described in No. 315, the particulars to be indicated are those applicable to the mobile stations.
- 4. This information is a basic characteristic.

Column 9 - Transmitting antenna characteristics

Column 9a - Azimuth of maximum radiation

- 1. If a directive transmitting antenna is used, indicate the azimuth of maximum radiation of the transmissing antenna in degrees (clockwise) from True North.
- 2. If a transmitting antenna with non-directional characteristics is used, insert ND in this column.
- 3. This information is a basic characteristic, except when the frequency assignment is used for reception in the circumstances described in No. 315.

Columns 9b and 9c -

The I.F.R.B. bases the Technical Standards it applies on the Recommendations of the C.C.I.R.. If, therefore, the radiation characteristics of the antenna concerned differ from those recommended by the C.C.I.R., the following information should also be notified in Columns 9b and 9c:

Column 9b - Angular width of main lobe in the horizontal plane in degrees

The total angle in degrees within which the radiation power in any direction is not more than 6 db less than the power radiated in the direction of maximum radiation, should be indicated.

Column 9c - Gain of the antenna in decibels (db) in direction of maximum radiation at the assigned frequency

The gain calculated with reference to a perfect free space half-wave dipole (see Article 1) should be indicated.

- <u>Column 10</u> Maximum hours of operation of the circuit to each locality or area $(G_{\bullet}M_{\bullet}T_{\bullet})_{\bullet}$
 - 1. In the case where it refers to reception by a land station in the circumstances described in No. 315, the maximum hours of operation are those relating to the mobile stations.
 - 2. This information is a basic characteristic.
- <u>Column 11</u> Megacycle Order of the other frequencies normally utilized for the same circuit.
 - 1. If the notified frequency is the only frequency used for the particular circuit, the indication "Nil" shall be inserted in this column.
 - 2. In other cases, the megacycle order of the other frequencies normally used for the circuit shall be indicated. For this purpose, the megacycle order shall be calculated according to the following ranges:

<u>Range</u>	<u>Megacycle order</u>
2,000 - 3,999	3
4,000 - 5,999	5
6,000 - 7,999	7
	\int
28,000 - 29,999	29 .

3. This information is a basic characteristic.

Column 12a - Operating Administration or Company*

This information is not a basic characteristic, but it is recommended it be supplied in cases where the same agency operates in more than one country.

<u>Column 12b</u> - Postal and Telegraphic Address of <u>Centralizing Office</u> responsible for the station.*

- 1. The postal and telegraphic address of the Centralizing Office under whose jurisdiction the station is placed, should be indicated.
- 2. The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions, and questions referring to the technical operation of the circuit (see Article 14).
- 3. This information is not a basic characteristic.

Supplementary Information

Any supplementary information supplied by the Administration should be indicated on the right hand side of the notice, within the frame provided.

- 1. If the assignment is made in accordance with a Regional or Service Agreement, the relevant Agreement shall be indicated in the appropriate place.
- 2. Reference to any coordination effected with other Administrations shall be indicated in the appropriate place, the name of the country shall follow the symbol COORD/....., or the indication "NIL" if no coordination has been effected.
- 3. Any other information which the Administration considers to be relevant should be indicated, such as, for example, an indication that the assignment concerned would be operating in accordance with No. 88 of the Radio Regulations, or information concerning the use of the notified frequency if such use is restricted or if the frequency is not used during all the time which is possible according to propagation conditions.
- 4. The information indicated under paragraphs 1 and 2 above is a basic characteristic.

^{*} Where this information already appears in the Preface to the International Frequency List, the appropriate reference number or letter may be used.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

WORKING GROUP 6B

DRAFT REPORT

Working Group 6B to Committee 6

TABLE OF TOLERANCES FOR THE INTENSITY OF SPURIOUS EMISSIONS (See Article 16)

- 1. The table below states the allowable tolerances which shall apply as from the dates quoted to the mean power of any spurious emission supplied by any transmitter to the antenna transmission line.
- 2. Furthermore, spurious radiation from any part of the system other than the antenna system shall not have an effect greater than would occur if the antenna system were supplied with the maximum power at that spurious emission frequency.
- 3. It is recognised that, for technical and operational reasons, specific services may demand tolerances tighter than those here quoted.
- 4. These tolerances shall not, however, apply to transmitters fitted aboard lifeboats and survival craft and those provided for emergency (reserve) purposes in the aeronautical and maritime services.
- 5. The final dates by which all equipment shall meet the tolerances laid down in Column B are 1st January 1966 in Region 1 and 1st January 1970 in Regions 2 and 3. Nevertheless all Administrations recognise the urgent need to implement Column B tolerances for all equipment at the earliest possible dates and will endeavour to ensure that necessary changes are made to all Transmitters of their Countries well before the dates specified.
- 6. No specific tolerances are quoted for transmitters operating on fundamental frequencies above 235 Mc/s. For these transmitters the levels of spurious emissions shall be as low as the state of the technique permits.

		The second secon
		urious emission supplied to line shall not exceed the umns A and B below
	A	В
Fundamental Frequency Band	Tolerances applicable until 1st January 1966 (Region 1) or 1st January 1970 (Regions 2 and 3) to trans—mitters now in use and to those installed before 1st January 1964.	Tolerances applicable to all new transmitters installed after 1st January 1964 and to all transmitters after 1st January 1966 (Region 1) or 1st January 1970 (Regions 2 and 3).
All frequencies below 30 Mc/s	40 decibels below the mean power of the fundamental without exceeding the power of 200 milliwatts.	40 decibels below the mean power of the fundamental without exceeding the power of 50 milliwatts (1)(2)(3)
30 Mc/s to 235 Mc/s: for transmitters having mean funda- mental power as quoted below:		
Greater than 25 watts		60 decibels below the mean power of the fundamental without exceeding 1 milliwatt (4)
Greater than 1 watt but not greater than 25 watts		40 decibels below the mean power of the fundamental without exceeding 25 microwatts (4)
l watt or less		40 decibels but this shall not be taken to require suppression below 10 microwatts (4)

Notes

- 1. For transmitters of mean power exceeding 50 kilowatts and which are required to operate over a frequency range approaching an octave or more, a suppression to less than 50 milliwatts is not mandatory, but every effort should be made to keep within the tolerances in the Table.
- 2. For hand-portable equipment of mean power less than 5 watts in the frequency band 10 kc/s to 30 Mc/s the suppression shall be at least 30 decibels but every effort should be made to meet the 40 decibels suppression.
- For mobile transmitters the spurious emission shall be at least 40 decibels below the fundamental without exceeding the value of 200 milliwatts, but every effort should be made to keep within the 50 milliwatts limit wherever practicable.
- 4. For spurious emissions originating from frequency modulated VHF maritime mobile equipment, the mean power of spurious emissions falling in any other International VHF Maritime Mobile channel, due to products of modulation, shall not exceed 10 microwatts and the power of any other spurious emission on any discreet frequency within the International VHF Maritime Mobile band shall not exceed 2.5 microwatts. Where, exceptionally, transmitters of power above 20 watts are employed, these limits may be increased proportionally.
- 5. Mobile stations of countries of Regions 2 and 3 operating within Region 1 shall adopt the tolerances appropriate to that Region.

Document No. DT 604-E 26 October, 1959

GENEVA, 1959

SUB-WORKING GROUP 5Al

STUDY OF PROPOSALS CONCERNING THE ENTRY OF DATES IN THE DIFFERENT COLUMNS

COUNTRY	BANDS FOR WHICH PLANS OR LISTS HAVE BEEN ADOPTED	OTHER BANDS	REMARKS
Belgium France French O.P.T.A.	2a NE 9 2b 2b	REGISTER (Without Symbol ((if examination favourable) 2c (With Symbol ((if examination unfavourable)	
Italy	PROCEDURE: 2a or 2b, 2c	PROCEDURE: 2c (with or without Symbol)	
U.S.A. Japan	2a	REGISTER	
Spain	ملك عند عند عند الحد الحد الحد الحد الحد الحد الحد الح	2b 1.4.52 or later 2c) 2c or 13) 2c	
	PROCEDURE: 2a or 2b, 2c	PROCEDURE: 2b, 2c (with Symbol indi- cating "Provisional" or the Finding)	

COUNTRY	BANDS FOR WHICH PLANS OR LISTS HAVE BEEN ADOPTED	OTHER BANDS	REMARKS
McTico	2a 2	REGISTER 2c	
United Kingdom	2a	2c No. 272 (E.A.R.C) (2a or) with U or 13 (2b) with U 2c later No. 272 E.A.R.C. (2b) if examination or 13 (2b if examination unfavourable	

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COUNTRY	BANDS FOR WHICH PLANS OR LISTS HAVE BEEN ADOPTED	OTHER BANDS	REMARKS
U.S.S.R.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	EW REGISTER orm date for all assignments orm (2a or 2b, 2c)	

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 605-FES 26 octobre 1959

GROUPE SPECIAL COMMISSION 5
AD HOC GROUP COMMITTEE 5
GRUPO ESPECIAL COMISION 5

ORDRE DU JOUR

Troisième séance du Groupe spécial

Mardi 27 octobre 1959, 9 heures - Salle E

- 1. Rapport verbal du Président du Groupe spécial sur les résultats des entrevues.
- 2. Divers.

A G E N D A

Third Neeting of the Ad Hoc Group

Tuesday, 27 October, 1959, at 9 a.m. Room E

- 1. Verbal Report by the Chairman of the Sub-Ad Hoc Group on the result of the interviews.
- 2. Any other business.

ORDEN DEL DÍA

3. a sesión del Grapo Especial

Martes, 27 de octubre, a las 9 de la mañana - Sala E

- 1. Informe oral del Presidente del Grupo especial sobre el resultado de sus entrevistas.
- 2. Otros asuntos.

Le Président :

Chairman:

M.N. Mirza

El Presidente:

GENEVA, 1959

Document No. DT 606-E 26 October, 1959

WORKING GROUP 5A

SPAIN

Proposals Nos 5054, 5055 and 5056 (Spain) (Document No. 38, pages 43 and 44) brought into line with the trends revealed in course of discussion in Working Group 5A now continued in Drafting Group 5Al

Number of proposal

5054

Cancelled.

5054a

Replaces proposal No. 5054.

When an Administration is obliged, for reasons of harmful interference encountered in the operation of a given commercial circuit (public correspondence), to set aside for that circuit a number of frequencies of the same order of magnitude, it may so inform the Board and call upon it to study the problem, providing the Board, to that end, with a comprehensive complement of the frequencies assigned to the circuit or at least that part of the complement which corresponds to the order of magnitude in question and the order of magnitude of the remaining frequencies in the complement.

5054b New.

In such cases, the Board after making sure that all the frequencies of the order of magnitude in question assigned for use by the given circuit in actual fact run the risk of harmful interference from stations in relation to which it enjoys no right of protection, shall carry out studies for improving the situation by means of reducing the number of frequencies of the order of magnitude in question assigned for use by the circuit subject to improving the category (status) of the retained assignments or at least the practical conditions of their usage.

5054c New.

Considering that, for the purpose of these studies, it will be useful to have at least a partial indication of the frequency complements of the other circuits involved in the study, the Board shall obtain such indication, wherever possible, by referring to the information contained in the Master Record, by consulting by correspondence the Administrations concerned (in respect of public correspondence circuits), by resorting, whenever a useful purpose may thereby be served, to the data obtained through monitoring of the transmissions, to the

Number of proposal

information supplied by Administration in connection with earlier cases of the same nature, and to any other means at its disposal.

5055 Revised.

If these studies show that, to facilitate the problem and to enable the number of frequencies assigned to one or more circuits to be reduced, specific cancellations or modifications can conveniently be effected in the existing assignments, either unilaterally by an Administration, or by mutual agreement between two or more Administrations, the Board shall propose such cancellations, modifications, or agreements to the Administrations concerned.

5056 Remains unchanged.

For the purpose of these studies, the Board shall take into account, for those stations that on occasion work "alternately" with a number of others, that, in view of the requirements and advantages of such a working method, allowance should in principle be made for the fact that it is reasonable that the number of frequencies required to ensure connection should be the same as if each circuit operated completely independently.

5056a New.

In following this procedure, the Board shall exercise the greatest discretion with regard to the information received from the Administration raising the matter as well as that obtained from other sources. It shall be understood that No. 360 RR is not applicable to this category of the studies carried out and recommendations issued by the Board.

Document Nº DT 607-FES 26 octobre 1959

GROUPE DE TRAVAIL 6A WORKING GROUP 6A GRUPO DE TRABAJO 6A

ORDRE DU JOUR

Treizième séance du Groupe de travail 6A (Définitions)

Mardi 27 octobre 1959, à 9 heures - Salle C

- 1. Compte rendu de la onzième séance (Document Nº 447).
- 2. Rapport du Président du Sous-Groupe de travail 6A4 (Document Nº DT 569).
- 3. Rapport du Président du Sous-Groupe de travail 6A5 (Document Nº DT 516, page 243).
- 4. Rapport du Président du Sous-Groupe de travail 6A7.
- 5. Termes restant à définir (Documents Nº 326 DT 536, DT 111).
- 6. Divers.

AGENDA

Thirteenth Meeting - Working Group 6A (Definitions)

Tuesday, 27 October 1959, at 09.00 hours - Room C

- 1. Summary Record of the Eleventh Meeting Document No. 447.
- 2. Report of Chairman of Sub-Group 6A4, Document No DT 569.
- 3. Report of Chairman of Sub-Group 6A5, Document No. DT 516, page 243.
- 4. Report of Chairman of Sub-Group 6A7.
- 5. Remaining terms to be defined, Document Nos. 326 DT 536, DT 111.
- 6. Other Matters.

ORDEN DEL DÍA

13. a sesión - Grupo de trabajo 6A (Definiciones)

Martes, 27 de octubre, a las 9 de la manana - Sala C

- 1. Informe de la 11.ª sesion, Documento N.º 447.
- 2. Informe del Presidente del Subgrupo 6A4, Documento N.º DT 569.
- 3. Informe del Presidente del Subgrupo 6A5, Documento N.º DT 516, pagina 243.
- 4. Informe del Presidente del Subgrupo 6A7.
- 5. Terminos no definidos aun. Documentos N.ºS 326, DT 536, DT 111.
- 6. Otros asuntos.

Le Président Chairman

E.W. Allen

El Presidente

Document No. DT 608-E 26 October, 1959

WORKING GROUP 7A7

AGENDA

MEETING OF WORKING GROUP 7A7

Tuesday, 27 October, 1959 at 3 p.m. - Room L

- 1. Lists of Coast and Ship Stations, Proposals 1456, 1457, 1458, 1959, 1460, 1461, 1462, 1463, 1464 and 1465 of the Yellow Book, pages 353 to 354.1 as well as Radio Division Circular No. 766, containing on pages 17 and 18 the Report of the General Secretariat regarding List IV.
- .2. Draft Recommendation to Committee 7 of Working Group 7A regarding secession of the publication of List V (List of Aeronautical and Aircraft Stations).
- 3. Any other business.

E. Ron

Chairman

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 609-FES 26 octobre 1959

SUB-WORKING GROUP 4B2
SUBGRUPO DE TRABAJO 4B2

ORDRE DU JOUR

4ème séance - Sous-Groupe de travail 4B2

Mercredi, 28 octobre 1959, de 9 heures à 12h 30 - Salle F

- Examen des propositions relatives aux attributions des bandes de fréquences 70 150 kc/s (Voir Document N° DT 48 et Document N° 91)
- 2. Divers.

AGENDA

Fourth Meeting Sub-Working Group 4B2

Wednesday, 28 October, 1959, 0900-1230, Room F

- 1. Consideration of proposals for allocation of frequency bands 70 150 kc/s (Reference Document No. DT 48 and Document No. 91)
- 2. Any other business.

ORDEN DEL DÍA

4.ª sesión del Subgrupo de trabajo 4B2

Miércoles, 28 de octubre 1959, de 9 a 12,30 - Sala F

- 1. Examen de las proposiciones de atribución de las bandas de frecuencias 70 150 kc/s (Documentos N.ºS DT 48 y Documento 91).
- 2. Otros asuntos.

Le Président The Chairman El Presidente

K.A. Williams

GENEVE, 1959

Document No DT 610-FES 26 octobre 1959

SOUS-COMMISSION 7A SUB-COMMITTEE 7A SUBCOMISION 7A

ORDRE DU JOUR

Séance du Mercredi 28 octobre 1959, 9 heures - Salle D

- 1. Approbation du Compte rendu de la treizième séance (Document Nº 398)
- 2. Approbation du Compte rendu de la quinzième séance (Document Nº 399)
- 3. Approbation de l'Annexe au Document N° 398
- 4. Approbation de l'Annexe au Document Nº 399
- 5. Continuation de l'étude des propositions concernant l'Article 20
- 6. Etude des propositions concernant l'Appendice 6
- 7. Etude des propositions concernant l'Appendice 7
- 8. Divers.

Le Président

P. Bouchier

A G E N D A

Meeting on Wednesay, 28 October, 1959 at 9 a.m. - Room D

- 1. Approval of the Summary Record of the thirteenth meeting (Document No. 398)
- 2. Approval of the Summary Record of the fifteenth meeting (Document No. 399)
- 3. Approval of the Annex to Document No.398
- 4. Approval of the Annex to Document No.399
- 5. Continued study of the proposals concerning Article 20
- 6. Study of the proposals concerning Appendix 6
- 7. Study of the proposals concerning Appendix 7
- 8. Any other business.

The Chairman P. Bouchier

ORDEN DEL DÍA

Miércoles, 28 de octubre de 1959, a las 9 de la mañana - Sala D

- 1. Informe de la 13.ª sesión (Documento N.º 398)
- 2. Informe de la 15.ª sesión (Documento N.º 399)
- 3. Aprobación del Anexo al documento N.º 398
- 4. Aprobación del Anexo al documento N.º 399
- 5. Continuación del estudio de las proposiciones relativas al Artículo 20
- 6. Estudio de las proposiciones relativas al Apéndice 6
- 7. Estudio de las proposiciones relativas al Apéndice 7
- 8. Otros asuntos.

El Presidente P. Bouchier

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

SUB-WORKING GROUP 5A1

SUMMARY OF DOCUMENTS USED Article 11

Sections & numbers	Yellow document	Yellow document	Yellow document	Green document
Sections I & II Numbers 309 to 320 a	DT 330		DT 524	
Section III Numbers 320 b to 332	DT 330 Add.No.1 (Rev.1)			
Section III (cont'd.) Numbers 333 to 338	DT 330 Add.No.2	DT 330 Add.Nos.	DT 524	
Section III (cont'd.) Numbers 339 to 339 j	DT 330 Add.No.3	2 & 3 (Rev.1)	Add.No.1 (Nos.333 to 339 i)	
Section III (cont'd.) Numbers 339 j to 339 l (ex 346)	DT 330 Add.No. 6		DT 524	
Section IV Number 339 aa	DT 330 Add.No.4	DT 330 Add.No.4 (Rev.1'- partiel)	Add.No.2	
Section IV (cont'd.) Number 339 ab - 339 as	DT 330 Add.No.4		DT 524	
Section IV (cont'd.) Number 339 at - 339 cg	DT 330 Add.No.5		Add.No.3	
Section V Numbers 340 to 345	DT 330 Add.No.7		DT 524	-
Section VI Numbers 347 to 351	DT 330 Add.No.8		Add.No.4	
Section VII Numbers 352 to 361	DT 330 Add.No.9			
Articles 10 and 12 and Appendix 1				
Article 10	DT 586 ·	DT 586 (Rev.1)		
Article 12	DT 599			
Appendix 1	No number	DT 602		

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 612-FES 24 octobre 1959

GROUPE DE TRAVAIL 4A

WORKING GROUP 4A

GRUPO DE TRABAJO 4A

ORDRE DU JOUR

Septième séance - Groupe de travail 4A

Jeudi, 29 octobre 1959, 9 heures - Salle B

- 1. Rapport du Groupe de travail ad hoc sur l'extension de la zone tropicale 40° E et 80° E de Greenwich
- 2. Projet d'Addendum au Document N° DT 413 (Suite de la discussion de la Proposition N° 5530 de l'Inde relative au N° 253 du RR)
- 3. Divers.

AGENDA

Seventh meeting of Working Group 4A

Thursday, 29 October, 1959 at 9 a.m. - Room B

- 1. Report by the Ad Hoc Working Group on the extension of the tropical zone 40° E and 80° E of Greenwich
- 2. Draft Addeundum to Document No. DT 413 (Discussion of Proposal No. 5530 by India relating to No. 253 of the RR continued)
- 3. Miscellaneous.

ORDEN DEL DÍA

7.ª sesión del Grupo de trabajo 4A

Jueves, 29 de octubre de 1959, a las 9 de la maĥana - Sala B

- 1. Informe del Grupo de trabajo especial sobre la ampliación de la zona tropical 40° E y 80° E de Greenwich
- 2. Proyecto de Addendum al documento N.º DT 413 (Continuación de la discusión de la Proposición N.º 5530, de India, relativa al N.º 253 del RR)
- 3. Otros asuntos.

Le Président The Chairman El Presidente

G. Loyen

Document No. DT 613-E 26 October 1959

GENEVA, 1959

SUB-COMMITTEE 7B

REPORT

by Ad Hoc Group composed of Representatives of
Belgium, China, France, Netherlands, United States of America,
United Kingdom of Great Britain and Northern Ireland
and Federal Republic of Germany to
Sub-Committee 7B

Considering Proposals Nos. 1763, 1764, 4176, 1765, 1766, 1767, 1768, 4677 and 1914, the Ad Hoc Group unanimously adopted the following text:

RR No. 618 (2)

However, in the bands of frequencies between 4 000 and 23 000 kc/s, when the conditions of establishing contact are difficult, the call signs may be transmitted more than three times but not more than ten times. In this case, the call signs of the called and the calling station should be transmitted in alternative sequence up to a total of twenty call signs altogether (e.g. ABC ABC de WXYZ WXYZ or ABC ABC ABC de WXYZ WXYZ WXYZ). This call may be sent three times at intervals of two minutes. Then it must not be renewed until an interval of fifteen minutes.

H. Barth

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

SUB-WORKING GROUP 5B1

SECOND REPORT

of Sub-Working Group 5Bl (Region 1) to Sub-Working Group 5Bl

1. Proposals referred to Sub-Working Group 5Bl (Region 1)

The Sub-Working Group 5Bl (Region 1) has considered the undermentioned Proposals, apportioned to it pursuant to Document No. DT 300 and DT 300 Addendum 1, and recommends that they be adopted:

Document No.	Proposal	Source	Subject
. 22	4869	U.K.	Rec. on Maritime Radiobeacons
24	4875-4878	U.K.	Article 9 considered at the request of Committee 4
	1077 .		~ ·.
	1077 bis		

The Delegate of the Federal Republic of Germany withdrew Proposals Nos. 5103 - 5107 (Document No. 62) which were similar in content to Proposals in Document No. 24.

2. Intership frequencies in the band 2 194 - 2 440 kc/s.
Proposed Assignments submitted by the Federal Republic of Germany (Doc. DT 447)

The frequency 2 396 kc/s is listed for the United Kingdom in Annex 2 of the E.A.R.C. Agreement for the following areas:

Atlantic
Baltic
Channel
Indian Ocean
Mediterranean
North Sea.

The Delegates of the United Kingdom and the Federal Republic of Gormany have agreed upon the following:

a) The United Kingdom to use the frequency 2 396 kc/s only in the areas of:

South Atlantic Indian Ocean Mediterranean;

b) The Federal Republic of Germany to use the frequency 2 396 kc/s in the areas of:

Baltic North Atlantic Channel North Sea

Document No. DT 447 was accordingly treated as withdrawn.

3. Proposed assignments submitted by Spain (Doc. No. DT 290) & U.S.S.R. (Doc. No. DT 440)

In view of the difficulties that would arise for some countries if all the proposed assignments in these two documents were accepted, it was agreed that consultations should take place between the delegates of the countries mainly concerned and that the results should be considered at a later meeting.

W. A. Kirkpatrick Chairman

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 615-FES 26 octobre 1959

GROUPE DE TRAVAIL 6B WORKING GROUP 6B GRUPO DE TRABAJO 6B

ORDRE DU JOUR

<u>Treizième séance - Groupe do travail 6B</u>

Mercredi 28 octobre 1959, à 9 heures - Salle C

Le Groupe examinera les points de l'ordre du jour de la 12ème séance (Document DT 579, points 4, 6, 7, 8, 9, 10 et 11) qui n'ont pas été liquidés, en y ajoutant le point suivant: "Appendice 4, tolérances pour les rayonnements non essentiels, Document DT 603".

AGENDA

Thirteenth meeting of Working Group 6B
Wednesday, 28 October, 1959 at 9 a.m. - Room C

The uncompleted items of the Agenda for the Twelth meeting, Document No. DT 579, (viz. items 4, 6, 7, 8, 9, 10 and 11) will be taken together with a further item "Appendix 4, Tolerances for Spurious Emissions, Document No. DT 603".

ORDEN DEL DÍA

13^a sesión del Grupo de trabajo 6B

Miércoles, 28 de octubre de 1959, a las 9 de la maĥana - Sala C

Examen de los puntos del Orden del día no examinados en la 12º sesión (Documento N.º DT 579, puntos 4, 6, 7, 8, 9, 10 y 11) junto con el siguiente: "Apéndice 4, tolerancias para las emisiones no esenciales (Documento N.º DT 603)".

Le Président : The Chairman : El Presidente :

J.K.S. Jowet

GENEVA, 1959

COMMITTEE 6

$\hbox{\tt R} \ \hbox{\tt E} \ \hbox{\tt V} \ \hbox{\tt I} \ \hbox{\tt S} \ \hbox{\tt E} \ \hbox{\tt D} \qquad \hbox{\tt A} \ \hbox{\tt G} \ \hbox{\tt E} \ \hbox{\tt N} \ \hbox{\tt D} \ \hbox{\tt A}$

Ninth Meeting - Committee 6 (Technical)

Wednesday, 28 October, 1959 at 1500 hours - Room C

- 1. Report of Chairman of Working Group 6A
 - a) Oral report
 - b) Definitions
- 2. Report of Chairman of Working Group 6B
 - a) Oral report
 - b) Article 2, Section 1 (Document No. 409, Annex 1 revised)
 - c) Appendix 3, new format (Document No. DT 584)
 - d) Appendix 5 (Document No. 461 revised)
- 3. Standard Frequency and Time Signal Services (Document No. 462)
- 4. Other matters.

M.N. Mirza Chairman

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

COMMITTEE 6

AGENDA

Ninth Meeting - Committee 6 (Technical)
Wednesday, 28 October, 1959 at 1500 hours - Room C

- 1. Report of Chairman of Working Group 6A
 - a) Oral report
 - b) Definitions
- 2. Report of Chairman of Working Group 6B
 - ·a) Oral report
 - b) Article 2, Section 1 (Document No. 409)
 - c) Appendix 3, new format (Document No. DT 534)
 - d) Appendix 5 (Document No. 461)
- 3. Standard Frequency and Time Signal Services (Document No. 462)
- 4. Other matters.

M.N. Mirza Chairman

Document No. DT. 617-E 27 October, 1959

GENEVA, 1959

COMMITTEE 7 SUB-COMMITTEE 7A

A NOTE BY THE GENERAL SECRETARIAT

This document meets a request by Sub-Committee 7A. It gives extracts from the documents of the Atlantic City Radio Conference, shewing the discussions that took place in connection with Proposal 2519, submitted by the Republic of the Philippines, which proposal had to do with the formation of call signs. (See Document No. 456).

Document No. 569 R. - Report by the Sub-Subcommittee of Sub-Committee A (General) of the Operations Committee (Committee 8):

"The Sub-Subcommittee then turned to discussion of the proposal of the Philippines (2519 R). The merits of this proposal are recognized and the Delegation of the Philippines is to be congratulated on the work done in this connection. However, in view of the directive in the terms of reference of this Sub-Subcommittee that minimum changes be made in present assignments it was the concensus of opinion that because a complete revision of all call sign assignments would be required by its adoption another solution should be sought."

<u>Document No. 587 R. - Report by Sub-Committee A of the Operations Committee (Committee 8):</u>

"A proposal by the Philippine Delegation involved the assignment of two identifying letters to each country but this proposal had been regarded as outside the terms of reference of his Sub-Subcommittee which required that the **present** allocations be disturbed as little as possible."

<u>Document No. 684 R. - Report of Sub-Committee A (General)</u> of the Operations Committee (Committee 8):

"In connection with the Philippines proposal (Document No. 358 R) for an entirely new plan for forming call signs the <u>Chairman</u> asked if it might not be approporiate for this Sub-Committee to propose a recommendation that Administrations be asked to study the whole call sign problem before the next conference in order to overcome the difficulties and limitations of the present plan and simplify it and to provide more margin for expansion.

The <u>Philippines Delegate</u> was grateful for this suggestion and referred to his memorandum annexed to Document No. 587 R.

"The <u>Chairman</u> then asked the Philippines, China, France, and United States delegates to prepare a brief statement on the subject for consideration by this Sub-Committee where it would if approved be submitted to Committee 8 for inclusion in the documents of this Conference."

<u>Document No. 685. - Report of Sub-Committee A (General) of the Operations Committee (Committee 8):</u>

AHHEX

DRAFT RESOLUTION FOR A NEW METHOD OF GENERATING CALL SIGHS:

The Radiocommunication Conference of Atlantic City (1947): considering that:

- 1. The Delegate of the Republic of the Philippines has set forth a completely new method of generating call signs (Document No. 358 R, Proposal 2519 R);
- 2. This proposal in particular provides that the call signs for each country or its territories or its possessions should be identified by the group of the first two letters exclusively allocated to that country, its territories, or its possessions;
- 3. The new method proposed permits more readily the identification of the nationality of stations than the system presently in use;
- 4. The system of generation of call signs presently in use as well as the new table of allocation of call signs will only temporarily satisfy the needs for call signs;
- .5. The proposal of the Republic of the Philippines may offer a solution to many of the difficulties now apparent;
- 6. The adoption of the principles contained in this proposal would necessitate the almost complete change in the assignment of call signs throughout the world; and
- 7. In view of the considerable amount of administrative work involved in such a change the Conference has he sitated to adopt the plan;

recommends that:

- All countries concerned make a careful study of Proposal 2519 R submitted by the Republic of the Philippines prior to the convening of the next Radiocommunication Conference; and
- Should some future Radiocommunication Conference find it necessary to revise the Table of Allocation of Call Signs (Article 14) particular attention should be given to this proposal or to any similar proposals intended to establish a method of generation of call signs which will solve, so far as possible, the problem of allocation of call signs and thus avoid their periodic rearrangement."

A Note by the General Secretariat:

The above draft recommendation was later adopted by Committee 8 and Plenary Reeting (Documents Fos. 769 R, 807 R, and 934 R).

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS GENEVE, 1959

Document Nº DT 618-FES 27 octobre 1959

SOUS-GROUPE DE TRAVAIL 4D7
SUB-WORKING GROUP 4D7
SUBGRUPO DE TRABAJO 4D7

ORDRE DU JOUR

Deuxième séance du sous-groupe de travail 4D7 (Région 3)

Jeudi 29 octobre 1959, 17 heures - Salle G

Suite de l'examen des propositions d'attribution dans les bandes 174-235 Mc/s dans la Région 3.

A G E N D A

Second meeting of Sub-Working Group 4D7 (Region 3)

Thursday 29th October 1959 - at 5 p.m. - Room G

Further consideration of proposals for allocations in the band 174-235 Mc/s in Region 3.

ORDEN DEL DÍA

2.ª sesión del Subgrupo de trabajo 4D7 (Región 3)

Jueves, 29 de octubre de 1959, a las 5 de la tarde - Sala G

Continuación del examen de las proposiciones de atribución en las bandas 174-235 Mc/s, en la Región 3.

Le Président
The Chairman J.M. Power
El Presidente

GENEVA, 1959

WORKING GROUP 4A

REPORT

Sub-Working Group 4A Ad Hoc to Working Group 4A

- 1. At its Sixth Meeting held on 20 October, 1959, Working Group 4A decided to set up the Sub-Working Group 4A Ad Hoc with the Delegates of Iran, Pakistan, Turkey, the U.S.S.R., the I.F.R.B. and the C.C.I.R. as members and the Delegate of India in the chair.
- 2. The Ad Hoc group has the following terms of reference (re Document No. DT 558):

"To examine the technical reasons in favour of extending the Tropical Zone up to the latitude 43° North between longitudes 40° East and 80° East of Greenwich". (Proposal No. 1058 of the U.S.S.R.).

- The Ad Hoc group met twice (on Tuesday, 22 and Monday, 26 October, 1959). The Delegates of Iran, Pakistan, Turkey and the U.S.S.R. were present. Mr. Iastrebov and Mr. John H. Gayer, members of the I.F.R.B. and Dr. Mao of the C.C.I.R. assisted the proceedings.
- 4. The following technical factors were considered:
 - i) atmospheric noise data contained in the Report No. 65 adopted by the VIIIth Plenary Assembly of the C.C.I.R. (Warsaw 1956);
 - ii) some of the technical and geographical characteristics of the terrain without reference to precise technical data in the region of the proposed extension of the Tropical Zone;
 - iii) the appropriateness of the use of the Tropical Broadcasting bands listed in RR 244.
- 5. The following emerged from the deliberations:
 - i) the Tropical Zone as defined by RR 252 covers a wide range of noise areas, terrain characteristics and ionospheric propagational characteristics;
 - ii) the factors mentioned in paragraph 4) above, singly or in combination, cannot determine uniquely a broad area, such as the Tropical Zone, as distinct from other areas of the world.

- 6. Considering the position outlined in paragraph 5) above and recognising the fact that precise criteria defining the Tropical Zone are not available, it was found difficult to find sufficient and precise technical justification in respect of the extension of the Tropical Zone as contained in proposal No. 1058 of the U.S.S.R.
- 7. In addition to the conclusions reached (paragraph 6 above) concerning the terms of reference of the Sub-Working Group, the group (with the exception of the delegation of Turkey whose opinion is covered in paragraph 8 below) recommends that Broadcasting Stations are admitted within the proposed zone of extension under the following conditions:
 - i) the Broadcasting Service in the extended zone should operate on the basis of equality with the other services sharing the bands listed in RR 244 and operating in the same zone;
 - ii) the Broadcasting Service in the extended zone should operate on the basis of equality with the other services in the Tropical Zone (RR 252) in the bands listed in RR 244;
 - iii) the Broadcasting Service in the Tropical Zone (RR 252) has priority over the Broadcasting Service in the extended zone within the bands listed in RR 244.
- 8. The delegation of Turkey is not in favour of the substance of the recommendation in paragraph 7 above and is of the opinion that this report should not include such recommendation as one outside the terms of reference of the group.
- 9. The work of the group is concluded with this report.

V.V. Rao

Chairman

Document No. DT 620-E 26 October, 1959

AD HOC GROUP COMMITTEE 5

REPORT

of the Sub-Ad hoc Group to the Ad hoc Group on the Result of the Interviews

As directed by the Ad hoc Group, the Sub-Group, presided over by Mr. Carl W. Loeber (U.S.A.) and consisting of the representatives of Albania, Ethiopia, Pakistan and Paraguay, conducted the interviews based on Document No. DT 437 (Rev.) to study the practical needs of the new and developing countries. Six sittings were arranged in all and twenty-one delegations presented their points of view. The delegations interviewed were the following:

Belgian Congo	Greece	Malaya
Burma	India	Pakistan
Canada	Iran	Paraguay - Bolivia
Ceylon	Israel	Saudi Arabia
Ethiopia	Jordan	Sudan
French Overseas Terr.	Korea	Tunisia
Ghana	Libya	United Arab Republic

QUESTION 1: Can you indicate the order of importance in which your Delegation considers the following services in your country which are working between 4 Mc/s and 27.5 Mc/s?:

- i) National broadcast services (for the service areas within the territories of the country).
- ii) International broadcast services.
- iii) International fixed services.
- iv) National fixed services.

The answers to the first question are varied, and it has been considered best to put them in the following form:

Ci annu i annu annu annu annu annu annu a	Number of Delegations							
Service	First Preference	Second Preference	Third Preference	Fourth Preference				
National Broadcast	. 5	8	3	imph				
International Broadcast	<u>-</u>	4	3	9				
International Fixed	9	4	3	· •				
National Fixed	3	3	6	3				

In addition, three delegations considered that all the four services were of equal importance, two delegations were interested in providing their present needs for National Broadcasting only, and one delegation desired to inform the Sub-Group of its future expansion in National broadcasting.

QUESTION 2 :

a) Do you consider that the draft plans of I.F.R.B. as they stand, give satisfaction to your broadcasting needs for i) national services, and ii) international services?

Tho	recult	a oh	tains	d are	20	follows	٠
1 (14)	result	$s - \omega$	1.64.1 [16]	eo are	as	TOLIOWS	

Number of Delegations										
National Se	ervices		International Services							
Plans satisfy the needs as they stand	Plans can satisfy with slight adjust-ments	not	Plans satisfy the needs as they stand	Plans can satisfy the needs with slight adjust- ments	Plans do not satisfy the needs					
3	3	14	2	3	14					

The reasons already communicated to the I.F.R.B. and heard frequently in this Conference have been given for the non-acceptance of the plans as they stand. There was, however, general support to the idea of

planned usage of High Frequency Broadcast Bands. A view was put forward that the non-acceptance of the I.F.R.B. draft plans by some administrations was motivated by the fear of losing the exaggerated registrations in the Master Frequency Record rather than other technical reasons. There were other suggestions to improve the I.F.R.B. draft plans so as to make them acceptable or to arrive at some procedure of frequency management, for instance as suggested in U.S.A.-Australia proposals.

- b) See Annex 1.
- c) See Annex 1.
- d) See Annex 2.
- e) See Annex 2.

In the view of the delegates interviewed, the difficulties experienced in actual operations arise, invariably, from the state of congestion in the frequency spectrum. The complaints referred to the non-availability of clear channels, harmful interference from other broadcasts, frequent changes in frequency to avoid interference and the need to engage in out-of-band broadcasts. To get the program through, some administrations broadcast simultaneously on more than one frequency, thus aggravating the situation still further.

Some delegations stressed the necessity of solving the problem of intentional interference on broadcasts and recommended that the issue be brought before the Plenipotentiary Conference if necessary. It was also suggested that the practice of using many frequencies simultaneously for the same program should be discouraged.

Some delegations expressed a special requirement for covering large portions of their territories with programs broadcast from a minimum number of stations because of the practical difficulties in the establishment of the number of stations required to provide adequate coverage from a technical standpoint.

QUESTION 3:

Fixed Services

a) Is your Administration having difficulty with problems of interference? If so, please state whether bilateral coordination was attempted or the help of I.F.R.B. sought. What was the result?

The answer to the first part of the question has generally been in the affirmative. The amount of interference varies during the hours of the day and is more serious during the morning and evening hours. Some delegates stated that satisfactory operation had been achieved on some of the frequencies which had received unfavourable findings from the I.F.R.B.

Bilateral coordination to remove interference had been tried in about 50% of the cases and the results have been mixed. In some cases the coordination has been quite effective. However, some administrations did not try bilateral negotiations on account of their interpretation of the prior dates of the other administrations. Some found that the formalities prescribed by the regulations are too long and laborious to attempt coordination. The problems are further accentuated by the frequent difficulty of identifying the interfering stations.

In those cases where the help of the I.F.R.B. was sought, the results were not always satisfactory. The statements tended to fall in two categories:

- i) those who felt that the new and developing countries did not receive due attention from I.F.R.B., and
- ii) those who considered I.F.R.B. helpless in view of the grave situation.
- b) Has your Administration any special problems? If so, please give details of such problems.

About 66% of the delegates stated they had some form of difficulties, basically arising out of the non-availability of interference-free channels. Some of them needed technical assistance in the form of advice on special problems concerning radio propagation and radio frequency engineering as well as training facilities to provide the essential staff for the services. Mention was also made of the geographical characteristics of various countries and the problems arising out of them. Difficulties arising out of interference originating in the countries which are not signatories to the international agreements were also brought to the notice of the Group.

c) In particular, does your Administration have difficulty in notification procedure? If so, what are these difficulties?

The reply to this question, almost invariably, referred to the result of technical examination conducted on the notifications. Some delegations placed the number of unfavourable findings between 70% and 95%. Some delegations stated they did not insist on notification in light of unfavourable findings. This resulted in part at least from a lack of appreciation of the possibilities in this regard.

d) Are your international fixed services satisfactory? If not, what do you think can remedy the situation?

About 70% of the administrations mentioned the presence of interference of varying magnitude on their international circuits. In some

cases, due to the lack of suitable frequencies for establishing short distance direct circuits, international circuits had to be routed indirectly raising the tariff to prohibitive values. The following suggestions were made to relieve this difficult situation:

- i) The efficient and effective use of the radio spectrum requires the examination of existing long-distance circuits with a view of reducing their number to conserve frequencies.
- ii) Other means of telecommunications, e.g., coaxial cable, micro-wave links, etc., should be used wherever practicable.
- iii) New and developing countries be favoured in registration of the frequencies whenever a clear channel was found in the spectrum.
 - iv) Some machinery should be provided to make the Master Frequency Record reflect actual usage of the spectrum.
 - v) It is necessary to review the concept that the status of the entries in the Master Record is determined by the dates shown therein. This concept tends to make the record static rather than dynamic.
- vi) Document No. 302 contains proposals for the solution of some of the problems of new and developing countries, and due consideration should be given to these proposals.
- vii) A regular procedure should be laid down for encouraging bilateral coordination in cases of interference.
- e) Are your national fixed services satisfactory? If not, what do you think can remedy the situation?

About 30% of the delegations stated that their national services suffered either on account of interference or are inadequate as compared to their requirements or both.

f) Have you any particular suggestions concerning your present practical requirements? If so, state them briefly with special reference to i) order of frequencies required, ii) reception localities or areas, and iii) hours of operation required.

A number of delegations stated that the programs of their countries for the development of their fixed services were being retarded owing to a lack of suitable frequencies. As a consequence, the establishment of needed new circuits was being delayed. Some of these delegations were unable to provide details of such instances.

QUESTION 4:

Other Services. Has your delegation any particular problems concerning the other services? If so, please state them.

Some delegations referred to the non-availability of frequencies for medium wave broadcasts and the interference experienced especially during evening hours. In this connection, the relevant paragraph of Document No. 105 was brought to the notice of the Group as a possible long-term solution.

Two delegations stated that more frequencies will be required by them for new maritime services.

One delegate stated that the distress frequency 2,180 kc/s was not suitable in his area on account of the presence of high atmospheric noise. A frequency in 8 Mc/s band would be preferred.

One delegation stated that its "off-route" allocations in the aeronautical bands were inadequate.

QUESTION 5:

Other Services. Would your delegation like to avail itself of assistance in frequency management, in international monitoring, or any other similar matter, and how should such assistance be provided?

Almost all the delegations replied in affirmative to this question. The type of assistance, however, varied according to the state of technical and economic development of the country. The establishment of an international monitoring system was also urged as a means towards better frequency management. A few delegations offered to cooperate with international monitoring efforts by providing land for a monitoring station. In most cases they indicated that assistance in some form would be required. Further reference to the need for technical assistance is made in response to Question 3b) above.

Miscellaneous observations by delegations

- 1. The problem of difficulty in obtaining the crystals was mentioned and the possibility of setting up regional or sub-regional crystal grinding centres was suggested.
- 2. A large number of the delegations interviewed were situated in regions of high atmospheric noise which prevented them from making a satisfactory use of the radio frequency spectrum below 5 Mc/s.

Maqbool Ahmad Rapporteur

Carl W. Loeber Chairman Sub-Ad hoc Group

Annexes: 2

This information is furnished for the use of the Ad Hoc Group only.

- 2. High Frequency and Tropical Broadcasting Services (where applicable)
 - b) What are your minimum requirements for national broadcasting in channel hours, in each band, which can be used with the present installed equipment? Please state also whether for morning, day, evening or night.
 - c) Of these requirements, how many cannot be satisfied at present within the appropriate bands, without harmful interference?

COUNTRY	Tropical	6 Mc/s	7 Mc/s	9 Mc/s	11 Mc/s	15 Mc/s	17 Mc/s	21 Mc/s	26 Mc/s	Remarks
ARS	15	30	30	30	-	. 	<u>-</u>	÷.	Char	All the broadcasts are subject to interference during evening hours
OL & PRG	Th	e require	ments are	the same	as includ	ed in the 1	Draft Plans	3 .		
BRM	116	8	7	12	-			prists	-	
CGO	<i>←</i>	209	>	39	21	-		_		
CLN		$7\frac{1}{2}$	75	***		****	_	destre	-	
CTO	-	28	38 ⁻	28		· _	_	· 	_	67% of the broadcasts cannot be satisfied
ETH	· 	10	12	12	-	-	-	-		Harmful interferents is present 50% of the time
POM	-	182	158½	161 1	24	31	10		-	Broadcasts suffer from harmful interference during morning and evening hours
GRC	· <u>-</u>	30	30		-	-	_ ,	- .	-	All the broadcasts suffer from harmful interference
IND	·	70	198 3	1482	39	$13\frac{3}{4}$	9	-	-	50% of the time, the interference is present
IRN	40	daytime & evening	daytime & evening	daytime only	daytime only		-	-	<u>-</u>	Interference is experienced on all frequencies

Annex 1 to Document No. DT 620-E Page 8

COUNTRY	Tropical	6 Mc/s	7 Mc/s	9 Mc/s	11 Mc/s	15 Mc/s	17 Mc/s	21 Mc/s	26 Mc/s	Remarks
ISR	36	-	***			<u> </u>	N-1			
JOR	-	19		6		 .	_	•••	-	Harmful interference is present for about 75% of the time
KOR	-	40	20	9	-		-	~		50% broadcasts suffer from harmful inter- ference
LBY	4	12	6		-	-	-		· <u>-</u>	Zero % satisfaction is obtained so far in 6 Mc/s and 7 Mc/s
MLA	The I.F	.R.B. Dra	ft Plans s	satisfy t	he nationa	l requirem	ents			
PAK	<u>-</u>	141/2	57	10	13	9 <u>1</u>	3	3½		Broadcasts suffer on account of interference & necessitate frequent changes in the frequency of operation
SDN	-	16	16	-	-	~-				Harmful interference on all the broadcasts
TUN		20	an		-	_	~-		_	
U.A.R.	-	3 2	40	38	20	20	~	-		Out of band operation is resorted to to avoid avoid interference

ANNEX 2

This information is furnished for the use of the Ad Hoc Group only.

2. High Frequency and Tropical Broadcasting Services (where applicable)

d) What are your minimum requirements for international broadcasting, in channel hours in each band, which can be used with present installed equipment? Please give this information for June 1960 solar activity.

e) Of these requirements, how many cannot be satisfied at present within the appropriate bands, without harmful interference?

COUNTRY	6 Mc/s	7 Mc/s	9 Mc/s	ll Mc/s	15 Mc/s	17 Mc/s	21 Mc/s	26.1	Mc/s Remarks
Saudia Arabia	15	15	15	15	15	5	5	5	Harmful interference is present on all the broadcasts
Ceylon		12	7	-	11	32	•••	-	General interference on all the Frequencies at one time or other
Ghana		-	4	5	27	6	-7-		Zero % satisfaction
Greece	15	12	3	20	19	2	4		Harmful interference is present practically all the time
Iran	-		essa,	8	20	-	8	- .	These services suffer largely on a/c of interference
Israel	_	14	12	12	-	-	-	-	Satisfaction is about 40%
Korea	-	-	5	8	8	4	2		About 35% could be considered satisfactory
Sudan	· ·	-	-	16			***	- ,	Interference is present in general
U.A.R.	-	-	28	48	22	50	~	- ,	Obliged to use out-of-band frequencies in many cases
Bolivia and) Paraguay	The I.I	F.R.B. Pr	aft Plans	satisfy th	e requirem	ents	·		
Belgian Congo	The I.	F.R.B. Dr	aft Plans	satisf y t	he require	ments			·

Annex 2 to Document No. 620-E Page 10

COUNTRY	6 Mc/s	7 Mc/s	9 Mc/s	ll Mc/s	15 Mc/s	17 Mc/s	21 Mc/s	26 Mc/s	Remarks
Ethiopia	_		4	5	-	2	2	n e Prince de como con describir de la como qual que a della contrabación.	
Jordan	~ .	-	6	8	4	4	-	-	None of the broadcasts are free from interference
Pakistan		$2\frac{1}{2}$	5	$12\frac{1}{2}$	8 .	$7\frac{1}{2}$	3	- ,	No interference free channels are available
India (The informati	on will b	e provide	d later on)				More than 80% services suffer from interference
Burma	-	_	**	8	16	10	3	-	

GENEVE, 1959

Document No. DT 621-FES 27 octobre 1959

SOUS-GROUPE DE TRAVAIL 5B1 SUB-WORKING GROUP 5B1 SUBGRUPO DE TRABAJO 5B1

ORDRE DU JOUR

6ème séance - Sous-Groupe de travail 5Bl

Mercredi 28 octobre 1959 à 15 heures - Salle F

- 1. Rapport du Président du Groupe de la Region 1
- 2. Rapport du Président du Groupe de la Region 3
- 3. Examen du Document N.º 403
- 4. Divers

AGENDA

Sixth Meeting of Sub-Working Group 5Bl

Wednesday 28 October, 1959 at 15 hours - Room F

- 1. Report from Chairman Region 1 Working Party
- 2. Report from Chairman Region 3 Working Party
- 3. Consideration of Document No. 403
- 4. Any other business

ORDEN DEL DÍA

6. a sesión del Subgrupo de trabajo 5B1

Miércoles, 28 de octubre de 1959, a las 3 de la tarde - Sala F

- 1. Informe del Presidente del Subgrupo de la Región 1
- 2. Informe del Presidente del Subgrupo de la Región 3.
- 3. Examen del documento N.º 403.
- 4. Otros asuntos.

Le Président The Chairman El Presidente

S.A. Sathar

Document No DT 622-E 27 October, 1959

WORKING GROUP 4D

A G E N D A

Eleventh Meeting of Working Group 4D (Table of Frequency Allocations, 27.5-960 Mc/s)

Wednesday, 28 October, 1959 at 15.00 hours - Room B

(Note - Because the scheduled meeting of Working Group 4E at 1700 hours has been cancelled, Working Group 4D may, if necessary, continue its work until 18.30 hours.)

- 1. Reports from the Chairmen of the Sub-Working Groups of 4D. (It is hoped that some Reports will be available as Green Documents, e.g. 4D9-DT 597).
- 2. Further consideration of the allocations in the band 132-136 Mc/s and the question of the allocation of about 1 Mc/s for space in the bands 130-140 Mc/s.
- 3. Further consideration of the allocation of the bands 41-68 Mc/s in Region 1.
- 4. Other business.

C. W. Sowton

Chairman

ADMINISTRATIVE RADIO CONFERENCE GENEVA. 1959

Document No. DT 623-E CORRIGENDUM No. 1 29 October 1959

WORKING GROUP AD

CORRIGENDUM

REPORT

of Sub-Group ADA/Region 3 to Working Group AD

Kindly replace page 6 of Document No. DT 623 by the corrected page attached hereto.

W.H. Hatfield

Chairman, Sub-Working Group 4D4/Region 3

Annex: 1.

		Frequency band Mc/s	Allocation to services						
			World-wide		Regional				
		MC/S	world-wide	Region 1	Region 2	Region 3			
Table	MOD	88-100				a) Fixed b) Mobile c) Broad- casting			
Table	MOD	100-108				Broadcast- ing 67b) 67c) 69b) 74a) 80a)			

189 SUP 75)

190 SUP 76)

192 SUP 78)

194 SUP 30)

194a ADD 80a) In the Philippines, the frequency band 100-108 Mc/s is allocated additionally to the fixed and mobile services.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT. 623-E 27 October, 1959

WORKING GROUP 4D

REPORT

of Sub-Group 4D4/Region 3 to Working Group 4D

- 1. The terms of reference of Sub-Group 4D4/Region 3 prescribed the study of the Table of Frequency Allocations in the frequency band 68 108 Mc/s, for Region 3.
- 2. The Sub-Group held 6 meetings in which the Representatives of the following countries took part: Australia, China, India, Indonesia, Japan, Korea, Malaya (also representing North Borneo, Sarawak and Singapore), New Zealand, Pakistan, Philippines, and was assisted by Mr. M.S. Kari of the I.F.R.B. Secretariat.
- 3. It was noted that in Working Group 4D the following had been agreed upon:

Mc/s	World-wide allocation	Region 3
74.6 - 75.4		Aeronautical radionavigation (Marker beacons)
88 - 100	Broadcasting	

After careful consideration of the various requirements of the countries in <u>Region 3</u>, the Sub-Group <u>unanimously recommends</u> the alterations to the Table of Frequency Allocations and associated footnotes, as shown in the Annex attached.

W.H. Hatfield

Chairman, Sub-Working Group 4D4/Region 3

Annex: 1

ANNEX

		The care of the		Allocation -	to Services			
		Frequency Band Mc/s	World-wide					
				Region 1	Region 2	Region 3		
Table	MOD	29.7-88 (cont.)				68-70 a) Fixed b) Mobile c) Aero-		
						nautical radio- navi- gation		
		(cont.)				67a) 67b) 67c)		
181	SUP	67)						
181a	ADD	alterna vices, s	ralia the freq tively to the and the freque tively to the	fixed, mobi	le and broa -88 Mc/s is	dcasting ser-		
181b	ADD	are alle broadca	In China the frequency bands 68-70 Mc/s and 75.4-87 Mc/s are allocated alternatively to the fixed, mobile and broadcasting services, and the frequency band 100-108 Mc/s is allocated additionally to the fixed service.					
181c	A D D	addition	a the frequence nally to the key bands 76-87 tively to the	roadcasting 'Mc/s and l	servico, a 00-108 Mc/s	nd the are allocated		

Annex to Document No. DT 623-E Page 3

,		į.	Frequency band		Allocation	to services			
		1	îc/s	World-	Regio	nal			
				wide	Region 1	Region 2	Region 3		
Table	MOD	29.7-8 (cont.					70-74.6 a) Fixed b) Mobile 67 c) 69 a) 69 b)		
Table	MOD	(cont.)				74.6-75.4 Aeronautical radio- navigation (Marker beacons)		
183	SUP	69)							
183a	ADD	69a)	In India the frequency bands 70-72.8 Mc/s and 76-85 Mc/s are allocated additionally to the broadcasting service.						
183b	ADD	69ъ)	In Malaya, Morth Borneo, Sarawak and Singapore, the frequency band 72.8-74.6 Mc/s is allocated additionally to the aeronautical radionavigation service, and the frequency band 100-108 Mc/s is allocated additionally to the fixed and mobile services.						

			CALLES CONTROLS CONTROLS	Allocation t	o Services	
	Frequency band Mc/s	World-wide	Regional			
			Region l	Region 2	Region 3	
Table	MOD	29.7-88 (cont.)				75.4-78 a) Fixed b) Mobile 67b) 67c) 69a)
Table	MOD					78-80 a) Fixed b) Mobile c) Aeronauti- cal radio- navigation 67b) 67c)
		(cont.)				69a) 69c)
183c	ADD		an the frequen			Llocated

70)

SUP

184

					· · · · · · · · · · · · · · · · · · ·	
		Frequency band	Allocation to Services			
	I.I		Regional			
	Mc/	ric/s	s World-wide	Region 1	Region 2	Region 3
Table	MOD	29.7~88 (cont'd)				80~87 a) Fixed b) Mobile 67a) 67b) 67c) 69a) 69c) 74a)
Table	MOD					87-88 a) Fixed b) Mobile c) Broad- casting 67a) 74a)

188 SUP 74)

ADD 74a) In New Zealand the frequency band 84-88 Mc/s is allocated additionally to the radionavigation service, and the frequency band 100-108 Mc/s is allocated alternatively to the fixed and mobile services.

		Frequency		Allocation	n to Services		
	İ	Band Mc/s	1.	Regional			
			World-wide	Region 1	Region 2	Region 3	
Table	MOD	88-100	Broadcasting 72) 73) 74b) 77)				
Table	MOD	100-108				Broadcasting 67b) 67c) 69b) 74a) 80a)	

188b ADD 74b) In Region 3, the frequency band 88-100 Mc/s is allocated additionally to the fixed and mobile services.

189 SUP 75)

190 SUP 76)

192 SUP 78)

194a ADD 80a) In the Phillipines, the frequency band 100-108 Mc/s is allocated additionally to the fixed and mobile services.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

COMMITTEE 6

DRAFT RECOMMENDATION

Considering:

- a) that Article 2, Section 1, of the Radio Regulations classifies emissions for the purpose of their designation;
- b) that certain symbols are used for classes of emission which nevertheless are not precisely specified;
- c) that new classes of emissions may need to be specified in the future:
- d) that in the recording processes used by the I.F.R.B. and by certain administrations, in particular mechanical recording processes, a simple and precise method of designation is required, using the smallest practicable number of symbols for each designation to provide all the essential information;
- e) that it may be more useful for the information, now classified as supplementary characteristics, to be combined in a single series of symbols with the types of modulation of the main carrier;
- f) that the present method for designating emissions does not adequately provide for systems employing multiple modulation processes;
- g) that the increasing use of multi-channel telephone and telegraph systems makes it desirable to classify them in categories and to adopt, if possible, a uniform designation of channels in such systems.
- h) that pulse modulation is not intrinsically a basic modulation process but is a form of signal stimulus which gives rise to amplitude frequency or phase modulation or a combination of these modulations;
- i) that the I.F.R.B. sometimes receives from administrations, additional significant information of a supplementary nature e.g., carrier level and telegraph signal code information, which is not provided for in the present system of designation;
- j) that the present system of designation is not wholly logical, neither does it enable emissions to be specified precisely or completely.

Invites the C.C.I.R.

- 1. to consider, in conjunction with the I.F.R.B., all essential emissions and characteristics requiring classification;
- 2. to study, in conjunction with the I.F.R.B., various methods of designating and classifying emissions, and to develope a method which could be used over a long period of time and which would provide all the essential information;
- 3. to report their conclusions on these matters, and to make a recommendation in time for a decision to be taken at the next Administrative Radio Conference.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 624-E 27 October, 1959.

WORKING GROUP 6B

DRAFT RECOMMENDATION

Considering;

- a) that Article 2, Section 1, of the Radio Regulations classifies emissions for the purpose of their designation,
- b) that certain symbols are used for types of transmission which are nevertheless not precisely specified,
- c) that new types of transmission may need to be specified in the future,
- d) that in the recording processes used by the I.F.R.B. and by administrations, a simple and precise method of designation is required, using the smallest practicable number of symbols for each designation to provide all the essential information.
- e) that it may be more useful for the modulation information, now classified as supplementary characteristics, to be combined in a single series of symbols with the types of modulation of the main carrier,
- f) that the present method for designating emissions does not adequately provide for systems employing multiple modulation processes,
- g) that pulse modulation is not intrinsically a basic modulation process but is a form of signal stimulus which gives rise to amplitude frequency or phase modulation or a combination of these modulations,
- h) that the table of classification of emissions in Article 2 gives typical examples and is not a complete list,
- i) that the I.F.R.B. sometimes receives from administrations, additional significant information of a supplementary nature e.g., carrier level and telegraph signal code information, which is not provided for in the present system of designation,
- j) that the present system of designation is not wholly logical, neither does it enable emissions to be specified precisely or completely.

Requests to the C.C.I.R.

- 1. to consider, in conjunction with the I.F.R.B., all essential emissions and characteristics requiring classification,
- 2. to study, with the cooperation of the I.F.R.B., suitable alternative methods of designating and classifying emissions,
- 3. to report their conclusions on these matters, and to make a recommendation as to the most practical system for future use, in time for a decision to be taken at the next Administrative Radio Conference.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 625-FES 27 octobre 1959

SOUS-GROUPE DE TRAVAIL 4E3
SUB-WORKING GROUP 4E3
SUBGRUPO DE TRABAJO 4E3

ORDRE DU JOUR

Cinquième séance - Sous-Groupe de travail 4E3

Jeudi 29 octobre 1959, 11 heures - Salle E

- 1. Examen des propositions relatives à la bande 9 000 9 500 Mc/s (voir les Documents N° DT 123, Addendums N° 15, 16 et 17; N° DT 480; N° DT 498 et N° DT 598).
- 2. Projet de rapport du Sous-Groupe 4E3 au Groupe 4E.
- 3. Divers.

AGENDA

Fifth Meeting - Sub-Working Group 4E3

Thursday 29th October 1959, at 11 a. m., Room E

- 1. Examination of proposals for the frequency band 9 000 9 500 Mc/s. Relevant Documents are No. DT 123, Addenda Nos. 15, 16 and 17; No. DT 480, No. DT 498 and No. DT 598.
- 2. Draft report from Sub-Working Group 4E3 to Working Group 4E.
- 3. Other business.

ORDEN DEL DIA

5. a sesión - Subgrupo de trabajo 4E3

Jueves, 29 de octubre de 1959, a las 11 de la mañana - Sala E

- 1. Proposiciones relativas a la banda de frecuencias 9 000 9 500 Mc/s (Documentos Nº DT 123, Addenda Nº 15, 16 y 17; Nº DT 480; Nº DT 498 y Nº DT 598).
- 2. Proyento de informe del Subgrupo de trabajo 4E3 al Grupo de trabajo 4E.
- 3. Otros asuntos.

Le Président :

Chairman : E. W. Andersen

El Presidente:

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 626-E 27 October, 1959.

WORKING GROUP 7B6

REPORT

of 7B6B to 7B6

1. General information

Sub-Working Group 7B6B was set up by Working Group 7B6 on its meeting on 15 October, 1959, with the following terms of reference:

"The use of frequencies in the international maritime VHF Radiotelephone service"

The group held five meetings and delegates of the following countries participated:

Federal Republic of Germany France the Netherlands U.K. U.S.A.

Observers from two International Organisations (International Chamber of Shipping and International Radio Maritime Committee) also took part in the discussions.

The new Radio Regulations concerning these proposals would be included under Section IV of Article 34 and replace the existing \$830, 831, 832, 833 and 834. The frequency assignment table would be included under App. 12 bis. The sub-division of the new Section IV would be:

- A. Call, reply and safety
- B. Watch
- C. Traffic.

2. Proposals considered by the group

The group took account of the proposals listed in DT 472, pages 6, 7 and 8, with the following exceptions:

Federal Republic of Germany proposal 5113 Document No. 64

This is a proposal relating to procedures. It was not taken into account, but referred to Group 7B7.

U.S.A. proposal 4304 page 532.5

Already covered by the new text for 571 (2) and 571 (2 bis) as adopted by sub-committee 7B (Document 408).

U.S.A. proposal 4337 page 532.10

This proposal is also covered by \$ 571 (2).

The discussions held in Sub-Committee 7B were also taken into consideration especially those of the 12th meeting. (See Document No. 416 of 17 October, 1959).

Other proposals

Our group has considered also the U.S.A. proposals 4348 to 4352 which are relevant, although not included in Document No. DT 472.

The majority of the proposals submitted are based on the precise texts of the Hague agreement or on the principles adopted at that Conference.

3. Draft texts

The texts given in the Annex to this paper cover in general the substance of all the proposals considered by our group.

In the great majority of cases the draft texts reflect the unanimous agreement of the Group.

However in a few cases no unanimous agreement could be reached. The proposals concerned (marked with a bar in the margin) have been included in the Annex and they should be read in conjunction with the remarks B, C and I.

Romark A concerning text call, reply and safety frequency 156.80 Mc/s

It is recommended that Working Group 7B6 should compare this text with the wording which will be adopted for the relevant §§ concerning 500 kc/s and 2 182 kc/s.

Remark B concerning proposals about a two-frequency calling channel

Several European countries submitted proposals based on The Hague supplementary RR No. 25 (page 24), to introduce a two-frequency calling channel, namely channel 24.

The U.K., however, specified channel 28 and during the discussions it became clear that other European countries favoured channel 28 as a result of a recent agreement between several Administrations. The U.S.A. delegate opposed the provision of any international two-frequency calling channel.

Remark C concerning watch of ship stations

This paragraph could not be accepted by the U.S.A. delegate. The Observer of the C.I.R.M. expressed the opinion that the restriction "when within the service area of a coast station....etc." should be deleted.

Remark D - Channel designators

After careful consideration all the delegates present agreed that no special paragraph was necessary, as the channel designators are already indicated in the table.

Remark E concerning frequency modulation, etc.

Should this paragraph be moved to another place in the Regulations the U.S.A. delegate would like to add:

"for stations using telephony in the maritime mobile service on the frequencies set forth in the assignment table as indicated in Appendix 12 bis."

Remark F concerning technical characteristics (transmitters)

The group is of the opinion that there is no need for including in Section IV of Article 34 technical characteristics which appear elsewhere in the Radio Regulations, such as the frequency tolerance and the spurious tolerance.

Remark G concerning technical characteristics (receivers)

No technical characteristics of the receiver should be included in the Radio Regulations.

Remark H concerning 156.30 Mc/s during ice seasons

The group was of the opinion that this note on special priority for icebreakers, etc. need not be included in the international regulations, although it is mentioned in the Hague agreement.

Remark I concerning the use of a special single-frequency channel

The background of this proposal appears to be that in the U.S.A. it is visualised that a simple single-frequency equipment fitted on the bridge would improve Safety of Life at Sea. The other members did not support this concept.

The U.S.A. proposes that an appropriate frequency should be selected by the Radio Conference. The U.S.A. suggests that Channel 13 (156.65 Mc/s) be considered for this purpose.

H. T. Hylkema Chairman

Annex: 1

ANNEX

PROPOSED NEW REGULATIONS

	nger determinente Sammer und en negen genomen von der einem von der einem von der einem dere einem der einem der einem der einem der einem der einem der ein
The Hague, Annex 2 page 15 RR page 154	Section IV Frequency bands between 150.8 and 174 Mc/s
U.S.S.R. 2247 ter p. 550 U.K. 2247 bis p. 550 BEL etc. 2320 p. 565 U.S.A. 4592 p. 802.2	
RR 830 p. 154, Atlantic City	s 1. Call, reply and safety
The Hague Rec. No. 2 page 17 Austr. 2246 page 550 U.K. 2247 page 550 U.S.S.R. 2248 page 550 U.K. 2245 page 550 BEL etc. 2323 page 565 U.S.A. 4298 page 532.5 U.S.A. 4307 page 532.6 U.K. 2249 page 551 U.S.A. 4348 - 4352 page 532.12 See Remark A	1) The frequency 156.80 Mc/s is the frequency designated for world-wide use in the international maritime mobile VHF radiotelephone service for call, reply and safety purposes. It may also be used for messages preceded by the urgency and safety signal. and, if necessary for distress messages. It may also be used by coast stations to announce the transmission, on another frequency, of their traffic lists and important announcements of general interest.
RR 831, page 154, Atlantic City U.K. 2250 page 551 BEL etc. 2324 page 565 U.S.A. 4308 page 532.b The Hague supl. RR 23 page 24 U.K. 2252 page 551 U.S.S.R. 2391 page 558 U.S.A. 4356 page 532.12	2) All emissions in the bands 156.725 - 156.875 Mc/s capable of causing harmful interference to authorized maritime mobile service transmissions on 156.30 Mc/s are forbidden. \$\frac{3}{2}\$. Watch 1) Every coast station providing an international maritime mobile service of telephony in the band 150.8 - 174 Mc/s should, during its working hours in that band, maintain as far as possible, an efficient aural watch on the frequency 156.80 Mc/s

The Hague supl. RR 25 page 24 BEL etc. 2329 page 566 U.K. 2254 page 552 U.S.S.R. 2293 page 558 See Remark B	2) Coast stations open to public correspondence and using the two-frequency calling channel (157.40 and 162.00 Mc/s) should, as far as possible, maintain watch on the frequency 157.40 Mc/s during their working hours.
U.S.A. 4358 page 532.13 BEL etc. 2327 page 566	3) In addition to the watch prescribed by \$2, 1) and 2) coast stations open to the international service of public correspondence, must, during their hours of service, monitor their recciving frequency or frequencies which are indicated in the List of Coast Stations for receiving calls from mobile stations. With regard to the effective reception of calls from mobile stations, the method of monitoring shall be no less efficient than watch by an operator.
The Hague supl. RR 26 page 24 U.K. 2253 page 552 U.S.S.R. 2294 page 558 BEL etc. 2330 page 556	4) If the frequency 156.80 Mc/s is in use for distress, urgency or safety, coast stations in the Port Operations Service in that particular area shall during their working hours keep an additional watch on the first choice Port Operations channel 156.60 Mc/s or other Port Operations frequencies as indicated in heavy type in the List of Coast Stations.
EEL etc. 2328 page 566 U.S.S.R. 2292 page 558 U.K. 2252 page 551 See Remark C	5) Ships stations, during their working hours in the VHF maritime radiotelephone band, should where practicable, maintain watch on 156.80 Mc/s when within the service areas of coast stations that provide international maritime VHF radiotelephone service.
The Hague Rec. No. 5 page 18 U.S.S.R. 2264 page 254 BEL etc. 2332 page 567 U.S.A. 4332 page 532.9	s 3. Traffic 1) As far as may be practicable, coast stations open to the inter-national service of public correspondence shall, when using telephony, be capable of working with ship stations equipped either for duplex or semiduplex operation.

U.S.A.	4329	page 532.9	2) Coast stations, which use the frequency 156.80 Mc/s for calling must be able to use at least one other channel authorized by these Regulations for the maritime mobile service of telephony in the band 150.80 - 174 Mc/s
U.S.A. U.K. BEL etc.	4303 225 8 2333	6, \$1, page 7 page 532.5 page 553 page 567 page 802.3	3) In the very high frequency (VHF) band 150.8 - 174 Mc/s, frequencies shall be assigned to coast and ship stations, for such services as Administrations consider necessary in accordance with the assignment Table of Transmitting Frequencies for the international maritime mobile radio telephony within the bands 150.8 - 174 Mc/s as indicated in Appendix 12 bis
The Hague U.K. BEL etc. U.S.S.R. U.S.A.	2261233930214592	page 553 page 569	4) In assigning frequencies to their coast stations, Administrations should collaborate in cases where harmful interference might occur.
The Hague U.K. BEL etc. U.S.S.R. U.S.A.	2260233630214592	page 553 page 569	5) The method of working, that is, single-frequency or two-frequency, indicated for each channel should be adhered to for international services.
The Hague U.K. BEL etc. U.S.S.R.	226223463021		6) Communications on port operation channels in or near a port must be restricted to those related to the movement and the safety of ships and, in emergency, to the safety of persons.

The Hague Rec. No. 3, page 18 U.S.S.R 2263 page 554 EEL etc. 2334 page 567 See Remark D	7) Channels shall be designated by numbers commencing with No. 1 for 156.05 Mc/s, No. 2 for 156.10 Mc/s, and so on in steps of 50 kc/s as given in the Assignment Table in Appendix 12 bis.
The Hague art. 6, \$ 2, page 7 U.S.A. 4306 page 532.5	8) In assigning frequencies to authorized services other than maritime mobile, Administrations shall avoid the possibility of harmful interference to international maritime VHF services of telephony conducted on the VHF frequencies set forth in Appendix 12 bis.
RR 813 §15 page 154 A.C. The Hague page 15 §6 India 2255 page 552 U.K. 2256 page 552 Belg. etc.2321 page 565 U.S.A. 4309 page 532.b France 1707 page 420 MOR 4159 page 420 U.S.S.R. 2257 page 553 U.K. 2256 Doc. 29	§15 Technical characteristics 1) Only frequency modulation with a pre-emphasis of 6 db/octave shall be used.
The Hague page 15 \$1 France 1703 page 420 U.S.A. 4593 page 802.4 (\$ 2) MOR 4155 page 428.3	(2) The frequency deviation corresponding to 100% modulation shall approach 15 kc/s as nearly as practicable. In no event shall the frequency deviation exceed plus or minus 15 kc/s. (It is recognised that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference).

Annex to Document No. DT 626-E Page 8

The Hague U.S.A. U.K. France MOR	page 15 \$3 4310 page 532.b 2256 Doc.No. 29 1705 page 420 4157 page 428.3	(3) When transmitting on any of the frequencies designated in the assignment table in Appendix 12 bis, the emission of each ship station and of each coast station shall be polarised vertically at the source.
	page 16. §9 1710 page 421	(4) The audio frequency bandwidth shall be limited to 3 000 c/s
The Hague U.K. U.S.A. MOR France	page 15 s ₇ 2256 bis Doc. 29 4336 page 532.10 4160 page 428.4 1708 page 420	(5) The power of ship station transmitters should, as a general rule, not exceed 20 Watts and shall in no case exceed 50 Watts.
	1709 page 420 4161 page 428.4 4593 \$5page 802.4 1711 page 421 4163 page 428.4 e Remark F	Further technical characteristics of transmitter
U.S.A.	4156 page 428.3	Technical characteristics of receivers.

BEL etc. 2335 page 568 U.S.S.R. 3021 page 804 U.K. 3020 page 803 U.S.A. 4592 page 802.2

APPENDIX 12 BIS

TABLE OF TRANSMITTING FREQUENCIES FOR THE INTERNATIONAL MARITIME MOBILE RADIOTELEPHONE SERVICE IN THE BANDS 150.8 - 174 Mc/s

Channel	Transmit Frequencies Mc/s		Intership	Port Ope	Public Correspon-	
designators	Ship Stations	Coast Stations	111001 5111 P	Single- Frequency	Two- Frequency	dence
1	156.05*	160.65			10	8
2	156.10	160.70			8	10
3	156 . 15*	160.75			9	9
4	156.20	160.80			11.	7
5	156.25	160.85			6	12
6	156.30		<u>1</u>			
7	156.35	160.95			7	11
8	156.40		<u>2</u>			
9	156.45	156.45	<u>5</u> .	5		
10	156.50	·	<u>3</u>			
11	156.55	156.55		3 1		·
12	156.60	156.60		1		
13	156.65	156.65***	4	4		
14	156.70	156.70		2		
15		Guard band l	56 . 725 - 15	6.775 Mc/	s	
16	156.80	156.80	·		AND SAFE	ΓY
17		Guard band l	56 . 825 - 15	6.875 Mc/	s	
18	156.90	161.50			3	
19	156.95	161.55			4	
20	157.00	161.00			1	
21	157.05	156.05* or 161.65			5	
22	157.10	161.70			2	
23	157.15	156.15*				5
		or 161.75				
24	157.20	161.80				4
25	157.25	161.85				3
26	157.30	161.90				<u>3</u> <u>1</u>
27	157.35	161.95	<u> </u>			2
28	157,40	162.00**				6

^{*}See Note 6

^{**}See Note 5

^{***}See Note 7

NOTES WITH THE TABLE

The Hague Belg. etc. U.K. U.S.S.R. U.S.A.	Note 2 page 14 2337 page 569 3020 page 803 note a 3021 page 805 note 2 4592 page 802.3 note 2	Note 1. The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
The Hague Belg. etc. U.K. U.S.S.R. U.S.A.	Note 3 page 14 2338 page 569 3020 page 803 note C 3021 page 805 note 3 4592 page 802.3 note 3	Note 2. The figures in the columns headed "Port Operations" and "Public Correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However in some cases it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
The Hague Belg. etc. U.S.S.R. U.S.A. See Reman	Note 6 page 14 2341 page 570 3021 page 805 note 6 4592 page 802.3 note 7	Note 3. During ice seasons, ship stations shall avoid harmful interference to communications between ice-breakers and assisted ships on the frequency 156.30 Mc/s (Channel 6).
The Hague Belg. etc. U.K. U.S.S.R. U.S.A.	Note 7 page 14 2342 page 570 3020 page 804 note C 3021 page 805 note 7 4592 page 802.3 note 8	Note 4. Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures underlined in the Assignment Table can obtain a reasonably adequate use of available services.
The Hague Belg. etc. U.K. U.S.S.R. See Remark	2343 page 570 3020 page 804 note d 3021 page 805 note 8	Note 5. When an Administration finds it necessary to introduce a two-frequency calling channel for public correspondence the channel marked ** shall be used for this purpose. This channel shall also be used for selective calling if this method of calling is introduced for public correspondence.

Annex to Document No. DT.626-E Page 11

The Hague Belg. etc. U.K. U.S.S.R. Belg. etc. U.K. U.S.S.R.	2344 3020 3021 2345	page 804 note e page 805 note 9 page 571 page 804 note f	Note 6. The frequencies 156.05 and 156.15 Mc/s marked *) are used as ship frequencies in channels 1 and 3 respectively and as coast station frequencies in channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
U.S.A. See:	4592 Remark		Note 7. The use of this frequency is limited to ship-ship and ship-shore navigational communication exclusively.

Document N° DT 627-FES. 27 octobre 1959

GENEVE, 1959

GROUPE DE TRAVAIL 7B6 WORKING GROUP 7B6 GRUPO DE TRABAJO 7B6

ORDRE DU JOUR

Troisième séance - Groupe de travail 786

(Emploi des fréquences dans le service mobile maritime radiotéléphonique)

Mercredi 28 octobre 1959, à 9 heures - Salle K

- 1. Examen du projet de document de travail, s'il est publié, du Sous-Groupe de travail 786-A (bande des 2 Mc/s)
- 2. Examen du projet de document de travail, s'il est publié, du Sous-Groupe de travail 786-8 (bande des 156 Mc/s)
- 3. Examen du projet de document de travail, s'il est publié, du Sous-Groupe de travail 786-C (bandes comprises entre 4 et 23 Mc/s).

A G E N D A

Third Meeting of Working Group 7B6

(Use of Radio Frequencies in the Maritime Mobile Radiotelephone Service)
Wednesday, 28 October 1959, at 0900 - Room K

- 1. Review of draft working document, if available, from sub-Working Group 7B6-A (2 Megacycle Range)
- 2. Review of draft working document, if available, from sub-Working Group 786-8 (156 Megacycle Range)
- 3. Review of draft working document, if available, from sub-Working Group 7B6-C (4-23 Megacycles Range)

ORDEN DEL DIA

3.ª sesión del Grupo de trabajo 786

(Utilización de las frecuencias radioeléctricas en el servicio radiotelefónico móvil maritimo)

Microoles: 28 de octubre de 1959, a las 9 de la nafana - Sala K

- 1. Proyecto de documento de trabajo (si se ha publicado) del Subgrupo 7B6-A (Gama de 2 Mc/s)
- 2. Proyecto de documento de trabajo (si se ha publicado) del Subgrupo 7B6-B (Gana de 156 Mc/s)
- 3. Proyecto de documento de trabajo (si se ha publicado) del Subgrupo 7B6-C (Gama de 4 23 Mc/s)

Le Président : The Chairman : El Presidente :

T.A. Chandler

F = 6/6/54E = 6/20/I8

S = 6/53/40

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

Document No. DT 628-E 27 October, 1959

SUB-COMMITTEE 7A

FURTHER REPORT

Working Group 7A2

The Working Group report of 19 October referred to the drafting of a recommendation to the next Conference in respect to the nomenclature to be employed in describing the various operator certificates. A draft recommendation is appended hereto.

M. S. Orr Convener

Annex: 1 - Recommendation relating to Nomenclature of Operator Certificates.

RECOMMENDATION RELATING TO NOMENCLATURE OF OPERATOR CERTIFICATES

The Administrative Radio Conference of Geneva (1959),

considering,

- that Article 24 of the Radio Regulations provides that Operator Certificates for ship and aircraft stations be divided into two general categories, i.e., radiotelegraph and radiotelephone;
- 2. that with the introduction of new modes of telecommunication, including the use of automatic communications devices, it becomes increasingly difficult to categorize such modes as either radiotelegraph or radiotelephone;
- 3. that all such devices, as well as radiotelephone stations, may be operated by holders of radiotelegraph operator certificates; and many automatic communication devices may be operated by holders of radiotelephone certificates;

recommends that,

Administrations consider this problem and submit to the next Administrative Radio Conference proposals for the amendment of Article 24 to recognize, particularly in the nomenclature of Operator Certificates, the use of such new communication techniques.

GENEVA, 1959

COMMITTEE 7 SUB-COMMITTEE 7B

PROPOSAL FROM THE SWEDISH DELEGATION FOR AMENDMENT TO THE DRAFT RECOMMENDATION CONTAINED IN DOCUMENT NO. DT 527

In accordance with the decision reached at the meeting of the Sub-Committee 7B held on 27 October, 1959, the Swedish Delegation herewith has the honour to submit the following proposed amendment to paragraphs No. 3, 4 and 5 of the Draft Recommendation to the Intergovernmental Maritime Consultative Organization, International Civil Aviation Organization and to the Administrations, which recommendation is contained in Document No. DT 527, page 2:

3. that Administrations should study the code and inform the Secretary-General of the I.T.U. as soon as possible of the result of their study, stating whether or not they agree to introduce the code in its present form on an experimental basis.

4. that those Administrations which introduce the code should pass their suggestions for improving the effectiveness of the code to the Secretary-General of the I.T.U.

5. that the Secretary-General of the I.T.U. should circulate to all Administrations a copy of the code amended as a result of the above studies and suggestions. Administrations should then make proposals to the next Administrative Radio Conference for the inclusion of the code in the Radio Regulations.

SUB-COMMITTEE 7B

AGENDA

Eighteenth Meeting of Sub-Committee 7B

(Radiotelegraph and Radiotelephone Procedure in the Mobile Service)

Thursday, 29 October, 1959 at 9 a.m. - Room D

- 1. Approval of Summary Record of Fifteenth Meeting (Document No. 460)
- 2. Approval of Summary Record of Fourteenth Meeting (If available)
- 3. Approval of texts in Annex to Summary Record of Fourteenth Meeting (If available)
- 4. Draft Recommendation contained in Document No. DT 527 and Swedish amendment.
- 5. E.A.R.C. Agreement:
 - 5a) No. 294 (for information)
 - 5b) Recommendation No. 6
- 6. Final Acts of the Baltic and North Sea Radiotelephone Conference (Gothenburg, 1955):
 - 6a) Resolution No. 3
 - 6b) Resolution No. 4 Proposal No. 25 (page 35)
 - 6c) Resolution No. 5 Proposal No. 26 (page 36)
 - 6d) Recommendation No. 1
 - 6e) Recommendation No. 5
 - 6f) Recommendation No. 6
 - 6g) Recommendation No. 7
 - 6h) Recommendation No. 8
 - 6i) Recommendation No. 9
 - 6j) Recommendation No. 10
 - 6k) Supplementary Regulations 1 25 inclusive Proposal No. 19 (page 33)

- 7. Final Acts of the International Maritime VHF Radiotelephone Conference (The Hague, 1957):
 - 7a) Annex 1
 - 7b) Annex 2
 - 7c) Recommendation No. 1
 - 7d) Recommendation No. 2
 - 7e) Recommendation No. 3
 - 7f) Recommendation No. 4
 - 7g) Recommendation No. 5
 - 7h) Recommendation No. 6
 - 7i) Supplementary Regulations No. 1 26 inclusive
- 8. Draft Recommendation on Single Sideband (Document No. 48) and Proposals Nos. 4111 (page 413.2) and 4148 (page 428.2) second part.
- 9. Any other business.

R. M. Billington Chairman

WORKING GROUP 5B

REPORT

By Sub-Working Group 5B2 to Working Group 5B

- Sub-Working Group 5B2 was established by Working Group 5B on Tuesday, 8 September, 1959. Its terms of reference were generally to consider the aeronautical mobile plan, between 2 850 kc/s and 27 500 kc/s "with an eye to their implementation and any necessary re-adjustments" (see Annex to Document No. DT 98 E).
- 2. This plan, generally referred to as the I.A.A.R.C. Plan, is contained in Annexes 8 and 9 to the 1951 E.A.R.C. Agreement. In relation to the plan itself, several factors or groups of factors had to be considered before the Sub-Working Group could reach its conclusions; among these factors are the following:
 - A: The use or disposition to be made of a number of provisions of the E.A.R.C. Agreement applying to the said plan.
 - B. A number of proposals had been made to this Conference by various I.T.U. Administrations with reference to the I.A.A.R.C. Plan.
 - C. Some additional proposals were submitted by certain delegations during the Conference.
 - D. Pages IV.8 and IV.9 of the I.F.R.B. Report contain certain questions and suggestions also related to the implementation and administration of this Plan.
 - E. In addition to the above, there were a number of problems within the terms of reference of other units of the Conference concerning which the views of Sub-Working Group 5B2 were sought by or were believed by this Sub-Working Group to be useful to these other units of the Conference.
- On the basis of the above, Sub-Working Group 5B2 organized its work into a program which is contained in Annex 1 to this Report.
- 4. With regard to its basic terms of reference, as reflected in the first paragraph above, 5B2 recommends that the "I.A.A.R.C. Plan" be included in the Radio Regulations in the form of an Appendix, the proposed text of which is contained in Annex 2 to this Report.

- 5. The following are statements of the actions taken with respect to the different items of the program of work of Sub-Working Group, as set forth in Annex 1 hereto.
- 6. Item 1 Proposal 29ter (U.S.S.R.): Extension of Certain Major World Air Route Areas

This proposal was first studied by an Ad Hoc Group and a special fact finding body. A study of the conclusions of these two groups led Sub-Working Group 5B2 to the conclusion that proposal 29ter could not be accepted in its original form. The Sub-Working Group therefore decided to undertake studies designed to find a solution to the problems raised in proposal 29ter. These studies are still continuing and at this writing there appear to be good prospects of an agreement among the interested administrations. Sub-Working Group 5B2 intends to submit a supplementary report on this topic in the near future.

7. Item 2 - Proposals Nos. 3659 (U.S.A.) and 5088 (G)

The delegations of the two administrations having filed these proposals combined them into a common proposal which, after consideration by Sub-Working Group 5B2, was adopted in the form of a text to be inserted at the appropriate point in the Radio Regulations (probably in Article 9).

- 8. This text is contained in Annex 3 to this Report, and Sub-Working Group 5B2 recommends its adoption by Working Group 5B to govern the new Appendix 16 bis referred to in paragraph 4 above.
- 9. Item 3 Appendix 16 bis

Proposals 5079 (G) 5080 (G) 4596 (U.S.A.)

These proposals were combined by the interested delegations into a single proposal which ultimately became the text of the Appendix referred to in paragraph 4 above.

10. Item 4 - Public Correspondence

Proposals 1059 (F) 1060 (G)

Proposal 1059 was withdrawn, thus leaving only proposal 1060, which was adopted by Sub-Working Group 5B2. This proposal is intended to govern the conditions under which public correspondence shall be exchanged in the aeronautical mobile bands. The text adopted by 5B2 is contained in Annex 4 to this Report.

11. Use of the Frequency 5 680 kc/s Proposal 4629 (CAN)

This proposal was amended by the Delegation of Canada, and its intent is carried out in Annex 2 to this Report, (paragraph 3, Part I, Section II).

12. I.A.A.R.C. Recommendation No. 13 Proposal 4600 (U.S.A.)

This recommendation deals with methods to be employed to obtain a more efficient use of the frequencies in the exclusive HF aeronautical mobile bands. Sub-Working Group 5B2 recommends its adoption by Working-Group 5B in the form given in Annex 5 to this Report.

13. C.C.I.R. Recommendation on SSB Proposal 5081 (G)

After discussion of this proposal, Sub-Working Group 5B2 reached the following conclusions:

- a) This recommendation is addressed principally to the maritime service and contains only incidental references to the aeronautical service.
- b) The Sub-Working Group needs take no action thereon.
- c) However, if a study of this recommendation is undertaken by Sub-Working Group 5B3 or some other unit of the Conference, Sub-Working Group 5B2 would be interested in participating in such work.
- 14. The gist of the above information was conveyed to the Chairman of Working Group 5B by the Chairman of Sub-Working Group 5B2 in a communication dated 29 September, 1959.
- Because of the highly specialized nature of the HF aeronautical mobile R and OR Plan, special I.F.R.B. procedures have been needed in the past and will continue to be required in the future for the notification, examination and recording of frequency assignments in the bands involved.
- These procedures will be contained in an article of the Radio Regulations which is now under study by Working Group 5A. It was thought by Sub-Working Group 5B2 that its views in the matter might be helpful to Working Group 5A. Accordingly, the Sub-Working Group studied the problem and adopted on the subject the draft text contained in Annex 6 to this Report.
- 17. Copies of this text were made available informally to the Chairman of Working Group 5A for advance information.

- 18. The Sub-Working Group requested me to point out that should the proposed Appendix 16 bis and other relevant texts be incorporated into the Regulations, Annexes 8 and 9, and other relevant provisions of the E.A.R.C. should cease to have effect as between the parties to the new Regulations. It was assumed by Sub-Working Group 5B2 that the same general situation will exist for other parts of the E.A.R.C. Agreement and that this Conference will study the problem and determine the manner in which the various provisions of this Agreement will be affected legally by the coming into force of new Radio Regulations.
- 19. Sub-Working Group 5B2 now wishes to place on record an expression of its sincere thanks for the valuable advice and assistance received at every step of its proceedings from Mr. John Gracie, member of the I.F.R.B. Thanks to Mr. Gracie's help, it is certain that the course followed by the Sub-Working Group has been wiser and its assignment more thoroughly covered.
- 20. Finally, Sub-Working Group 5B2 is also happy to express its sincere appreciation to the I.F.R.B. for making available to it the services of Mrs. Betty Arnold. Mrs. Arnold has, from the outset, performed the functions of an assistant to the Chairman and by discharging daily a number of technical and professional duties, has relieved the Chairman of a substantial burden of work.

Arthur L. Lebel Chairman

Annexes: 6

PROGRAMME OF WORK FOR AERONAUTICAL GROUP 5B2

(Note: The entries shown under each item refer to a) the Administration making the proposal, b) the number of the proposal in the "yellow books" and c) the page or document in which the proposal is to be found.)

	-					-
Item	No.	1.	Amendment	of	MWARA	
			URS		29 ter	Page 40 Rev. 1
11	No.	2.	Amendment	to	Article 9	
			G USA		5078 3659	Document No. 46 Page 257 Rev. 1
1)	No.	3.	Λ ppendix 1	L6bi	s	•
			G G USA		5079 5080 4596	Document No. 47 Document No. 47 Page 816.3 and Document No. 142
51	No.	4.	Public cor	rres	spondence	
			F		1059 1060	Page 256 Rev. 1 Page 256.1
69	No.	5.	Change of	foc	otnote apply	ing to the use of 5680 kc/s
			CAN		4629	Page 193 Rev. 1
11	No.	6.	IAARC Reco	omm e	endation No.	13

USA

4600

Page 825.1

Annex 1 to Document No. DT 631-E Page 6

- Item No. 7. Action on E.A.R.C. provisions
- " No. 8. C.C.I.R. Recommendations on SSB for the Aeronautical Service and G 5081 Document No. 48
- No. 9. Other Aeronautical Matters referred to the Group, either by Committee 5B or by other components of the Conference.
- " No.10. Questions suggested by the I.F.R.B. for consideration Document No. 20, Section IV, pages IV.8 and IV.9.

A. Lebel Chairman

V N N E X S

APPENDIX 16 bis

Frequency Allotment Plan for the Aeronautical Mobile Service and Related Information

(See Article 9)

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		A. Description of the Major World Air Route Area (M.W.A.R.A.) Boundaries	
		B. Description of the Regional and Domestic Air Route Area (R.D.A.R.A.)	-
Section	II.	Allotment of Frequencies to the Aeronautical Mobile (R) Service	
		A. Frequency Allotment Plan (per M.W.A.R.A.'s, R.D.A.R.A.'s and sub-R.D.A.R.A.'s)	
		B. Frequency Allotment Plan (per Numerical Order of Frequencies)	

PART III

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	Allotment of Frequencies for the	
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Section I	. Available Frequency Bands and Channels	
Section I	I. Adaptation of Technical Principles	
Section I	II. Preparation of the Allotment Plan for the Aeronautical Mobile (OR) Service Bands	•
	PART IV	
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1. Abbr	eviations	
2. (OR)	Frequency Plan	
Α,	Exclusive Bands	
В.	Shared Bands (Frequencies Allotted)	
	Region 1. 3,155-3,200, 3,200-3,230 and 3,800-3,900 kc/s	
	Region 2. 2,505-2,850, 3,155-3,200 and 3,200-3,230 kc/s	•
	Region 3. 3,155-3,200, 3,200-3,230 and 3,900-3,930 kc/s	
С.	Shared Bands (Frequencies not Allotted)	
	Major World Air Route Area Map) Regional and Domestic Air Route Area Map) Pocket Transparencies used with above Maps)	

PART I

GENERAL PROVISIONS

Section I. Definitions

1. Frequency Allotment Plan.

A plan which shows the frequencies to be used in particular areas or by particular countries, without specifying the stations to which the frequencies are to be assigned.

2. The terms to express the different methods of frequency distribution as used in this Appendix have the following meanings:

Distribution to:	French	English	Spanish
Services	Allocation (allouer)	Allocation (to allocate)	Distribución (distribuir)
Areas, Regions	Attribution (attribuer)	Allotment (to allot)	Distribución (distribuir)
Stations	Assignation (assigner)	Assignment (to assign)	Asignación (asignar)

- 3. A Major World Air Route is considered to be a long-distance route, made up of one or more segments, essentially international in character, extending through more than one country and requiring long-distance communications facilities.
- 4. <u>A Major World Air Route Area</u> (M.W.A.R.A.) is an area embracing a certain number of Major World Air Routes, which generally follow the same traffic pattern and are so related geographically that the same frequency families may logically be applied.
- 5. Regional and Domestic Air Routes are all those using the Aeronautical Mobile (R) Service not covered by the definition of Major World Air Routes in paragraph 4 above.
- 6. A Regional and Domestic Air Route Area (R.D.A.R.A.) is one embracing a certain number of the air routes defined in the foregoing paragraph.
- 7. Family of Frequencies in the Aeronautical Mobile Service.

A group of frequencies selected from different aeronautical mobile bands in such a way as to permit communication, at any time and over any

distance, between aircraft in flight and appropriate aeronautical stations.

Section II. Technical and Operational Principles used for the Establishment of the Plan of Allotment of Frequencies in the Aeronautical Mobile (R) and (OR) Services

A. Determination of Channel Width

1. Frequency Separation.

The frequency separations adopted are adequate to permit high capacity means of communication, as indicated in the following table:

Band	Separation	Band	Separation
2,850-3,155 kc/s 3,400-3,500 kc/s 3,900-3,950 kc/s 4,650-4,750 kc/s 5,450-5,480 kc/s 5,480-5,730 kc/s 6,525-6,765 kc/s	7 kc/s 7 kc/s 7 kc/s 7 kc/s 7 kc/s 7.5 kc/s 7.5 kc/s 7.5 kc/s	8,815- 9,040 kc/s 10,005-10,100 kc/s 11,175-11,400 kc/s 13,200-13,360 kc/s 15,010-15,100 kc/s 17,900-18,030 kc/s	8.5 kc/s 9 kc/s 9.5 kc/s 10 kc/s 10 kc/s 10 kc/s

- 1) It is assumed that A3 modulation frequencies will be limited to 3,000 cycles and that the sideband radiation of A1 emissions will not exceed that of A3 emissions.
- 2) The use of channels as derived from the above table, for the various classes of emissions (Al, A2, A3, A4 and F1), will be subject to special arrangements by the administrations concerned in order to avoid the interference which may result from the simultaneous use of the same channel for several classes of emission, no inherent priority being given to any particular class of emission.
- 3) It is recognized that two or more Al channels can be derived from each of the channels provided under this frequency separation plan.
- 4) The grouping of adjacent channels derived from the above table to permit the satisfaction of particular requirements, will be subject to special arrangements by the administrations concerned.
- 5) The arrangements contemplated in 2), 3) and 4) above should be made under the provisions of Article 41 (Special Arrangements) of the International Telecommunication Convention and Article 4 of the Radio Regulations.

2. Frequencies to be alloted. ,

The following is a list of the frequencies to be alloted in the exclusive aeronautical mobile bands, on the basis of the frequency separation provided for under paragraph 1 above :

Band:

```
3,900-3,950 kc/s.
                                                                 4,650-4,750 kc/s
2,850-3,155 kc/s
                       3,400-3,500 kc/s
                                                                 4,654.5
2,854
                       3,404.5
                                            3,904
                                            3,911
                                                                 3,661.5
2,861
                       3,411.5
2,868
                       3,418.5
                                            3,918
                                                                 4,668.5
2,875
                                                       (OR)
                                                                 4,675.5
                                                                            (R)
                       3,425.5
                                            3,925
2,882
                                                                            (7)
                                                       (7)
                                                                 4,682.5
                       3,432.5
                                            3,932
2,889
                                                                 4,689.5
                       3,439.5
                                            3,939
2,896
                       3,446.5
                                   (R)
                                                                 4,696.5
                                            3,946
2,903
                                   (14)
                       3,453.5
                                                                 4,703.5
2,910
                       3,460.5
                                                                 4,710.5
2,917
                       3,467.5
                                                                            (OR)
                                                                 4,717.5
2,924
                       3,474.5
                                                                            (7)
                                                                 4,724.5
           (R)
2,931
                       3,481.5
                                                                 4,731.5
2,938
                       3,488.5
          (24)
                                                                 4,738.5
2,945
                       3,495.5
                                                                 4,745.5
2,952
2,959
2,966
2,973
2,980
2,987
2,994
3,001
3,008
3,015
          (R) & (OR)
3,023.5
3,032
3,039
3,046
3,053
3,060
3,067
3,074
3,081
3,088,
           (OR)
3,095
           (18)
3,102
3,109
3,116
3,123
3,130
3,137
3,144
3,151
```

Band:

```
10,005-10,100
5,450-5,480
                5,480-5,730
                                 6,525-6,765
                                                  8,815-9,040
                                                                        kc/s
    kc/s
                     kc/s
                                      kc/s
                                                       kc/s
                5,484
                                 6,529.5)
5,454
       ) (R)
                                                                   10,012
                                                  8,820
                5,491.5)
                                                  8,828.5)
5,461.5)
                                 6,537
                                                                   10,021
                5,499
                                 6,544.5)
                                                                   10,030
5,469
                                                  8,837
                5,506.5
5,476.5)
                                 6,552
                                                  8,845.5)
                                                                   10,039
                                                                                (R)
                5,514
                                                                   10,048
                                 6,559.5
                                                  8,854
                                                                                (10)
                5,521.5
                                 6,567
                                                  8,862.5
                                                                   10,057
                5,529
                                 6,574.5
                                                  8,871
                                                                   10,066
                5,536.5
                                                                   10,075
                                 6,582
                                                  8,879.5
                5,544
                                 6,589.5)
                                                                   10,084
                                                  888,8
                                                             (\mathbb{R})
                5,551.5)
                                 6,597
                                            (R)
                                                  8,896.5)
                                                            (18)
                                                                   10,093
                5,559
                                 6,604.5)
                                           (21)
                                                  8,905
                5,566.5)
                                 6,612
                                                  8,913.5
                                 6,619.5)
                5,574
                            (R)
                                                  8,922
                5,581.5)
                           (26)
                                 6,627
                                                  8,930.5
                5,589
                                 6,634.5
                                                  8,939
                5,596.5
                                 6,642
                                                  8,947.5
                5,604
                                                  8,956
                                 6,649.5)
                5,611.5
                                              */**8,961.5)
                                 6,657
                 5,619
                                 6,664.5
                5,626.5
                                 6,672
                                                  8,967
                5,634
                                 6,679.5)
                                                  8,975.5
                5,641.5
                                                  8,984
                                *6,685
                                                              (OR)
                5,649
                                                  8,992.5
                                *6,687.5
                                                              (9)
                5,656.5)
                                                  9,001
                                 6,693
                5,664
                                                  9,009.5)
                                 6,700.5)
                5,671.5)
                                                  9,018
                                 6,708
                           (R)
                                                  9,026.5
                                 6,715.5)
                                            (OR)
                 5,680
                                                  9,035
                           රිට
                                            (12)
                                 6,723
                          (OR)
                                 6,730.5)
                5,688
                                 6,738
                5,695.5)
                                 6,745.5)
                5,703
                           (OR)
                                 6,753
                           (6)
                5,710.5)
                                 6,760.5)
                5,718
                5,725.5)
```

^{*} Available for Al emission only.

^{**} It is necessary that only equipment having a high degree of stability be used on this channel.

Band:

```
13 200-13 360
                                     15 010-15 100
                                                        17 900-18 030
11 175-11 400
      kc/s
                        kc/s
                                           kc/s
                                                             kc/s
                                                        17 906.5
11 180.5
                   13 205.5
                                     15 016
                   13 215.5
                                     15 026
                                                        17 916.5
11 190
                   13 225.5
                                                        17 926.5
11 199.5
                                (OR) 15 036
                   13 235.5
                                (6)
                                     15 046
                                                        17 936.5
                                                                     (R)
11 209
                                                   (OR) 17 946.5
                   13 245.5
                                     15 056
11 218.5
                                                   (10) 17 956.5
11 228
              (OR) 13 255.5
                                     15 066
 11 237.5
              (11)
                                     15 076
                                                        17 966.5
                                     15 086
                   13 264.5
 11 247
 11 256.5
                   13 274.5
                                    *15 092.5
                                                       *17 975
                   13 284.5
                                    *15 096.5)
                                                        17 983.5
11 266
                                                        17 993.5
                                                                     (OR)
*11 273
                   13 294.5
                   13 304.5
                                (R)
                                                        18 003.5
                                                                     (6)
                   13 314.5
                                (10)
                                                        18 013.5
11 280.5
                   13 324.5
                                                        18 023.5
11 290
                   13 334.5
11 299.5
11 309
                   13 344.5
11 318.5
                   13 354.5
 11 328
 11 337.5
 11 347
              (13)
 11 356.5
11 366
 11 375.5
 11 385
 11 394.5
```

3. Channels Common to (R) and (OR) Services.

The channels common to the (R) and (OR) services, centered at 3 023.5 and 5 680 kc/s, are authorized for use world-wide as shown in Part II of this Annex.

Notwithstanding those provisions of the Allotment Plan set forth in Part II hereof, the frequency 5 680 kc/s may also be used at aeronautical stations for communication with aircraft stations when other frequencies of the aeronautical stations are either unavailable or unknown. However, this use shall be restricted to such areas and conditions that harmful interference cannot be caused to other authorized aeronautical uses.

^{*} Available for Al emission only.

4. The International Civil Aviation Organization (I.C.A.O.) coordinates aeronautical (R) communications with air operations for a large part of the world and this organization should be consulted in appropriate cases.

5. Adaptation of Allotment Procedure

It is recognized that all the sharing possibilities have not been exhausted in the allotment plans contained in this Annex. Therefore, in order to satisfy particular operational requirements which are not otherwise met by these allotment plans, Administrations may assign frequencies from the HF aeronautical mobile bands in areas other than those to which they are allotted in the said plans. However, the use of the frequencies so assigned must not decrease the protection to the same frequencies in the areas where they are allotted by the plans below that prescribed in Part I, Section II and Part III, Section II, para. 4(4) of this Annex for the (R) and (OR) Services respectively.

- 6. When necessary to satisfy the needs of international air operations Administrations may adapt the allotment procedure for the assignment of aeronautical mobile (R) frequencies, which assignments shall then be the subject of prior agreement between Administrations affected.
- 7. Resort to the coordination described in paragraph 4 shall be made where appropriate and desirable for the efficient utilization of the frequencies in question.

B. Interference Range Contours

1. Definition of Contours.

The transparencies inserted in the pocket at the end of this Appendix show contours which indicate the minimum acceptable distance separating two ground stations of 1.0 kW radiated power (unmodulated) for the frequencies stated and for producing a protection ratio of 15 db of desired signal to interfering signal on the same frequency at an aircraft operating at the limit of the service range of the desired ground transmitter.

The service range is not included in the contour.

2. Type of Map Used.

These transparencies can be used only on a Mercators projection world map of the scales given on each transparency, and will not be suitable for use on any other scale of Mercators projection or any other projection. The world maps accompanying this Appendix, depicting R.D.A.R.A. and M.W.A.R.A. boundaries are to the colrect scale and the transparencies carrying the interference range contours can be directly used on these maps.

3. Change of Scale or Projection.

Should any other Mercator scale be desired, then, by using the coordinates given in the tables shown below, new interference range contours can be drawn to fit the new scales.

It must be remembered that when the new transparencies are constructed, the intersection of the vertical line of symmetry, i.e., the meridian of longitude and the horizontal line of latitude should be at 00° latitude for the 00° contour, 20°N for the 20° contour, 40°N for the 40° contour, etc.

The coordinates shown in the above-mentioned tables are given with reference to the 180° meridian taken as the axis of symmetry for the construction of the contours.

4. Sharing Conditions Between Areas.

The transparencies were constructed on the basis of sharing conditions agreed at the International Administrative Aeronautical Radio Conference (I.A.A.R.C.) of 1948-1949, namely:

M.W.A.R.A. to M.W.A.R.A. :

Bands: 3-6.6 Mc/s -- night
9-11.3 Mc/s -- day
13-18 Mc/s -- time separation

Note: 6.6 Mc/s and 5.6 Mc/s conditions considered the same.

M.W.A.R.A. to R.D.A.R.A.: Bands: 3 - 5.6 Mc/s -- night

6.6-11.3 Mc/s -- day

13 -18 Mc/s -- time separation

R.D.A.R.A. to R.D.A.R.A.: Bands: 3 - 4.7 Mc/s -- night

5.6-11.3 Mc/s -- day

13 -18 Mc/s -- time separation

The additional contours for day included for 3, 3.5 and 4.7 Mc/s are for determining daylight sharing possibilities.

The material in "Minimum and Maximum Range Charts for Use as a Guide to the Allotment of Frequencies" Annex 1 to Vol. 1 of the Report of the First Session of the I.A.A.R.C. (Geneva, 1948) was used in the preparation of the allotment plan.

5. Method of Use.

Take the M.W.A.R.A. or the R.D.A.R.A. maps accompanying this Annex and select the transparency for the frequency order and sharing conditions under consideration.

Place the centre of the transparency (i.e., the intersection of the axis of symmetry and the latitude line) over the boundary of the area or at the location of the transmitter. Note the latitude of this point and select the contour corresponding to this latitude. A transmitter located at any point outside the contour will result as defined in paragraph l above, in a protection ratio of better than 15 db. Any transmitter located at a point inside the contour will result in a protection ratio of less than 15 db.

For the Northern Hemisphere, the contours should be used in their natural position as published, but for the Southern Hemisphere, the transparency should be inverted. This point should be carefully observed when following the boundaries of the areas which involve the transition of the equator.

6. Data for tracing interference contours.

Editorial note: The material for this paragraph is that given in pages 21 to 24 of the I.A.A.R.C. Final Agreement.

7. Power (unless otherwise indicated in Parts II and IV)

Al emissions:

Ground station

Aircraft

1.0 kilowatt radiated (peak),

50 watts radiated (peak).

A3 emissions:

Ground station

4.0 kilowatts radiated (peak), 100%

modulated.

Aircraft

200 watts radiated (peak), 100%

modulated

Editorial Note

This Part of Appendix 16 bis is a reproduction of Annex 8, Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951), with but minor editorial changes to adapt verious titles to the composition of an appendix.

For the above reason, and to avoid bulk, this Part of the Appendix is not reproduced here.

In addition the following amendment is also required. In Annex 8, Volume VII of the Final Acts of E.A.R.C., Article 2, page 22 under General Notes (1), Power, replace the present text as follows:

"Power (unless otherwise indicated):

Al emissions:

Ground station

1.0 kilowatt radiated (peak),

Aircraft

50 watts radiated (peak).

A3 emissions:

Ground station

4.0 kilowatts radiated (peak), 100% modu-

lated.

Aircraft

200 watts radiated (peak),100% modulated.

PART III

TECHNICAL AND OPERATIONAL PRINCIPLES FOR THE ALLOTMENT OF FREQUENCIES FOR THE AERONAUTICAL MOBILE (OR) SERVICE.

Section I. Available Frequency Bands and Channels.

1. Bands.

- 1. The frequency bands available to the (OR) service fall into three distinct categories, i.e.,
 - a) bands allocated exclusively to the aeronautical mobile (OR) service,
 - b) bands which specifically provide for the aeronautical mobile (OR) service, but which are shared with other services, and
 - c) bands for the general mobile services, from which the aeronautical mobile (OR) service is not specifically excluded.

2. Assignable Frequencies.

1) Exclusive Bands.

The frequencies for the bands allocated exclusively to the aeronautical mobile (OR) service are indicated in Part I.

2) Shared Bands.

The channels proposed for allotment to the (OR) service in the shared bands have the same separation as those in the exclusive bands. No specific frequencies were recorded, however, for these shared band channels. The numbers of (OR) allotments proposed in the shared bands were assessed primarily on the basis of the size of the bands and the number of services sharing them.

3. Selection of Frequenciés ...

1) Exclusive Bands.

All requirements including those common to more than one region were, to the limit of the spectrum space available, accommodated in the bands allocated exclusively to the (OR) service on a worldwide basis. Excess requirements in respect of Region 1 were met, as far as possible, from the band 3,900 to 3,950 kc/s allocated exclusively to the (OR) service in that region.

2) Shared Bands.

The balance of the requirements was accommodated to the maximum extent in the bands mentioned in No.1b) and 1c) of Section I in that order of preference.

Section II Adaptation of Technical Principles.

1. Division of Channels..

In order to utilize the bands more efficiently, it is considered that one A3 channel is capable of satisfying requirements for either one A3, or two or more A1, A3A, or other complex types of transmission. Where a channel is subdivided the partial channels are not to be used by different administrations. In employing the additional channels so derived due care must be exercised to avoid harmful interference to the users of adjacent channels.

2. Modification of Class of Emission.

In view of the necessity on the one hand to avoid harmful interference, and on the other hand, to use the spectrum space to its full capacity changes from one type of emission to another are permissible in those cases where no additional band space is thereby occupied.

3. Allotment of Adjacent (OR) Channels.

Where a country so desired, the allotments to that country were assembled into contiguous channels where geographical considerations permit and where otherwise practicable.

4. Protection Ratios and Sharing.

- 1) In areas where it was found necessarz to secure a greater repetition of assignments, the same frequency has been allotted to more than one requirement of an administration even though this maz result in a reduction of protection ratio between the emissions of the stations concerned.
- 2) In certain areas where peaks of requirements occur, protection ratios may be lowered by agreement between the countries concerned.
- 3) Certain assignments have been repeated where there is a strong probability of interference between stations of different administrations. This was done in the belief that the working time of any one of the stations so treated would be intermittent.

In these cases each station has an equal right to use the frequency, and no one station or group of stations is given priority.

- 4) A number of frequencies were assigned on a "secondary" basis. In such cases, a station having the use of a frequency as a "primary" assignment is protected from any other station using the same frequency as a "secondary" assignment by the following provisions:
 - a station using a frequency on a secondary basis must be inferior in power to the station operating on a primary basis,
 - such a station must be distant from the station operating on a primary basis by not less than half of the repetition distance required for a protection ratio of 20 db.

Section III. Preparation of the Allotment Plan for the Aeronautical Mobile (OR) Service Bands.

1. Allotment Procedure.

- 1) Requirements of a country to have all or some of the same frequencies for its overseas territories as for the home country were satisfied on condition that maximum economy in the allotment of frequencies was achieved, and that the full possibilities of geographical duplication were taken into account. However, the requirements for overseas territories were considered on exactly the same terms as those of other countries in the same area without giving any priority to the countries requiring the same frequencies in their home and overseas territories.
- 2) Because of problems peculiar to the areas concerned the following arrangements were made:
 - a) European Area of Region 1.

In the European Area of Region 1 the allotment of frequencies in the bands:

was made by effecting a preliminary distribution of all the frequencies of each band (with the exception of one or two so-called reserve frequencies) in each of two parts of the area separated by the western frontiers of Poland, Czechoslovakia, Roumania and Yugoslavia. In this distribution of frequencies the possibilities of repetition of

assignments were taken into account.

Before adopting the final distribution of these frequencies it was verified that the allotments made to the countries bordering the line of partition were acceptable from the point of view of interference. The application of the reserve frequencies permitted complete latitude for carrying out are-allotment of the unacceptable frequencies.

For the band 6,685 to 6,765 kc/s and 8,965 to 9,040 kc/s, this procedure was inapplicable by reason of the excessive interference ranges wich cover practically all of Europe.

b) SouthermArea of Region 2 (South America)
The following channels are set aside to meet the (OR) service requirements of Ecuador, Paraguay, Peru and Venezuela:

3 , 067	4,703.5	5 , 688
3,081	4,710.5	5,695.5
3,095	4,731.5	
3,116	4,745.5	
3 , 130	·	
3,137		

Moreover, the frequencz of 3,151 kc/s is available for use in South America by tourist aircraft for air to ground communication.

c) Central Area of Region 2 (Central America and Caribbean Countries)

The channels 3,032, 3,046, 3,053, 3,074,3,130 and 3,151 kc/s are set aside to meet the (OR) service requirements of Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti and Panama.

2. Frequency Allotment Plan.

On the basis of all the foregoing data the (OR) bands allotment plan contained in Part IV below was prepared.

3. Channels Common to (R) and (OR) Services.

The channels common to the (R) and (OR) services, centered at 3,023.5 and 5,630 kc/s are authorized for use world-wide as laid down in No.3 of Section II of Part I.

4. Limitation of Power.

The interested administrations should agree on a reduction in aeronautical station radiated power at night to the extent necessary to make possible night time use of these frequencies.

PART IV

Editorial Note

This Part of Appendix 16 bis is a reproduction of Annex 9, Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951), with but minor editorial changes to adapt various titles to the composition of an appendix.

For the above reason and in order to avoid bulk this Part of Appendix is not reproduced here.

In addition the following amendment is also required. In Annex 9, Volume VII of the Final Acts of the I.A.A.R.C., on page 32 add a new paragraph as follows:

TEXT TO BE INSERTED IN ARTICLE 9 TO GOVERN APPENDIX 16 BIS

At the beginning of Section II of Article 9, add the following new paragraph:

§ 3 bis. Frequencies in the bands allocated to the Aeronautical Mobile Service between 2 850 and 18 030 kc/s (see Article 5) shall be assigned in conformity with the provisions of Appendix 16 bis and the other pertinent provisions of these Regulations.

PUBLIC CORRESPONDENCE

Article 9, Section II, § 4, in the fourth line, read:

" ... adopted by a conference of the Union to which all interested Members and Associate Members are invited".

RESOLUTION No.

The Administrative Radio Conference at Geneva (1959),

considering:

- 1. that the Flan developed for the use of HF channels for the Aeronautical Mobile (R) Service has been substantially implemented;
- 2. that air operations are subject to continuous changes;
- 3. that these changes will require attention by the Administrations concerned, but
- 4. that, in seeking to satisfy new communication requirements, no decision should be taken that will prevent or handicap the coordinated utilization of those HF (R) band allotments as prescribed in the Plan adopted at this Conference;
- 5. that the families of high frequencies allotted to the Major World Air Route Areas, Regional and Domestic Air Route Areas and sub-Areas have been chosen considering propagation conditions which will allow for the selection of the most suitable frequencies for the distance involved;
- 6. that it is essential to distribute the communication load as uniformly as possible over the frequencies of the same order;
- 7. that specific steps should be taken to ensure that the correct order of frequency is used;

resolves:

that administrations, individually or in collaboration, take the necessary steps:

- a) to make as great a use as possible of VHF in order to lessen the load on the HF (R) bands;
- b) to make as great a use as possible of antennas of appropriate directivity and efficiency in order to minimize possibilities of mutual interference within an area or between areas;

Annex 5 to Document No. DT 631-E Page 26

- c) to coordinate the use of families of frequencies necessary for a given route segment in accordance with the technical principles adopted by the Conference and in the light of the latest propagation data available in order that the most appropriate frequencies be used with an aircraft at a given distance from the aeronautical station providing service over the route segment concerned:
- d) to improve operating techniques and procedures and to use the best equipment possible in order to attain the highest possible efficiency in handling airground HF communications:
- e) to collect precise data on the operation of their HF communication systems and having a bearing on the technical and operating standards adopted by the Conference so as to facilitate such re-examination of this Plan as may be undertaken in the future;
- f) to establish, through regional agreements, the best method to provide the required communications for any new long-distance international or regional air operation which is not or cannot be accommodated within the system of M.W.A.R.A. and R.D.A.R.A. adopted by the Conference, in such a manner as not to cause any interference to the utilization of frequencies as prescribed in the (R) Frequency Plan adopted by this Conference.

ANNEX 6

I.F.R.B. PROCEDURE FOR HANDLING ASSIGNMENTS MADE PURSUANT TO APPENDIX 16 bis

Working Group 5B2 has agreed the necessity for incorporating the Aeromobile (R) and (OR) Plans in the I.T.U. Radio Regulations. In this way the Plans will be preserved for the future use and regulation of Aeronautical communications and until such time as they may be recast in the light of future technical advances.

Working Group 5B2 wishes to draw the attention of Committee 5A to certain unique features of these Allotment Plans which distinguish them from Plans adopted for other services elsewhere in the spectrum. Most important of these features is that of flexibility which enables unforseen operational requirements to be met without departing from the basic concepts on which the Plans are based. This quality of flexibility is of great importance to the aeronautical services, which the Plans were designed to serve, and is one of the features which Working Group 5B2 has been most anxious to see preserved.

However, whilst the conclusions of the Working Group in deciding to incorporate the Plans as part of the Radio Regulations form a notable step in the interests of aviation, nevertheless it is of equal importance that the Radio Regulations should also include instructions to the I.F.R.B. as to the way in which changes of frequency usage made in accordance with these Plans should be dealt with.

Working Group 5B2 fully recognizes that the task of preparing an agreed Procedure for the notification and Registration of Frequencies is proper to Committee 5A, but nevertheless feels that the Working Group set up to deal with the Aeromobile Plans would be neglecting its duty were it not to indicate what, in its opinion as a specialist body, is the manner in which the interests of aviation may best be served in this respect.

To this end the attached paper has been prepared and is submitted for consideration by Committee 5A. This paper describes a procedure for the treatment of Notices in accordance with the Plans which will enable Administrations to avail themselves of the flexibility features and at the same time will ensure the regulation and continuity of the Aeromobile HF Communications service.

Working Group 5B2 invites Committee 5A to adopt the procedures set forth in the attached Annex.

I.F.R.B. PROCEDURE FOR DEALING WITH NOTICES OF ASSIGNMENTS IN THE AERONAUTICAL MOBILE SERVICE IN THE FREQUENCY BANDS BETWEEN 2 850 AND 18 030 kc/s ALLOCATED EXCLUSIVELY TO THE AERONAUTICAL MOBILE SERVICE

ARTICLE 11

I.F.R.B. PROCEDURES

MASTER INTERNATIONAL FREQUENCY REGISTER

100	The Board shall enter in the Master Register, as initial data, the following categories of assignments reflected by listings in the Master Radio Frequency Record on the effective date of this Article:				
101	a) Each listing for an aeronautical station assignment in a band allocated to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kc/s.				
102		date of 3 December, 1951 shall be entered in Column 2a ided:			
103	i)	the frequency corresponds to one of the frequencies specified in Column 1 of the allotment plan for the Aeronautical Mobile (R) Service (Ref. to Appendix 16bis); or the frequency is the result of a permissive change from one type of emission to another in accordance with the provisions of Part I, Section II A, paras 1 (2) and 1 (3) of Appendix 16 bis;			
104	ii)	the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of the same plan;			
105	iii)	the limitations of use set forth in Column 3 of the plan have been appropriately observed; and,			
106	iv)	the class of station, type of emission, power and hours of use are in accord with those provided for in the General Notes which constitute the heading for the plan.			
107	prov	date of 3 December, 1951 shall be entered in Column 2b, ided that all of the foregoing conditions are met except that			

the area of use is not within the boundaries of Air Route Areas set forth in the plan, and the protection specified in Part I, Section II, paragraph 5 (see Document No. DT 224 revised) of

Appendix 16 bis is afforded to other allotments in the plan.

- 3. In all other cases, the date of first receipt of the notice by the Board shall be entered in Column 2B.
- 4. The date notified to the Board of bringing the assignment into use shall be entered in Column 2c.
- b) Each listing for an aeronautical station assignment in a band allocated to the Aeronautical Mobile (OR) Service between 3,025 and 18,030 kc/s.

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- 1. The date of 3 December, 1951 shall be entered in Column 2a provided the assignment is in conformity with the primary allotments in the (OR) allotment plan and the conditions specified therein.
- 2. The date of 3 December, 1951 shall be entered in Column 2b provided the assignment is in conformity with the conditions specified in the (OR) allotment plan but the allotment is in the plan on a secondary basis or the assignment satisfies the requirement for a "secondary assignment" as specified in Part III, Section II, paragraph 4, sub-paragraph 4) of Appendix 16 bis.
- 3. In all other cases, the date of first receipt of the notice by the Board shall be entered in Column 2b.
- 4. The date notified to the Board of bringing the assignment into use shall be entered in Column 2c.

* *

PROCEDURE FOR THE EXAMINATION OF NOTICES

Provisions Relating to Notices in the Bands between 2,850 and 18,030 kc/s allocated to the Aeronautical

Mobile Service

1. The Board shall examine each complete notice of a frequency assignment to a station in the bands between 2,850 and 18,030 kc/s allocated to the Aeronautical Mobile (R) and (OR) Service with respect to its conformity with the Table of Frequency Allocations, the rules for the allocation of frequencies, and other provisions of these Regulations, except those relating to the probability of harmful interference.

- 116 2. In the case of a notice of an assignment to a station in a frequency band between 2 850 and 17 970 kc/s allocated to the Aeronautical Mobile (R) Service, the Board shall also examine the notice to determine whether:
- a) the frequency corresponds to one of the frequencies specified in Column l of the allotment plan for the Aeronautical Mobile (R) Service, as contained in Appendix 16 bis, Part II, Section II B, of these Regulations; or the frequency is the result of a permissive change from one type of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Part I, Section II A, para. 1 of Appendix 16 bis;
- 118 b) the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of that plan;
- the limitations of use set forth in Column 3 of the plan have been appropriately observed;
- d) the class of station, type of emission, power, and hours of use are in accordance with the General Notes which constitute the heading for the plan.
- In the case of a notice which is in conformity with Nos. 117, 119 and 120 but is not in conformity with No. 118, the Board shall assume that the frequency will be used in accordance with the "sharing conditions between areas" specified in Part I, Section II B, para. 4 of Appendix 16 bis.
- 3. In the case of a notice of an assignment to a station in a frequency band between 3 025 and 18 030 kc/s allocated to the Aeronautical Mobile (OR) Service, the Board shall also examine the notice to determine whether:
- a) the assignment is in conformity with the primary allotments in the allotment plan for the Aeronautical Mobile (OR) Service and the conditions specified in Appendix 16 bis, Parts III and IV, of these Regulations;
- b) the assignment is in conformity with or satisfies the requirements for secondary allotments in the allotment plan for the Aeronautical Mobile (OR) Service and the conditions specified in Part III, Section II, paragraph 4, sub-paragraph 4) and Part IV of Appendix 16 bis;
- 124 bis b) bis In applying the provisions of Part III, Section II, paragraph 4, sub-paragraph 4) of Appendix 16 bis the Board shall assume that the frequency will be used on a day-time basis;

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c) the assignment is the result of a permissive change from one type of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Appendix 16 bis, Part III. Section II. paragraphs 1 and 2.

••

RECORDING CHANGES IN FREQUENCY USAGE

Procedure in the Bands between 2,850 and 18,030 kc/s allocated to the Aeronautical Mobile Service

- Depending upon the findings of the Board subsequent to the examinations prescribed in Nos. 115 to 125 above, further action shall be as follows:
- a) For notices of assignments in the bands between 2,850, and 18,030 kc/s allocated to the Aeronautical Mobile (R) and (OR) Service, if the finding is unfavourable with respect to No. 115 above, the Board shall return the notice immediately by airmail to the notifying country with the Board's reasons for the finding and with such suggestions as the Board may be able to offer for the satisfactory solution of the problem.
- b) If the notifying country re-submits the notice within sixty days with modifications which, after re-examination, results in a favourable finding by the Board, the assignment shall be recorded in the Master Register with the date of receipt by the Board of the modified notice being shown in Column 2a or 2b, as appropriate.
- c) Should the notifying country, however, insist upon reconsideration of the original notice unchanged, and should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register, the date of receipt of the first notice by the Board being shown in Column 2b and an indication of the finding of the Board in the Remarks Column.
- d) For the bands between 2,850 and 17,970 kc/s allocated to the Aeronautical Mobile (R) Service:
- 13. 1. if the finding is favourable with respect to Nos. 115 to 120 above, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2a;
- 2. if the finding is favourable with respect to Nos. 115, 117, 119 and 120 and is unfavourable with respect to No. 118, but the protection specified in Part I, Section II,

paragraph 5 (Document No. DT 224) of Appendix 16 bis is afforded to other allotments in the plan, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2b;

3. all other assignments shall be entered by the Board in the Master Register with the date of first receipt of the notice by the Board in Column 2b,

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- e) For the bands between 3,025 and 18,030 kc/s allocated exclusively to the Aeronautical Mobile (OR) Service:
 - 1. if the finding is favourable with respect to Nos. 115, 123 and 125, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2a;
 - 2. if the finding is favourable with respect to Nos. 115, 124 and 125, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2b;
 - 3. if the assignment is the result of a permissive change from one type of emission to another without additional band space being thereby occupied (See Appendix 16 bis, Part III, Section II, paragraph 1) and meets all the conditions for a primary or secondary allotment except that the frequency does not correspond numerically with one of the frequencies specified in the (OR) allotment plan, the Board shall enter the date of 3 December, 1951 in Column 2a or 2b of the Master Register as would otherwise be appropriate;
 - 4. all other assignments shall be entered by the Board in the Master Register with the date of first receipt of the notice by the Board in Column 2b.
- f) The date notified to the Board of bringing an assignment into use shall be entered in Column 2c in each case of an entry in the Master Register.

* *

GENERAL PROVISIONS RELATING TO THE AERONAUTICAL MOBILE SERVICE IN THE BANDS BETWEEN 2,850 AND 18,030 kc/s

The examination by the Board pursuant to Nos. 115 to 120 of notices of assignments to stations in bands between 2,850 and 17,090 kc/s allocated to the Aeronautical Mobile (R) Service shall be restricted to

their conformity with Part II of Appendix 16 bis; the technical criteria employed by the Board in its examination of these notices shall be those set forth in Part I of Appendix 16 bis.

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The examination by the Board pursuant to Nos. 122 to 125 of notices of assignments to stations in bands between 3,025 and 18,030 kc/s allocated to the Aeronautical Mobile (CR) Service shall be restricted to a determination of their conformity with Parts III and IV of Appendix 16 bis.

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The provisions of this Article relating to review of findings (Section VI) amendments or cancellations of frequency recordings (Section VII), and studies and recommendations (Section VIII) shall not be applicable to the listings in the Master Register relating to aeronautical stations operating in the above-named bands.

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ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 5A

CHAPTER IV

NOTIFICATION AND REGISTRATION OF FREQUENCIES INTERNATIONAL FREQUENCY REGISTRATION BOARD

Article 10.

General Provisions

284	MOD	§ 1.	The constitution and the essential duties of the
		Internati	ional Frequency Registration Board are defined in
		the Conve	ention.
285	SUP		
286	SUP		
287	NOC	§ 2.	The functions of the Board shall include:
288	MOD	_. a)	the processing of frequency assignment notices received from Administrations for recording in the Master International Frequency Register;
28 8 a	ADD	aa)	the processing and coordination of seasonal schedules of high frequency broadcasting with a view to accommodating requirements of all administrations for that service.
289	MOD	b)	the compilation, for publication in suitable form and at appropriate intervals by the Secretary General, of frequency lists reflecting the data recorded in the Master International Frequency Register, as well as other material relating to the assignment and use of frequencies;

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

284

MOD

g 1.

WORKING GROUP 5A

The constitution and the essential duties of the

CHAPTER IV

NOTIFICATION AND REGISTRATION OF FREQUENCIES INTERNATIONAL FREQUENCY REGISTRATION BOARD

Article 10

General Provisions

		Internation the Conver	onal Frequency Registration Board are defined in
285	SUP		
286	SUP		
287	NOC	§ 2.	The functions of the Board shall include:
288	MOD ,	a)	the processing of frequency assignment notices received from Administrations for recording in the Master International Frequency Register;
289	MOD	ъ)	the compilation, for publication in suitable form and at appropriate intervals by the Secretary General, of frequency lists reflecting the data recorded in the Master International Frequency Register, as well as other material relating to the assignment and use of frequencies;

291	МОМ	c)	the review of entries in the Master International Frequency Register with a view to amending or eliminating, as appropriate, those which do not reflect actual frequency usage, in agreement with the Administrations which notified the assignments concerned;
291a	ʿADD	d)	the study, on a long term basis, of the usage of the radio spectrum, particularly the portion concerning high frequencies, with a view to making recommendations for its more effective use;
29 2	MOD	e)	the investigation, at the request of one or more of the interested Administrations, of harmful interference and the formulation of recommendations with respect thereto;
293	MOD	f)	the provision of assistance to Administrations in the field of radio spectrum utilization, in particular to those Administrations in need of special assistance, and the recommendation to Administrations, where appropriate, of adjustments in their frequency assignments in order to obtain a better use of the radio spectrum;
	MOD	fa)	the collection of such results of monitoring observations as Administrations and organizations may be able to supply and the making of arrangements, through the Secretary-General, for their publication in suitable form;

294	NOC	g)	the formulation and reference to C.C.I.R. of all general technical questions arising from the Board's examination of frequency assignments;
294a	ADD	ga)	the technical planning for radio conferences with a view to reducing their duration; and
295	MOD	h)	the participation in an advisory capacity, upon invitation by the organizations or countries concerned, in conferences and meetings where questions relating to the assignment and utilization of frequencies are discussed.
295a	ADD	§ 2a.	The working arrangements of the Board are set
		forth in t	he remaining articles of this Chapter.
296	SUP		
297	SUP		
298	SUP		
299	SUP		
300	SUP		
301	SUP		
302	SU P		
303	SUP		
304	SUP		
305	SUP		
306	SU P		
307	SUP		
308	MOD	§ 5.	The Board shall have the assistance of an
		adequate s	pecialized secretariat of the requisite
		qualificat	ions and experience, who shall work under the
		immediate	direction of the Board to enable it to discharge

its prescribed duties and functions.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 632-E 28 October, 1959

WORKING GROUP 5A

ARTICLE 10

General Provisions

284 285 286	SUP SUP SUP	Frequency	The essential duties of the International Registration Board are defined in the Convention.
287	MOD*	§ 2.	The functions of the International Frequency
		Registrat	ion Board shall include:
288	· MOD	a)	the processing of frequency assignment notices received from Administrations, for recording in the Master International Frequency Register;
289	MOD	b)	the compilation, for publication in suitable form and at appropriate intervals by the Secretary General, of frequency lists reflecting the data recorded in the Master International Frequency Register, as well as other material relating to the assignment and use of frequencies;
290	(MOD)	c)	the collection of such results of monitoring observations as administrations and organizations may be able to supply and the making of arrangements, through the Secretary-General, for their publication in suitable form;

^{*} This drafting amendment relates to English text only.

291	MOD	a)	the review of entries in the Master International Frequency Register with a view to amending or eliminating, as appropriate, those which do not reflect actual frequency usage, in agreement with the Administrations which notified the assignments concerned;
292	(MOD)	e)	the investigation, at the request of one or more of the interested Administrations, particularly those in need of special assistance, of harmful interference and the formulation of recommendations with respect thereto;
293	MOD	f)	the prosecution of studies of frequency utilization, and the recommendation to administrations, where appropriate, of adjustments in their frequency assignments in order to obtain a better utilization of the frequency spectrum;
294	NOC	g)	the formulation and reference to C.C.I.R. of all general technical questions arising from the Board's examination of frequency assignments; and
295	MOD	h)	the participation in an advisory capacity, upon invitation by the organization of countries concerned, in conferences and meetings where questions relating to the assignment and utilization of frequencies are discussed.
29 5 a	ADD	\$ 2a. the Conve	The constitution of the Board is prescribed in ention; its working arrangements are set forth emaining articles of this chapter.
296 297 298 299	SUP SUP SUP SUP		

300 SUP 301 SUP 302 SUP 303 SUP 304 SUP 305 SUP 306 SUP 307 SUP 308 MOD

§ 5. The Board shall have the assistance of an adequate specialized secretariat of the requisite qualifications and experience, who shall work under immediate direction of the Board to enable it to discharge its prescribed duties and functions.

WORKING GROUP 5A

ARTICLE 12

Internal Regulations of the International Frequency Registration Board

- 362 MOD* § 1. The Board shall meet as frequently as necessary to deal expeditiously with its work and, normally, at least once a week.
- MOD § 2.(1) The members of the Board shall elect from among their number a Chairman and a Vice-Chairman, each to hold office for a term of one year or until their successors are duly elected.

 Thereafter, the Vice-Chairman shall succeed annually to the Chairmanship and a new Vice-Chairman shall be elected.
- 364 NOC (2) In the unavoidable absence of the Chairman and Vice-Chairman, the Board shall elect a temporary Chairman for the occasion from among its members.
- 365 MOD § 3 (1) Each member of the Board, including the Chairman, shall have one vote. Voting by proxy or by correspondence is not allowed.
- 366 MOD (2) The minutes shall indicate whether a finding was unanimous or by a majority.
- 367 MOD (3) The Board shall endeavour to reach its decisions by unanimous agreement. If the Board fails in that endeavour, it shall thereafter decide the problem on the basis of a two-thirds majority vote of the members present and voting for or against.

^{*}This drafting amendment relates to Spanish text only.

Document No. DT 633-E Page 2

368 NOC

(4) A quorum of the Board shall be one-half of the number of members of the Board. If, however, the verdict of such a quorum on a question coming before it is not unanimous, the question shall be referred for decision at a later meeting at which at least two-thirds of the total number of members of the Board are present. If these calculations result in a fraction, the fraction shall be rounded up to a whole number.

369 SUP

(Transferred to Article 11, following number 322)

370 MOD

§ 5. The documents of the Board. which shall include a complete record of its official actions and minutes of its meetings, shall be maintained by the Board in the working languages of the Union as defined in the Convention; for this purpose, as well as for the meetings of the Board, the necessary linguistic personnel, and such other facilities as may be required, shall be provided by the Secretary General. A copy of all documents of the Board shall be available for public inspection.

371 SUP

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

Document No. DT 634-E 28 October, 1959

WORKING GROUP 5A

APPENDIX 1

- A. Basic characteristics to be furnished for notification under number 314 of the Regulations
- B. Basic characteristics to be furnished for notification under number 315 of the Regulations
- C. Form of Notice
- D. General Instructions for using the Notice.

A. BASIC CHARACTERISTICS TO BE FURNISHED FOR NOTIFICATION UNDER NUMBER 314 OF THE REGULATIONS

- 1. Assigned frequency
- 2c. Date of putting into use
- 3. Call Sign (Identification)
 (Not required for stations referred to in number
- 4a. Name of transmitting station
- 4b. Country in which the station is located
- 4c. Longitude and latitude of the transmitter site
- 5. Class of station and nature of Service
- 6a. Locality(ies) or Area(s) with which communication(s) is(are) established

(Not required for Land, Radionavigation Land, Standard Frequencystations)

- 6b. Length of circuit (km)

 (Required only for Land, Radionavigation Land, Standard Frequency..... stations)
- 7. Class of emission and bandwidth necessarily occupied Land description of transmission 7
- 8. Power (in kW)
- 9. Azimuth of maximum radiation of transmitting antenna
- 10. Maximum hours of operation of the circuit to each locality or area (G.M.T.)
- 11. Megacycle order of the other frequencies normally utilized for the same circuit.

(Required only for Fixed Stations within the range 4 000 kc/s to 30 000 kc/s c and for Broadcasting stations within the range 5 950 kc/s to 26 100 kc/s)

BASIC CHARACTERISTICS TO BE FURNISHED FOR NOTIFICATION UNDER NUMBER 315 OF THE REGULATIONS

- 1. Assigned Frequency
- 2c. Date of putting into use
- 4a. The letter "R"
- 4b. Country in which the receiving (land) station is located
- 4c. Longitude and Latitude of the site of the receiving (land) station
- 5. Class of mobile stations and nature of service
- 6a. Name of the receiving (land) station
- 6b. Maximum distance in kms between mobile stations and the receiving (land) station
- 7. Class of emission of mobile stations and bandwidth necessarily occupied
- 8. Highest power used by the mobile stations
- 10. Maximum hours of operation of the mobile stations

C. FORM OF NOTICE

For use when notifying to the International Frequency Registration Board, in accordance with Article 11, a frequency assignment or a change to an assignment recorded in the Master International Frequency Register.

(see following page)

FORM OF NOTICE

FOR USE WHEN NOTIFYING TO THE INTERNATIONAL FREQUENCY REGISTRATION BOARD A FREQUENCY ASSIGNMENT

OR A CHANGE TO AN ASSIGNMENT RECORDED IN THE MASTER INTERNATIONAL FREQUENCY REGISTER (See Article 11)

(a) Notifying Administration Notice No. ______ Assigned frequency kc/s (b) New (c) Change of (d) Deletion of characteristics an assignment assignment of a recorded assignment For I.F.R.B. use 3 _____ Call sign (Identification) 2c _____ Date of putting into use Name of transmitting station 5 Class of station and nature of service 4c Longitude and latitude of the transmitter site Country Locality(ies) or area(s) Length of Class of emission and Power 9 Transmitting antenna Maximum hours Megacycle order of Supplementary Information with which communication circuit bandwidth_necessarily (kW) characteristics of operation the other frequencies is established occupied and descrip-(kms) of circuit to normally utilized for tion of transmission/ Azimuth of Antenna same circuit Angular each locality meximum width or area (GMT) gain radiation of in radiation db main 1obe 6a 6h 7 8 9a 9**b** 9c 10 11 Regional or service agreement: ______COORD/_____ Operating Administration or Company 12a Name and postal address of /central-_ izing office/ 12b Other information: Telegraphic address (Article 14)

D. GENERAL INSTRUCTIONS

- 1. A separate notice shall be sent to the I.F.R.B. for notifying:
 - Each new frequency assignment,
 - Any change in the characteristics of a frequency assignment recorded in the Master International Frequency Register,
 - Any total or partial deletion of a frequency assignment recorded in the Master International Frequency Register.
- 2. Frequencies prescribed by the Radio Regulations for common use, such as 500 kc/s, 2 182 kc/s, should not be notified. (See No. 316).
- 3. Separate entries, in Columns 6 to 10, should be made for the various basic characteristics when they do not apply to the assignment as a whole, for instance when the class of emission or the power differs according to the localities or areas of reception.

GENERAL NOTES

- (a) The name of the notifying Administration should be indicated.
- (b) Indicate in this box by the letter "X" when the notice reflects:
 - the first use of a frequency by a station,

or

- the use of an additional frequency by a station.
- (c) Indicate in this box by the letter "X" when the notice reflects a change in the characteristics of a frequency assignment recorded in the Master International Frequency Register.
 - (1) In the case where existing particulars are changed, the new characteristics in the appropriate place should be underlined; the original characteristics which have been changed should be shown in brackets undermeath.
 - (2) In the case where the change is an addition to existing particulars, the additional characteristics should be shown in the appropriate place and should be underlined.
 - (3) In the case where the change is a cancellation of a particular characteristic or characteristics, this should be shown in the appropriate place by a dash and, underneath, the characteristics which have been cancelled should be shown in brackets.

- (d) Indicate in this box by the letter "X" when the notice reflects a deletion of an assignment, in all of its notified characteristics.
- (e) The serial number of the notice and the date the notice is sent to the Board shall be shown here.

NOTES CONCERVING INFORMATION TO BE ENTERED IN THE NOTICE PERTAINING TO SPECIFIC COLUMNS OF THE MASTER INTERNATIONAL FREQUENCY REGISTER

Column 1 - Assigned Frequency

- Indicate the assigned frequency as defined in Article 1, in kc/s up to 30 000 kc/s inclusive, and in Mc/s above 30 Mc/s.
- 2. This information is a basic characteristic.

Column 2c - Date of putting into use.

- 1. In the case of a new assignment, insert the date (actual or foreseen, as appropriate) of putting the frequency assignment into use.
- 2. Whenever the assignment is changed in any of its basic characteristics as defined in this Appendix under Columns 1 to 11 except in the case of a change in Column 3, 4a or 11 of the Master International Frequency Register, then the date to be indicated shall be that of the latest change (actual or foreseen, as appropriate).
- 3. This information is a basic characteristic.

Column 3 - Call Sign (Identification)

- 1. Indicate the Call Sign or other identification used in accordance with Article 19.
- 2. This information is a basic characteristic, except for stations referred to in number or when the frequency assignment is used for reception in the circumstances described in No. 315.

Column 4 - Name and Location of Transmitting Station

4a. Indicate the name of the locality by which the transmitting station is known or in which it is situated.

- 4b. Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.
- 4c. Indicate the geographical coordinates (in degrees and minutes) of the transmitter site.

However, when the frequency assignment is used for reception by a land station in the circumstances described in No. 315, the indication to be given in Column 4 is as follows:

- 4a. The letter "R".
- 4b. The country in which the receiving (land) station is located.
- 4c. The geographical coordinates (in degrees and minutes) of the site of the receiving (land) station.

The information to be supplied for Columns 4a, 4b and 4c is a basic characteristic.

Column 5 - Class of Station and Nature of Service

- 1. Indicate the class of station and nature of service performed, using the symbols shown in Appendix 7.
- 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the class of station and nature of service applicable to the mobile stations should be indicated.
- 3. This information is a basic characteristic.
- Column 6a Locality(ies) or Area(s) with which communication is established.
 - 1. Indicate in this column the locality(ies) or area(s) in which the receiving stations are located.
 - 2. For the Fixed Service indicate the name of the locality by which the receiving station is known or in which it is situated.
 - a) Reception points may be grouped and entered collectively as areas in this column if all other basic characteristics of the frequency assignment are the same with respect to each such point and provided the area is well-defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view.

- b) Similarly, in the case of one-way simultaneous transmissions to multiple points, representative points outlining the area being served may be indicated, but it should be specified as Supplementary Information that this is simultaneous transmission.
- c) In the case of a network composed of stations inter-communicating on the same frequency, the symbol ZN shall be entered in Column 6a. When the same frequency is used for two or more networks of the same Administration, each network should be identified by a separate letter following the network symbol ZN, e.g. ZN-A, ZN-B, etc. However, each station in the network shall be the subject of a separate notice except for those stations of the network which may already be recorded in the Master International Frequency Register.
- 3. For land, radionavigation land, standard frequency, stations, it is not necessary to indicate any information in this column.
- 4. For broadcasting stations, the areas of reception should be indicated.
 - Each area should be either a country or one of the zones indicated on the attached map which is based on the CIRAF zones established by the International High Frequency Broadcasting Conference, Mexico City, 1949.
- 5. For reception by a land station in the circumstances described in No. 315, the name of the locality by which the receiving (land) station is known or in which it is situated, should be indicated.
- 6. This information is a basic characteristic, except for paragraph 3 above.

Column 6b - Length of circuit (kms)

- 1. The length of the circuit in kms should be indicated in this column.
- 2. For reception by a land station in the circumstances described in No. 315, the maximum distance between the mobile stations and the receiving (land) station should be indicated.
- 3. This information is not a basic characteristic except in the case of paragraph 2 above, and in the case of land, radionavigation land, standard frequency stations. In these latter cases, the distances shown shall represent the service ranges.
- Column 7 Class of emission and bandwidth necessarily occupied / and description of transmission /

- 1. Indicate, for each locality or area of reception shown in Column 6a, the class of emission and bandwidth necessarily occupied, in accordance with Article 2 and Appendix 5.
- 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the particulars to be indicated are those applicable to the mobile stations.
- 3. This information is a basic characteristic.

Column 8 - Power (in kW)

- 1. Indicate the power supplied to the antenna
- 2. The power used to each locality or area of reception shown in Column 6a shall be indicated.
- 3. When the frequency assignment is used for reception in the circumstances described in No. 315, if different powers are used by the mobile stations, the highest power should be indicated.
- 4. This information is a basic characteristic.

Column 9 - Transmitting antenna characteristics

Column 9a - Azimuth of maximum radiation

- 1. If a directive transmitting antenna is used, indicate the azimuth of maximum radiation of the transmitting antenna in degrees (clockwise) from True North.
- 2. If a transmitting antenna with non-directional characteristics is used, insert ND in this column.
- 3. This information is a basic characteristic, except when the frequency assignment is used for reception in the circumstances described in No. 315.

Columns 9b and 9c -

The I.F.R.B. bases the Technical Standards it applies on the Recommendations of the C.C.I.R. If, therefore, the radiation characteristics of the antenna concerned differ from those recommended by the C.C.I.R., the following information should also be notified in Columns 9b and 9c:

Column 9b - / Angular width of radiation main lobe /

The total angle in the horizontal plane in degrees within which the radiation power in any direction is not more than 6 db less than the power radiated in the direction of maximum radiation, should be indicated.

Column 9c - Antenna gain in decibels (db)

/The gain in direction of maximum radiation at the assigned frequency calculated with reference to a perfect free space half-wave dipole (see Article 1) should be indicated. /

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

- 1. When the frequency assignment is used for reception in the circumstances described in No. 315, the maximum hours of operation are those relating to the mobile stations.
- 2. This information is a basic characteristic.

Column 11 - Megacycle Order of the other frequencies normally utilized for the same circuit.

- 1. If the notified frequency is the only frequency used for the particular circuit, the indication "Nil" shall be inserted in this column.
- 2. In other cases, the megacycle order of the other frequencies normally used for the circuit shall be indicated. For this purpose, the megacycle order shall be calculated according to the following ranges:

Range	Megacycle order
4 000 - 5,999	5
6 000 - 7,999	7
28 000 - 29,999	29

3. This information is a basic characteristic for the Fixed /and High Frequency Broadcasting / Services between 4 and 30 Mc/s.

Column 12a - Operating Administration or Company*

This information is not a basic characteristic, but it is recommended it be supplied in cases where the same agency operates in more than one country.

Column 12b - Postal and Telegraphic Address of /Centralizing Office / responsible for the station.*

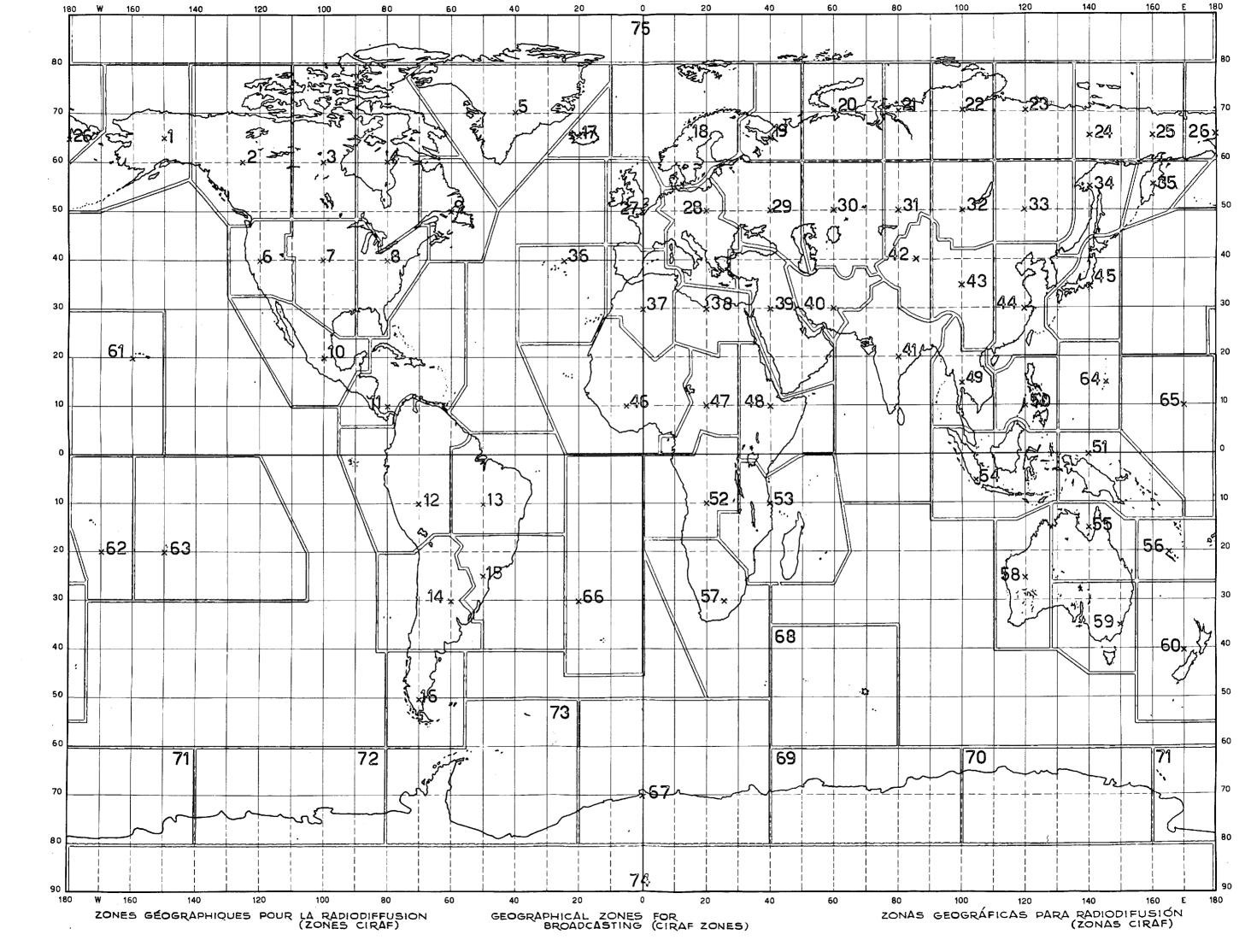
- 1. The postal and telegraphic address of the /Centralizing Office / under whose jurisdiction the station is placed, should be indicated.
- 2. The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions, and questions referring to the technical operation of the circuit (see Article 14).
- 3. This information is not a basic characteristic.

Supplementary Information

Any supplementary information supplied by the Administration should be indicated on the right hand side of the notice, within the frame provided.

- 1. If the assignment is made in application of a Regional or Service Agreement, the relevant Agreement shall be indicated in the appropriate place; otherwise, insert a dash.
- 2. Reference to any coordination effected with other Administrations shall be indicated in the appropriate place, the name of the country shall follow the symbol COORD/...., or the indication "Nil" if no coordination has been effected.
- 3. Any other information which the Administration considers to be relevant should be indicated, such as, for example, an indication that the assignment concerned would be operating in accordance with No. 88 of the Radio Regulations, or information concerning the use of the notified frequency if such use is restricted or if the frequency is not used during all the time which is possible according to propagation conditions.
- 4. This information is not a basic characteristic, but it is recommended that the information under paragraphs 1 and 2 above be supplied.

^{*} Where this information already appears in the Preface to the International Frequency List, the appropriate reference number or letter may be used.



CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No DT 635-FES 28 octobre 1959

GROUPE DE TRAVAIL 5B2
WORKING GROUP 5B2
GRUPO DE TRABAJO 5B2

SERVICE MOBILE AERONAUTIQUE

MM. les délégués sont informés que la séance du Groupe de travail 5B2, prévue pour le jeudi 29 octobre à 11.00 heures, est annulée.

AERONAUTICAL MOBILE SERVICE

Delegates are hereby informed that the meeting of Working Group 5B2 arranged for Thursday 29 October at 11.00 a.m. is cancelled.

SERVICIO MOVIL AERONAUTICO

La sessión que el Grupo de trabajo 5B2 debia celebrar el jueves, 29 de Octubre, a las 11 de la mañana, ha sido anulada.

Le Président Chairman El Presidente

A. Lebel

GENEVA, 1959

Document No. DT 636-E 19 October, 1959

WORKING GROUP 4C

DRAFT REPORT

of Working Group 4C to Committee 4

- During the course of meetings between 28 September, 1959, and October, 1959, Working Group 4C considered all proposals within its terms of reference in the 4-27.5 Mc/s band. Proposals involving the broadcasting service were not considered. Nor was any action taken on the 7 000-7 300 kc/s band because Committee 4 had already adopted allocations for this band (Annex 1 to Document No. 270).
- 2. At its first meeting, Mr. L. Spengenberg (U.S.A.) was appointed rapporteur. Mr. John A. Gracie, Vice-Chairman, Mr. John H. Gayer, Member of the I.F.R.B. and Mr. A.A. Matthey of the I.F.R.B. Secretariat contributed valuable assistance and guidance.
- 3. Representatives of the following Delegations participated:

Argentine	Colombia	Italy	United Kingdom
Australia	Denmark	Japan	Sweden
Austria	Spain	Mexico	Switzerland
Belgium	United States of America	New Zealand	Czechoslovakia
Bielorussia	France	Pakistan	(Portuguese
Brazil	Greece	Paraguay	(Overseas
Bulgaria	India .	Netherlands	Turkey
Canad a	Indonesia	Poland	Union of S.Africa
China	Ireland	Portugal	U.S.S.R.
		Ukraine	Venezue la

- N.B. It is considered that all countries listed in Document No. 329 participated because of their formal association with the Polish proposals Nos. 756 to 826 in the 4-27.5 Mc/s band.
- 4. All proposals contained in Document No. DT 90 and within the terms of reference were considered by the various groups as shown:

Addendum No. 1 Fixed Services

Addenda Nos. 4 and 5 Aeronautical and Maritime Mobile Services

Addenda Nos. 6 and 7
Mobile and Amateur Services

Addenda Nos. 8 through 11 Standard Frequencies, ISM, Space Communication Service and Radio Astronomy Working Group 40

Sub-Working Group 4Cl S.R. Burbank (Canada) Chairman

Sub-Working Group 4C2 S. Hase (Japan) Chairman

Sub-Working Group 4C3 W. Klein (Switzerland) Chairman

- 5. The following changes, as shown by the Table in Annex 1, were adopted:
 - a) 4 063-4 438 kc/s Delete notes 40 and 41, RR 154 RR 155
 - b) Provide an appropriate and substitute footnote to designate that the fixed service is a secondary service in the 4 063 4 438 kc/s band subject to the essential condition that no harmful interference is caused to the maritime mobile service by fixed stations communicating only within national boundaries, of mean power not exceeding 50 Watts, except in the band allocated to coast telegraph stations where the mean power shall not exceed 500 Watts.
 - c) 4 438-4 650 kc/s Add, in Region 1 "mobile except aeronautical mobile (R)".
 - d) In all bands delete the note 35 referring to the definition of aero mobile (OR) and (R) and notes 42, 47, 52, 54 and 56 referring to the standard frequencies.
 - e) In the bands 8 195 8 815 kc/s, 12 925 13 200 kc/s and 17 160 17 360 kc/s the footnotes 46, 49 and 53 (RR 160, RR 163 and RR 167) were retained subject to the provision that "... the I.F.R.B. is directed by this Conference to interpret and apply, from the date of entry-into-force of the final acts of this Conference, the provisions of these regulations to a) coast station assignments of all countries and b) fixed technical examinations according to the provisions of Article 11 of the 1959 Radio Regulations."

For information of Committee 4, Working Group 4C recognizes that existing problems between coast stations and fixed stations in the bands concerned should be considered in Committee 5.

- f) Delete note 48 (RR 162) in the 11 400 11 700 kc/s band.
- g) In the 26 100 27 500 kc/s band, change note 58 (RR 172) to read "In Region 2, Australia and New Zealand, the amateur service may operate within the band 26 960 27 230 kc/s".
- h) In the 9 995 10 005 kc/s band add the footnote "Transmissions for space research may take place on a frequency of 10 004 ± 1 kc/s provided they do not cause harmful interference to the standard frequency and time signal service."
- i) In the 19 990 20 010 kc/s band, add the footnote "the guard-band 19 990 20 010 kc/s may be used for space research provided no harmful interference is caused to the standard frequency and time signal service."
- Although there was a majority opinion for the above changes and no others Working Group 4C recognizes that it has no right to fore-close further discussion in Committee 4 on any of the proposals. However, as requested by the various Delegations, Working Group 4C notes to Committee 4 the following reservations, in varying degrees, contained in its Summary Records.
 - a) The United Kingdom, Sweden and the U.S.S.R. with respect to the new footnote recommended as a substitute for notes 40 and 41 (RR 154 and RR 155).
 - b) <u>Bielorussia</u> (for the U.S.S.R.) on the matter of the 50 Watt power limitation in note 43 (RR 157).
 - c) <u>Ukraine</u> with respect to status quo in the 11 975 12 330 kc/s band and more particularly, the section 12 320 12 330 kc/s.
 - The U.S.A. with respect to aeronautical mobile sharing in the $12\ 320-12\ 330\ kc/s$ band in the U.S.S.R.
 - d) <u>Bielorussia</u>, <u>India</u>, <u>Czechoslovakia</u> and <u>the U.S.S.R.</u> with respect to status quo in the 14 350 14 990 kc/s band.
 - e) The U.S.S.R. with respect to status quo in the 15 450 16 460 kc/s band and particularly the section 16 440 16 460 kc/s. The U.S.A. with respect to aeronautical mobile sharing in the 16 440 16 460 kc/s band in the U.S.R.
 - f) Czechoslovakia concerning the recommendations affecting the 17 160 17 360 kc/s and the 23 200 23 350 kc/s bands.

- g) Poland, the U.S.R. and others with respect to a proposed footnote that the fixed and mobile service would have equal status in the 21 850 22 000 kc/s band. France, Turkey and others against the adoption of such a footnote.
- h) The same general situation prevailed with respect to the 23 200 23 350 kc/s band as in g) above.

(ADD as appropriate re the report of the ad hoc group in the matter of 25 010 - 25 600 kc/s and 26 100 - 27 500 kc/s band when this has been settled)

- 7. The draft new Table of Frequency Allocations shown in Annex 1 is recommended for adoption by Committee 4 insofar as Working Group 4C within its terms of reference dealt with all proposals in Document No.90.
- 8. Working Group 4C also recommends the adoption by Committee 4 of the draft recommendations concerning the protection of the standard frequency bands as shown in Λ nnex 2 to the present Report.

L. Spangenberg
Rapporteur

H. Pressler Chairman, Working Group 4C

Annexes: 2

ANNEX 1

	Frequency	Allocation to services				
	band kc/s	World-wide	Regional			
		worra-wrae	Region 1 Region 2 Region 3			
Table NOC	4 000-4 063					
Table MOD	4 063-4 438	a) Maritime mobile * b) Fixed 41a)				
Table MOD	4 438-4 650		a) Fixed a) Fixed b) Mobile except except aeronautical mobile (R) a) Fixed b) Mobile except except aeronautical mobile (R)			
Table NOC**	4 650-4 995					
Table (MOD)	4 995-5 005	Standard frequency (5 000 kc/s)				
Table NOC**	5 005-9 995					

154 SUP 40)

155 SUP 41)

155a ADD 41a) The frequency band 4 063-4 438 kc/s may be used by fixed stations only exceptionally and on the essential condition that no harmful interference is caused to the maritime mobile service by fixed stations communicating only within national boundaries, of mean power not exceeding 50 Watts, except in the frequency band allocated to coast telegraph stations where the mean power shall not exceed 500 Watts.

156 SUP 42)

157 NOC 43)

158 NOC 44)

159 NOC 45)

160 NOC 46)

^{*} The maritime mobile service is the primary service. The fixed service is a secondary service as defined in Document No. 242 (Rev.), paragraph 7A.

^{**} NOC - Within the Terms of Reference of Working Group 4C.

			kc/s	World-wide	Region 1	Region 2	Region 3
Table	·Ι (-iOD	9 995-10 005	Standard frequency (10 000 kc/s) 47a)			
Table	e N	10C**	10 005-14 990				
Table	e ((MOD)	14 990-15 010	Standard frequency (15 000 kc/s)			
Table	e N	10C**	15 010-19 990				
Table	e M	4OD	19 990-20 010	Standard frequency (20 000 kc/s) 54a)			
161 SUP		SUP	47)				
1	.61a	ADD	the frequency of	smissions for space of 10 004 kc/s ± 1 erence to the stand	kc/s provi	ded they d	o not cause
1	.62	SUP	48)				
1	63	NOC	49)				
1	.64	NOC	50)				
. 1	.65	NOC	51)				
1	.66	SUP	52)				
1	.67	NOC	53)				
1	.68	SUP	54)				
1	.68a	ADD	54a) The 8	guard-band 19 990-2	20 010 kc/s		ed for

the standard frequency and time signal service.

space research provided no harmful interference is caused to

^{**} NOC - Within the Terms of Reference of Working Group 4C.

Annex 1 to Document No. DT 636-E Page 7

		kc/s	World-wide	Region 1	Region 2	Region 3
Table	NOC**	20 010-24 990				
Table	(MOD)	24 990-25 010	Standard frequency (25 000 kc/s)			
Table	NOC**	25 010-27 500				
169 NOC		55) (Subjon this particu	ect to recommend lar note).	lation from	4C Ad Hoc	Group
170	SUP	56)				
171	NOC	57)				
172	MOD		gion 2, Australi rate within the			

^{**} NOC - Within the Terms of Reference of Working Group 4C.

ANNEX 2

DRAFT RECOMMENDATION CONCERNING THE PROTECTION OF STANDARD FREQUENCY GUARD-BANDS FOR USE BY RADIO ASTRONOMY.

The Administrative Radio Conference (Geneva, 1959),

considering

- a) that an interference-free reception of standard frequency and time-signals in the frequency bands around (2.5), 5, 10, 15, 20 and 25 Mc/s, allocated exclusively to that service in the frequency allocation table, is of a world-wide interest;
- b) that these same frequency-bands may be used most efficiently for the observation of cosmic radiations by radio astronomers only if they are free from any noticeable energy due to emissions of other services than the standard frequency and time signal services;
- c) that the frequency band 10 003 10 005 kc/s and the frequency band 19 990 20 010 kc/s may be used for space research;

recommends

that the Administrations adhering to the present Convention take <u>all</u> possible measures to safeguard the above-mentioned frequency bands from any harmful interference.

Note

This recommendation would need to be reviewed if any allocation to Space Reasearch were proposed within these bands.

ADMINISTRATIVE RADIO CONFERENCE GENEVA. 1959

Document No. DT 637-E (Rev.) CORRIGENDUM No. 1. 4 November, 1959

WORKING GROUP 4E

CORRIGENDUM

Second Report of Sub-Working Group 4E3 to Working Group 4E

Page 1, para. 4 (French Text):-

ISM frequency of 2 500 Mc/s shown for Austria should read 2 450 Mc/s.

Page 4, para 4 of "noting":-

frequency band 5 340 - 5 460 Mc/s should read 5 350 - 5 460 Mc/s.

Page 55 Footnote 11

after "Mobile Services" delete "with all services having equal Priority".

Page 5, para, 6

Number first paragraph (A)

Page 6

After para (A) (iii) add new paragraphs (B) and (C) as follows:-

- (B) The Delegation of Switzerland was not represented at the sixth meeting of Sub-Working Group 4E3 when it was agreed that the priority should be removed from Radio Navigation in the band 8 750 - 8 850 Mc/s. The Delegate of Switzerland had expressed the view at the fifth meeting of Sub-Working Group 4E3 that he could not agree to the deletion of priority from the Radio Navigation service; and at the seventh meeting re-iterated his earlier statement and requested that this view should be included in the report of Sub-Working Group 4E3 to Working Group 4E. (c) The Delegate of Sweden also wished to reserve his position with regard to the priority of
- radio navigation in the band 8 750 8 850 Mc/s.

Re-number paragraph 7 to paragraph 8, and paragraph 8 to paragraph 9. Before paragraph 7 insert paragraph 6 as follows:-

The Delegate for Sweden advised that because of lack of time to study Document DT 637 (Rev) he wished to reserve his position with respect to modification of certain footnotes in the band 8 500 - 10 500 Mc/s.

> E. W. Anderson Chairman

Page 6

ADMINISTRATIVE RADIO CONFERENCE

Document No. DT 637-E (Rev.)
3 November 1959

GENEVA, 1959

WORKING GROUP 4E

SECOND REPORT

Sub-Working Group 4E3 to Working Group 4E

- § 1. The terms of reference of Sub-Working Group 4E3 are "to examine proposals made in connection with the Frequency Allocation Table between 1 700 to 2 700 Mc/s, and 8 500 to 10 500 Mc/s". The relevant documents are DT 123 Addenda 3, 4 and 5.
- Representatives of the following delegations attended the meetings: Argentina, Australia, Austria, Brazil, Canada, China, Federal Republic of Germany, France, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America, Union of South Africa and Union of Soviet Socialist Republics. Mr. Iastrebov of the I.F.R.B. and observers from I.A.T.A. and I.C.A.O. were also present.
- 3. The first report of Sub-Working Group 4E3 to Working Group 4E dealt with the Frequency Allocation Table in the band 1 700 2 700 Mc/s, but left outstanding consideration of footnotes 105 (RR 219), 106 (RR 220) and two proposed footnotes dealing with Tropspheric Scatter.
- § 4. At subsequent meetings of Sub-Working Group 4E3 the following recommendations were agreed upon:
 - a) Delete footnote 105 (RR 219)
 - b) Amend footnote 105 (RR 220) to read as follows:

The frequency 2 450 Mc/s is designated for Industrial, Scientific and Medical purposes except in the following countries where the frequency to be used is shown in brackets:

Federal Republic of Germany (2 400 Mc/s)
U.S.S.R. (2 375 M/cs)
Austria (2 400 Mc/s) and (2 450 Mc/s)

Emissions must be confined within ± 50 Mc/s of the frequencies designated. Radio Communication services operating within these limits must accept any harmful interference that may be experienced, from the operation of Industrial. Scientific and Medical Services.

- c) Add after band 2 550 2 700 Mc/s two footnotes :
 - i) In Region 1 tropospheric scatter may be accommodated in the band 2 550 - 2 700 Mc/s under arrangements to be agreed between Administrations concerned or affected.
 - ii) In the United Kingdom, the Radiolocation Service may operate on the band 2 550 2 600 Mc/s, provided no harmful interference is caused to tropospheric scatter systems.
- S5. General agreement has been reached on the following allocations. An asterisk after an allocation indicates that the service has priority in accordance with paragraph 7A of Document No. 242. All footnotes required are included in this document; footnotes at present in the Radio Regulations not shown herein are deleted.

Band 8 500 - 8 750 Mc/s

World	Wide
8 500 - 8 750 Mc/s	Radiolocation 1)2)

- Note 1) In the U.S.S.R. the frequency band 8 500 8 700 Mc/s is allocated alternatively to the Fixed and Mobile Services.
- Note 2) In the U.S.S.R. the frequency band 8 700 8 750 Mc/s is allocated alternatively to the Radio Navigation Service.

Band 8 750 - 8 850 Mc/s

Wor	dd Wide
8 750 - 8 850 Mc/s	(a) Aero RN (b) Radiolocation 3) 4)

Note 3) In Belgium, France, the Federal Republic of Germany, the Netherlands and U.S.S.R., the frequency band 8 825 - 9 225 Mc/s is allocated additionally (7C) to the Maritime Radio Navigation Service for use by shore based radars.

Note 4) The use of the frequency band 8 750 - 8 850 Mc/s by the Aeronautical Radio Navigation Service is limited to Airborne Doppler Navigation Aids on a centro frequency of 8 800 Mc/s.

Note: See paragraph 6 of this report.

Band 8 850 - 9 000 Mc/s

8 850 - 9 000 Mc/s	World Wide
0 050 - 9 000 Mc/s	RL 2) 3) 5)

Note 5) "In Switzerland the frequency bands 8 850 - 9 000 Mc/s, 9 200 - 9 300 Mc/s, and 9 500-9 000 Mc/s are allocated additionally (70), to the radionavigation service".

Band 9 000 - 9 500 Mc/s

	World Wide
9 000 - 9 200 Mc/s	a) Aeronautical RN* b) Radiolocation 6)
9 200 - 9 300 Mc/s	Radiolocation
9 300 - 9 500 Mc/s	a) Radio Navigation * b) Radiolocation 2) 3) 7) 8)

- 6. In the frequency band 9 000- 9 200 Mc/s, the only uses permitted by the Aeronautical Radionavigation service are for ground based radars and, in the future, for associated airborne transponders which transmit only on frequencies in this band, and only when actuated by radars operating in this band.
- 7. In the frequency band 9 300 9 500 Mc/s the Aeronautical Radionavigation service is limited to airborne weather radars and ground based radars.
- 8. In the frequency band 9 300 9 500 Mc/s ground based radars used in conjunction with the meterological aids service have priority over other radiologation services.

Note: Agreement to the allocation shown for 9 300-9 500 Mc/s was reached only after considerable discussion, and on the condition that the following recommendation should be included in the report.

RECOMMENDATION No......concerning the use of the band 9 300-9 500 mc/s.

The Administrative Radio Conference, Geneva, 1959

noting

- that there are in existence two main classes of airborne weather radar using the frequency bands 5 350-5 470 Mc/s and 9 300-9 500 Mc/s respectively;
- 2. that there is in existence a very considerable number of ship-borne radars the majority in the band 9 300-9 500 Mc/s;
- 3. that there are also ground-based radars of the maritime and aeronautical radionavigation services and of the meteorological service in this band;
- 4. that a priority allocation has been made for airborne weather radars in the band 5 340-5 460 Mc/s;
 - 5. that priority allocations have been made for shipborne radars in the bands 3 100-3 246 Mc/s and 5 470-5 650 Mc/s;
 - 6. that it has proved necessary to allocate the band 9 300-9 500 Mc/s on an equality basis to both the aeronautical and the maritime radionavigation services.

considering

- 1. that it is of the utmost importance to ensure that harmful interference is not caused to radionavigation services providing a Safety of Life function;
- 2. that the operating conditions of a Safety of Life service should be uniform throughout the world;
- 3. that an unco-ordinated increase in the use of the band 9 300-9 500 Mc/s can only lead to an increase in the probability of harmful interference between the aeronautical and maritime radionavigation services;

recommends

that Administrations and the International Civil Aviation Organisation and the Intergovernmental Maritime Consultative Organisation study this matter at the earliest opportunity taking into account the following:

- the need to establish whether and to what extent interference which is recognized to be technically possible between the two services becomes harmful in operational circumstances;
- 2. in the event that it is established that there may be harmful interference between the two services, the possibility that this can be reduced by technical, operational and procedural means, including the principle that new equipments should always be to the highest technical standards:

invites

Administrations, the International Civil Aviation Organization and the Intergovernmental Maritime Consultative Organization to communicate to the Union the results of their studies together with their views and proposals resulting therefrom.

Band 9 500-10 000 Mc/s

	World-wide
9 500-9 800 Mc/s	Radiolocation
9 800-10 000 Mc/s	a) Fixed b) Radiolocation * 9) 10)

Footnote 9) In the U.S.S.R. the band 9 800-10 000 Mc/s is allocated alternately to the fixed band radionavigation services.

Footnote 10) In Indonesia, Japan and Sweden the fixed and radiolocation services have equal priority.

Band 10 000-10 500 Mc/s

	World-wide
10 000-10 500 Mc/s	Amateur Radiolocation * 11)

Footnote 11) In Japan the band 10 000-10 500 Mc/s is allocated additionally to the Fixed and Mobile Services, with all services having equal priority.

In dealing with the allocation of 8 750-8 850 Mc/s to Aeronautical Radionavigation and Radiolocation, with a footnote limiting the first of these services to Airborne Doppler Navigation Aids on a centre frequency of 8 800 Mc/s; Sub-Working Group 4E3 has concluded that in this instance no priority need be given to the Aeronautical Radionavigation Service. This conclusion was based on the following reasoning:

- i) The Airborne Doppler Navigation Aid by virtue of its peculiar circuitry is inherently capable of ignoring all interference of a short-term nature, and its operation is considered to be compatible with the operation of radiolocation devices;
- ii) The prime operational function of the Doppler Navigational Aid is in any case for long distance use over sea routes, polar areas and sparsely populated areas where the probability of finding radiolocation devices also in use is very small indeed;
- iii) In areas where there might be interference of a duration exceeding that in (i) above, it is recognised that other and more appropriate navigation aids will be available.
- The U.S.S.R. requested that all countries listed in Document
 No. 329 should be included in footnotes 1, 2, 3 and 9. The U.S.A. did
 not agree with the inclusion of these countries on the ground that it
 would be procedurally incorrect to include countries not present at the
 meeting.
- § 8.' Allocations for space communications are still under discussion.
 - J. Mapson Rapporteur

E. W. Anderson Chairman

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

SUB-WORKING GROUP 4B2

AUSTRALIA - CANADA

Concerning the Frequency Bands 70-90, 90-110, 110-130 kc/s

With a view to facilitating and expediting the work of Sub-Working Group 4B2 the Delegations of Australia and Canada have jointly prepared the following draft Table of Frequency Allocations. We suggest that it provides a sound basis for world-wide agreement and a substantial compromise between the various proposals at present under consideration in the Sub-Working Group.

Frequency Band kc/s	World-wide	Region l	Region 2	Region 3
70 - 90		(a) Fixed (b) Maritime 1) Mobile (c) Radio- navigation*) 2)	(a) Fixed (b) Maritime 1) Mobile (c) Radio- navigation 2)	(a) Fixed (b) Maritime 1) Mobile (c) Radio- navigation*) 2)
90 - 110	(a) Fixed (b) Maritime 1) Mobile (c) Radio- navigation 3) 4)			
110 - 130		(a) Fixed (b) Maritime Mobile (c) Radio- navigation*)	(a) Fixed (b) Maritime Mobile (c) Radio- navigation 2)	(a) Fixed (b) Maritime Mobile (c) Radio- navigation* 2)

^{*)} Has priority.

¹⁾ Limited to coastal telegraph stations using Al and Fl emissions only.

²⁾ Continuous Wave Systems only.

- 3) In Regions 2 and 3 Radionavigation has priority.
- 4) The development and operation of long-distance radionavigation systems are authorised in this band which will become exclusively allocated, wholly or in part, for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services. If a pulse radionavigation system is employed the pulse emissions nevertheless must be confined within the band and must not cause harmful interference outside the band to stations operating in accordance with the Regulations.
 - Note: a) In Region 2 in the bands 70 90 kc/s and 110 130 kc/s the status of Radionavigation has yet to be determined.
 - b) In Region 1 in the band 90 110 kc/s the status of Radionavigation has yet to be determined.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE. 1959

Document No DT 639-FES 28 octobre 1959

GROUPE DE TRAVAIL 6A WORKING GROUP 6A GRUPO DE TRABAJO 6A

ORDRE DU JOUR

Quatorzième séance - Groupe de travail 6A (Définitions) Jeudi 29 octobre 1959, a 15 heures - Salle C

- 1. Compte rendu de la douzième séance (Document Nº 481)
- 2. Rapport du Sous-Groupe de travail 6A5 (Document N° DT 516)
- 3. Termes restant à définir (Documents N°S DT 536, DT 111, N° 326)
- 4. Divers.

AGENDA

Fourteenth Meeting - Working Group 6A (Definitions)

Thursday, 29 October, 1959 at 15.00 hours - Room C

- 1. Summary Record of the Twelfth Meeting, Document No. 481
- 2. Report of Sub-Working Group 6A5, Document No. DT 516
- 3. Remaining terms to be defined, Documents Nos. DT 536, DT 111, 326.
- 4. Other Matters.

ORDEN DEL DÍA

14. a sesión - Grupo de trabajo 6A (Definiciones) Jueves, 29 de octubre de 1959, a las 3 de la tarde - Sala C

- 1. Informe de la 12.ª sesión, Documento N.º 481
- 2. Informe del Subgrupo de trabajo 6A5, Documento N.º DT 516
- 3. Términos no definidos todavía, Documentos N. OS DT 536, DT 111, 326.
- 4. Otros asuntos.

The President,
The Chairman,
E. W. Allen
El Presidente,

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 640-E 28 October, 1959

WORKING GROUP 6B

REPORT

of Sub-Working Group 6B4 to Working Group 6B

The Sub-Working Group 6B4 held two meetings on 26 and 27 October 1959.

Appendix A contained in Radio Regulations (Atlantic City, 1947) and a draft resolution prepared by the I.F.R.B. was discussed. In this connection Recommendation 1 to C.C.I.R. in Radio Regulations and Recommendation No. 14 in E.A.R.C. Agreement were also considered. It was decided in the Sub-Working Group to draft separate texts for an Appendix A on 'Studies and Prediction of Radio Propagation and Radio Noise' and for a Recommendation to the C.C.I.R. relating to 'Studies of Radio Propagation and Radio Noise' and to the review of the Technical Standards of the I.F.R.B. The two draft texts are annexed in Annex 1 and Annex 2.

In preparing text in Annex 1, Proposals numbers 4598 (U.S.A.), 3044 (India), 3045 (Federal Republic of Germany) and 3046-3048 (U.K.) were taken into consideration.

A list of subjects of study referred to in Item 2 of Annex 2 is being prepared by the I.F.R.B. The Sub-Working Group was of the view that it might be possible to finalise the list by the Working Group at a later stage of the present conference when I.F.R.B. would have the know-ledge of the new problems arising from this conference. However, it was decided by the Sub-Working Group to forward the draft in Annex 2 in its present form to Working Group 6B for consideration.

M. K. Basu Chairman, 6B4

ANNEX

STUDIES AND PREDICTION OF RADIO PROPAGATION AND RADIO NOISE

Recognizing the vital dependence of efficient utilization of radio frequencies and efficient planning of radio communication services upon the fullest use of radio propagation and radio noise data, the countries, Members of the Union, shall continue to promote the establishment and operation of world-wide systems of observation stations to obtain data on radio noise and on ionospheric, tropospheric and other phenomena affecting radio propagation. Each country shall provide by the best means possible for the study, co-ordination and rapid dissemination of such data and where appropriate their predictions. In formulating and carrying out their programme of work in this field, the countries shall take note of the relevant C.C.I.R. Recommendations, Reports, Questions and Study Programmes, particularly regarding the conclusions so far reached therein, the direction and organization of future work and the recommended forms of presentation.

ANNEX 2 (REV.)

DRAFT RECOMMENDATION TO THE C.C.I.R. RELATING TO STUDIES OF RADIO PROPAGATION AND RADIO NOISE AND TO THE REVIEW OF THE TECHNICAL STANDARDS USED BY THE I.F.R.B.

(This replaces Recommendation No.1)

The Administrative Radio Conference, (Geneva, 1959)

considering

- a) that the efficient utilization of radio frequencies depends upon the use of most reliable technical data and standards especially in those parts of the radio frequency spectrum which are most congested;
- b) that the satisfaction of new frequency requirements and the development of radio services can be facilitated by improvements, where these are necessary, in the technical standards used at present by the I.F.R.B.;
- c) that, in accordance with Appendix A, countries will endeavour to carry out further studies on radio propagation and radio noise through the medium of the C.C.I.R.;
- d) that the C.C.I.R. has adopted programme of studies covering many of these problems;

recommends to the C.C.I.R.

- 1. to continue the programmes of studies on radio propagation and radio noise and to take measures for the co-ordination of the results of these programmes carried out by different countries;
- 2. to give particular attention to those studies which will lead to refinement in the Technical Standards of the I.F.R.B.;

Annex 2 (Rev.) to Document No. DT 640-E Page 4

- 3. to report regularly on these matters, even if the studies are not complete;
- 4. to continue regular consultation with organizations concerned with propagation work such as the International Scientific Radio Union, in order to attain the maximum possible degree of co-ordination.

ANNEX 2

DRAFT RECOMMENDATION TO THE C.C.I.R. RELATING TO STUDIES OF RADIO PROPAGATION AND RADIO NOISE AND TO THE REVIEW OF THE TECHNICAL STANDARDS USED BY THE I.F.R.B.

The Administrative Radio Conference, (Geneva, 1959)

recognizing

- a) that the efficient utilization of radio frequencies depends upon the use of most reliable technical data and standards specially in those parts of the radio frequency spectrum which are most congested.
- b) that in certain bands the accommodation of new frequency requirements and the development of radio services can be facilitated by improvements where these are necessary in the technical standards used at present by the I.F.R.B.
- c) that countries have already carried out through the medium of the C.C.I.R. extensive studies and that in accordance with Appendix A, countries will endeavour in particular to carry out further studies on radio propagation and radio noise
- d) that the C.C.I.R. has adopted programme of studies covering many of the problems.

Requests the C.C.I.R.

- 1. to continue the programmes of studies on the radio propagation and radio noise and to take measures for the coordination of the results of these programmes carried out by different countries.
- 2. to give particular attention to the following studies which will lead to refinement in the Technical standards of the I.F.R.B.

Annex 2 to Document No. DT-640-E Page 4

- 3. to report regularly on these matters, even if the studies are not complete.
- 4. to continue consultation regularly with organizations concerned with propagation work such as the International Scientific Radio Union, in order to attain maximum possible degree of coordination.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

COMMITTEE 7

AGENDA

Eleventh meeting - Committee 7 (Operations Committee)

Friday, 30 October, 1959 at 9 a.m.

- 1. Approval of Summary record of ninth meeting (Document No. 446)
- 2. Reports of Chairmen of Sub-Committees 7A, 7B, 7C and Working Group 7E
- 3. Approval of Report of Working Group 7E (Document No. 463)
- 4. Approval of First Report of Sub-Committee 7A and texts therein (Document No. 448)
- 5. Setting up of Working Group 7F to take over from Sub-Committee 7A, consideration of Articles 15, 42 and 44 and Appendices 2, 8, 15 and B.
- 6. Any other business

A.J. Ehnle Chairman

ADMINISTRATIVE RADIO CONFERENCE

CELEVA, 1959

Document No. DT 642-E 28 October, 1959

SUB-COMMITTEE 7A

REPORT

Working-Group 7Al to Sub-Committee 7A

In compliance with the decision made at the nineteenth Meeting of the Sub-Committee, and with the assistance rendered by Mr. Blow of the United Kingdom Delegation, the following draft text of the subject Recommendation is herewith submitted for consideration and adoption:

RECOMMENDATION NO.

to all Administrations relating to the re-classification of public correspondence categories of ship and aircraft stations

The Administrative Radio Conference of Geneva (1959),

considering:

- that in the international service of public correspondence, No. 844 of the Radio Regulations, Geneva, 1959, classifies ship stations maintaining eight hours (H8) daily watch and those maintaining sixteen hours (H16) daily watch in the same category, viz. the second category;
- that in the same service, No. 851 of the Radio Regulations, Geneva, 1959, classifies all ship stations equipped solely with radio-telephony in a single category, irrespective of the daily watch they maintain and regardless of the development which is taking place;

recommends:

that Administrations should study the advisability of extending the ship radiotelegraph station categories to four, viz. 24 hours, 16 hours, 8 hours and no fixed hours of watch, and of expanding the categories of ships fitted solely with radiotelephony to a number which more adequately reflects actual watch-keeping conditions.

M. N. Chen

Chairman

GENEVA, 1959

Document No. DT 643-E 27 October, 1959

SUB-COMMITTEE 7B

REPORT

of Working Group 7B4 to Sub-Committee 7B

The aim of this report is to inform Sub-Committee 7B of the outcome of the work of Working Group 7B4.

The following account is divided into four parts:

In the first part we have drawn attention to the terms of reference of the Working Group.

In the second part we have stated the principles on which the studies of the Working Group have been based.

In the third part we have commented on the results of the studies which were carried out according to these principles.

In the fourth and last part we have stated the opinions expressed by the Working Group in the light of these studies.

I. Terms of Reference of the Working Group

Working Group 7B4 was formed at the meeting of Sub-Committee 7B on 21 September, 1959, (see Document No. 271). It was instructed in the first place to consider the possibility of reconciling the proposals referring to Nos. 600 and 601 of the Radio Regulations.

At the present time these two Mos. form Section IV: Lifeboat, Liferaft and Survival Craft Stations, of Article 28: conditions to be fulfilled by mobile stations.

At the first meetings of the Worling Group it soon became clear that it was extremely difficult to consider, in isolation, the amendments to be made to these two numbers on account of the effect that these amendments would have:

- on the other provisions of the Regulations applying to the technical characteristics of lifeboat, liferaft and survival craft stations only,
- in a more general way, on the provisions applying to the technical characteristics of mobile stations,
- and even on the provisions dealing with the use of particular frequencies which are being considered for use by lifeboats, liferafts and survival craft stations.

We stated these difficulties at the meeting of Sub-Committee 7B on 12 October, 1959, (see Document No. 385). Sub-Committee 7B with the agreement of Sub-Committee 7C, then decided to request Working Group 7B4 to examine the question of the equipment of survival craft stations from a general aspect, with the collaboration of those taking part in Sub-Committee 7C.

Subsequently, Sub-Committee 7E asked Working Group 7B4, through Sub-Committee 7B, similarly to study the proposals of a general nature, i.e. Nos. 9 to 12 (Denmark, Finland, Iceland, Morway and Sweden), on pages 5 and 6 of the Volume of Proposals.

Sub-Committee 7C finally asked Working Group 7B4 to study Proposal 5447 (Federal Republic of Germany) in Document No. 186.

II. General Principles

After a thorough study of the existing Regulations and new requirements, the Working Group found that three general ideas emerged:

a) first, the provisions applicable to survival craft stations are somewhat specialized, and in the circumstances it would be advisable clearly to define what is meant by "survival craft stations".

The inclusion of such a definition would certainly be reasonable, and would facilitate drafting. For these reasons, the Working Group was unanimously in favour of including such a definition in Article 1 of the Regulations.

- The Working Group fully realized that:
- such a suggestion, if adopted, would have to be submitted to Committee 6 for consideration,
- that despite the advantages mentioned above, the adoption of a new definition would meet with one objection: to avoid any confusion, it will perhaps be necessary to amend the existing Regulations whenever the expression "mobile station" does not include survival craft stations.

The Working Group considered that this was a purely formal objection, for it was only rarely that confusion was likely to occur. The Working Group thought that it had eliminated doubtful cases by making the necessary amendments. Horeover, the Working Group considered that, although in theory confusion mighr arise, in practice it could not. It pointed out, in support of its views, that the existing wording was equally open to the objection referred to above.

b) Moreover, from a study of the existing Hos. 600 and 601 and of Article 36, with particular reference to Ho. 862, it was clear that, since Atlantic City, the International Telecommunication Union has been anxious to leave the international organizations concerned free to decide - subject to certain reservations concerning frequencies - on the type of radio equipment which should be used on board survival craft.

The Working Group unanimously agreed that the new provisions should not hamper the activities of those organizations.

This **risk** was all the more to be feared since the next meeting of the Conference on Safety of Life at Sea was scheduled for the beginning of 1960.

- c) Finally, during its broad study of the existing provisions of the Radio Regulations applicable to survival craft, the Working Group considered that some of the provisions:
 - either duplicated other identical provisions,
 - or seemed inappropriate within the existing Regulations.

In marking these comments, the Working Group did not intend to prejudge in any way any decisions that might be reached by the present Conference, especially as to the plan for the existing $^{\rm C}$ hapters XIII and XIV.

It merely hoped that these suggestions might in due course be of some little use.

III. Comments on the results achieved:

In the light of the general ideas explained above, the Working Group agreed to submit the two documents annexed to this report (Annexes 1 and 2) to Sub-Committee 7B for consideration. It also made a number of decisions, which are set out below.

*· *

Annex 1 consists mainly of:

- a draft definition of survival craft stations;
- various concomitant draft amendments to some of the definitions in Article 1 of the Radio Regulations.

If approved, this document would be submitted to Committee 6 for study.

The definition of survival craft stations is intended to include not only stations on board lifeboats, liferafts and other survival craft, but also stations working independently, without human aid, and used, for example, for locating a wreck.

The Working Party considered that the inclusion of a definition of a third category of mobile stations in the overall definition of maritime mobile and aeronautical mobile stations would entail a corresponding amendment of the definitions:

No. 24 - maritime mobile service

No. 25 - aeronautical mobile service

No. 41 - coast stations

No. 42 - aeronautical stations.

A slight amendment in the English text of the definition:

No. 45 - Ship stations

would also seem desirable.

The Working Group hoped that the new definition No. and the amendments to Nos. 24, 25, 41, 42 and 45 would be coherent.

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Annex 2 is a recapitulation of the Working Group's proposals concerning:

- the provisions applicable to survival craft;
- the changes to be made in the articles which today concern both survival craft stations and stations of other kinds. Let one preliminary remark be made in this connection.

The Working Group bore in mind the situation resulting from the work of Sub-Committees 7B and 7C. Hence Annex 2 explicitly quotes the documents to which the Working Group referred.

But a difficulty arose in connection with the changes to be made in Article 34. Sub-Committee 7B has not yet finished considering it. Hence the changes made in the paragraphs about which no decision has yet been taken are subject to its decisions.

In the absence of anything better, the Working Group felt obliged to adopt, for Article 34, provisions rigorously parallel to those now adopted for Article 33.

This having been said, the general tenor of the provisions provided for in Annex 2 can be analysed as follows:

1) We suggest that be assembled:

In Section IV of Article 28, all the provisions concerning the technical conditions to be observed by survival craft stations;

In Article 33, the provisions relating to the use of frequencies by radiotelegraph mobile stations;

In Article 34, the provisions relating to the use of frequencies by radiotelephone mobile stations.

2) Thus it is proposed:

to rearrange in the most appropriate places in Articles 33 and 34, the provisions of Section II of Article 37, which are partially concerned with the use of frequencies in case of distress in radiotelegraphy and radiotelephony;

to delete No. 277 of Article 9 which repeats the provisions of No. 780 of Article 33.

3) Moreover it is proposed to transfer the provisions of Mos. 860, 861 and 862 of Article 36 to Article 28. These provisions are concerned with the technical characteristics of the equipment of mobile stations in the aeronautical and maritime mobile services.

Nevertheless, a difficulty arises from the fact that these three numbers do not concern the whole of ships' radio equipment. Wo mention is made in them of the main installations of ships which are compulsorily provided with radio equipment.

After having considered various solutions, the Working Group finally thinks:

- that it is desireable to keep in the Radio Regulations a reference to the Convention for the safety of life at sea and to the Convention on International Civil Aviation.
- that the provisions of Mos. 860, 861 and 862 should be inserted in Section I ("General Provisions") of Article 28, when they have been arranged conveniently, so as to apply to all the radio equipment considered in this Article.

The Working Group moreover considers that the provisions of No. 863 are completely covered by the wording of Nos. 232 and 712 which were rephrased by Sub-Committee 7C. Together with the preceding remarks, this enables the Group to propose the complete deletion of Article 36.

We propose that 600 and 601 be amalgamated. In the new version, besides provisions similar to the existing ones, applicable to the frequency equipment of survival craft, there appear similar provisions relating to the possibility of using the frequencies 121.5 Mc/s and 243 Mc/s.

The Working Group hopes that the new wording will leave the door open to whatever decisions the international organizations concerned may see fit to take.

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In drafting Annexes 1 and 2 attached, the Working Group feels that it has fully considered the following proposals:

- 1716, 1717, 1718 and 1719 (France and Overseas France) on page 422 of the Volume of Proposals;
- 4167, 4168 (Morocco), on page 429.1 of the Volume of Proposals.
- 1745, 1746 (United Kingdom of Great Britain and Northern Ireland), on page 429.1.

This first conclusion we shall call Conclusion A.

The Working Group does not feel obliged to offer any comments on Danish, Finnish, Icelandic, Norwegian and Swedish proposal 10, on page 6 of the Volume of Proposals, nor on the corresponding part of proposal 9, on page 5 of the Volume. These proposals would seem to offer nothing new in the general discussions now under way in Sub-Committees 7B and 7C, on the use of radiotelephone distress frequency 2 182 kc/s.

This second conclusion we shall call Conclusion B.

We considered, too, Indian proposal 1,744, on page 429 rev.l of the Volume of Proposals. After some discussion, this was withdrawn and hence we no longer have to consider it.

This third conclusion let us call Conclusion C.

We considered the Federal German proposal 5447 (Document No. 186).

This proposal, we felt, defined the technical requirements applicable to survival craft stations, and that it was for the Convention on the Safety of Life at Sea to define those characteristics. Hence we felt unable to consider the substance thereof.

This is the fourth conclusion; let us call it D.

IV. The Consequences of our findings.

Under No. 195 of the Radio Regulations:

121.5 Mc/s is the aeronautical emergency frequency in the band 118-132 Mc/s.

According to Article 5 of the Radio Regulations, the band 235-328.6 Mc/s is reserved for the fixed and mobile services, and there is nothing which lays down that the frequency 243 Mc/s can be used for safety purposes.

Our proposal, namely that by means of an amendment to Nos. 600 and 601, survival craft stations be allowed to use the frequencies 121.5 Mc/s and 243 Mc/s means, we consider, that:

- special provision will have to be made in Article 5 for the use of 243 Mc/s.
- Article 28 of the Regulations should be supplemented by a provision allowing ships to use the emergency frequency 121.5 Mc/s in the aeronautical mobile service for safety purposes.

The following proposals, we feel, conduce to this end:

- proposals 9 and 12 of Denmark, Finland, Iceland, Norway and Sweden as far as 121.5 Mc/s is concerned, and 5,422 of Brazil, in Document No. 166.
- as regards the frequency 243 Mc/s, proposals 9 and 11 of Denmark and Finland, Iceland, Norway and Sweden, on pages 5 and 6 of the Volume of Proposals,
 - 619, from these same countries, on page 196,
 - and United States proposal 3,362 on page 197.10.

It is not for us, we feel, to consider these last two proposals.

Notwithstanding, the Working Group considers that the competent Committee should consider whether the following note might not be included in the Frequency Allocation Table as regards the band 235-328.6 Mc/s:

"No. 207a - 243 Mc/s shall be, in this band, the frequency which survival craft stations may use."

This is our first recommendation; let us call it Recommendation a

Lastly, Working Group 7B4 feels moreover that Article 28 might usefully be supplemented by a new number which should read as follows:

"No.... Mobile stations of the maritime mobile service may communicate, for safety purposes, with stations of the aeronautical mobile service. For these purposes only they may use the aeronautical emergency frequency 121,5 Mc/s on class A3 emissions. They must then conform to the relevant provisions of any special arrangements between the governments concerned by which the aeronautical mobile service is regulated."

The Working Group considers that this new number should be placed in Section I ("General Provisions") of Article 28. It is of the opinion that if necessary Sub-Committee 7B and in any event Committee 8 should examine the problem of where to place this new number in the section:

This let us call Recommendation b.

The following action might, we consider, usefully be taken on the proposals, findings and recommendations just analysed:

Proposals which are the subject of Annex 1 hereinafter	To be considered by Sub-Committee 7B for submission to Committee 6
Proposals which are the subject of Annex 2 hereinafter	To be considered by Sub-Committees 7B and 7C
Conclusion A, on page 7 herein	To be considered by Sub-Committee 7B
Conclusion B, on page 8 herein	To be considered by Sub-Committee 7B with an eye to submitting it to Sub-Committee 7E
Conclusion C, on page 8 herein	To be considered by Sub-Committee 7B.
Conclusion D, on page 8 herein	To be considered by Sub-Committee 7B
Recommendation a, on page 9 herein	For consideration by Sub-Committees 7B and 7C for possible submission to Committee 4
Recommendation b, on page 10 herein	For consideration by Sub-Committee 7B

Chairman

J. Pruniéras

PROPOSED NEW DEFINITION	SURVIVAL CRAFT STATION A mobile station in the maritime or aeronautical mobile service located on board any lifeboat, liferaft or other survival craft, or otherwise provided solely for survival purposes.
24)	Amend definition of "Maritime Mobile Service" to read:
	"A mobile service in which ship stations, coast stations and survival craft stations may participate."
25)	Amend definition of "Aeronautical Mobile Service" to read:
	"A mobile service in which aircraft stations, aeronautical stations and survival craft stations may participate."
41)	Amend definition of "Coast Station" to read:
	"A land station in the maritime mobile service."
42)	Amend definition of "Aeronautical station" to read:
	"A land station in the aeronautical mobile service. In certain instances an aeronautical station may be placed on board a ship."
45)	Amend definition of "ship station" in English text of Regulation 45; change "vessel" to "ship".

ANNEX 2

ARTICLE 9

SECTION IV

Delete No. 277

ARTICLE 28

SECTION I

In this section should be inserted the following new numbers; the Working Group has made no proposal as to their exact position.

Former No.860 amended "The Convention for the Safety of Life at Sea prescribes which ship and which of their survival craft must be fitted with radio equipment and which ship must carry portable radio equipment for use in survival craft. It also prescribes the requirements which must be complied with by such installations."

Former No. 861 amended The International Civil Aviation Organization prescribes which aircraft must be fitted with radio equipment and which aircraft must carry portable radio equipment for use in survival craft. It also prescribes the requirements which must be complied with by such installations."

Former No. 862 amended "The applicable provisions of the present Regulations must, however, be observed in the use of all such installations as indicated in Nos ... and ..."

New Number "Mobile stations of the maritime mobile service may communicate, for safety purposes, with stations of the aeronautical mobile service.

For these purposes only they may utilize the aeronautical emergency frequency 121.5 Mc/s on class A3 emissions. They must then conform to the relevant provisions of any special arrangements between the governments concerned by which the aeronautical mobile service is regulated."

SECTION II

Nos. 581 - 583

No change

No. 584

Deleted (See annex 2 to Document No. DT 258).

SECTION II (cont.)

Amend Nos. 585 - 589 to read:
(This is Document Mo. DT 258 - Annex 2, amended editorial-ly. Provision is still to be made for VHF by Committee 7B. See Document No. 271, Page 4)

- 10. All ship stations equipped with radiotelegraph apparatus to work in the authorized bands between 405 and 535 kc/s must be able to:
 - a) send and receive class A2 emissions on the frequency of 500 kc/s;
 - b) send, in addition, class Al and A2 emissions on at least 2 working frequencies;
 - c) receive, in addition, class Al and A2 emissions on all the other frequencies necessary for their service.
- 11. All ship stations equipped with radiotelephony apparatus to work in the authorized bands between 1 605 and 2 850 kc/s must be able to:
 - a) send and receive class A3 emissions on the frequency of 2 182 kc/s;
 - b) send, in addition, class A3 emissions on at least two working frequencies *):
 - c) receive, in addition, class A3 emissions on all the other frequencies necessary for their service.

(To take care of emergency (reserve) installations - see present No. 862).

12. The provisions of 10 b) and c) and ll b) and c) do not apply to apparatus provided solely for distress and urgency purposes.

Nos, 590 - 594

No change required.

Nos. 595 - 596

Deleted (Covered by Nos. 585 - 589 as amended - see Annex 2 of Document No. DT 258).

^{*)} In certain areas, Administrations may reduce this requirement to one working frequency.

SECTION II (cont.)

No. 597 (To be further modified by 7B drafting group) \$13. Ship stations equipped with radiotelegraph apparatus must be equipped with devices permitting change-over from transmission to reception and vice-versa without manual switching; devices shall also be provided for listening on the reception frequency during the course of periods of transmission.

SECTION IV

(Parts of 600 and 601)

Amend heading to read: "Section IV: Survival Craft Stations".

Equipment provided for use in survival craft stations must, if capable of operating:

- in the band 405-525 kc/s, be able to send on the frequency 500 kc/s, using class A2 emission (but see 712). If a receiver is provided for this band, it must be able to receive class A2 emission on 500 kc/s;
- in the band 1 605-2 850 kc/s, be able to send on the frequency 2 182 kc/s, using class A3 emission. If a receiver is provided for this band it must be able to receive class A3 emission on 2 182 kc/s;
- in the band 4 000-23 000 kc/s, be able to send on the frequency 8 364 kc/s using Class Λ2 emission. If a receiver is provided for this band it must be able to receive class Λ1 and Λ2 emissions throughout the band 8 266 to 8 745 kc/s;
- in the band 118-132 Mc/s, be able to send on the frequency 121.5 Mc/s, using amplitude modulated emissions. If a receiver is provided for this band it must be able to receive on 121.5 Mc/s, using amplitude modulated emissions;
- in the band 235-328.6 Mc/s, be able to send on the frequency 243 Mc/s. If a receiver is provided for this band it must be able to receive on 243 Mc/s.

ARTICLE 33

SECTION I

Amend start of 714 to read:

"The frequency 500 kc/s is the international distress frequency for radiotelegraphy: it must be used for this purpose by ship, aircraft and survival craft stations using frequencies in the band 405-535 kc/s when requesting •••"

Add, 714 bis:

870

"Exceptionally, ship and aircraft stations which cannot transmit on 500 kc/s should use their normal working frequency, or any other available frequency on which attention might be attracted".

Amend start of 715 to read:

"In addition, 500 kc/s may be used only..."

SECTION V

Amend 752 to read:

(This is the existing 752, modified to exclude survival craft. Ultimate text still being considered by Committee 7B)

"\$ 16 (1) Ship and aircraft stations equipped to operate in the frequency bands of the maritime mobile service between 4 000 and 23 000 kc/s must employ only class Al emission. However, for radiocommunication of a special character, the use of other classes of emission is not precluded".

Amend 780 to read:

(Proposal 4240 page 495.1, slightly modified)

The frequency 8 364 kc/s, however, shall not be assigned to or used by ship stations except to establish communications relating to the safety of life. It is designated for use by survival craft stations, if they are equipped to transmit on frequencies between 4 000 and 23 000 kc/s, and if they desire to establish with stations of the maritime and aeronautical mobile service communications relating to search and rescue.

SECTION VI

Replace 802 by:

871

"Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service the provisions of 714 and (714 bis) shall be complied with".

ARTICLE 34

SECTION II

Amend 813 to read:

(Not yet considered by Committee 7B. However, text included here conform with 714)

"The frequency 2 182 kc/s is the international distress frequency for radiotelephony; it must be used for this purpose by ship. aircraft and survival craft stations using frequencies in the authorized bands between 1 605 and 2 850 kc/s when requesting has been drafted to assistance from the maritime services. It is used for the distress call and distress traffic , for the urgency signal and urgency messages and for the safety signal (safety messages are where possible transmitted on a working frequency after a preliminary announcement on 2 182 kc/s)".

Add 813 bis:

870

"Exceptionally, ship and aircraft stations which cannot transmit on 2 182 kc/s should use their normal working frequency or any other available frequency on which attention might be attracted".

SECTION IV

Regulations 830-833 have not yet been considered by Committee 7B but, when re-drafted, should include paragraphs along the following lines to state the VHF requirements which have already been considered for Section II of Article 37 by Committee 7C:

(Proposal 2420, page 590, Rev. 1 modified)

"Ship stations equipped for radiotelephony in the bands 156-162 Mc/s, which need to use this band for safety purposes should exchange calls and traffic on 156.80 Mc/s".

(Proposal 4404, page 590.1, Rev.1, modified)

"Ship stations which cannot transmit on 156.80 Mc/s should use any other available frequency on which attention might be attracted".

SECTION V

Add new Regulation:

871

"Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service the provisions of 813 and (813 bis) shall be complied with.

ARTICLE 36

To delete.

ARTICLE 37

Delote Section II

Document No. DT 644-E 28 October, 1959

WORKING GROUP 5A

MEMORANDUM FOR MEMBERS OF WORKING GROUP 5A

Members of 5A are advised that initial drafts (green documents) from 5Al will become available to delegates this week.

The drafts of Articles 10 and 12 will be available before Saturday, but the draft of Article 11 will not be distributed until Saturday morning (31 October).

In virw of the shortage of time, members of 5A are requested to study these documents and be ready to enter into a discussion on them at the next meeting of 5A, which will be scheduled for Monday afternoon (2 November).

It will be appreciated that all members of 5Al have been working extended hours into the night to prepare these drafts, and 5A may need to follow this example.

G. Searle Chairman ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959 Document No. DT 645-E
Addendum No. 2
5 November, 1959

COMMITTEE 5 AD HOC GROUP

PAKISTAN

Draft Recommendations

A. For Fixed Services

- 1. The international fixed services should be given priority over the national fixed services. For this purpose the I.F.R.B. should take into account this relative priority while it is resolving cases of harmful interference and in studies relating to bringing about compatability in the bands allocated to the service.
- 2. The possibility of dividing the bands between the national and international fixed services should be studied by the I.F.R.B. taking into account the loading of the bands by such services with a view to the segregation of these bands.
- 3. With a view to removing from the Radio Frequency Record uncoordinated assignments not in use, in the case of international circuits the I.F.R.B. should verify both terminals of the circuit determining whether coordination exists if not bring about adjustments on the actual level of requirements. The space just found vacant will be available to meet the needs of new and developing countries.
- 4. Such assignments of the fixed services between 4 and 27.5 Mc/s which can be shifted to other means of communications or to the other bands by countries who have the necessary resourses should be carried out with a view to accommodating the requirements of the new and developing countries who may find it uneconomical to move into these bands.
- 5. With a view to conserving frequency usage between 4 and 27.5 Mc/s where alternative means of communications are possible in the fixed services every country agrees that it will use such frequencies only for a period of ten years after which unless it can be proved that the space is available and the continued use of the frequencies is essential the administration will give up further right to the use of these frequencies.
- 6. The principle stated in Document No. 302 should be incorporated in the future procedure for notification and registration.
- 7. The importance of dates in the Radio Frequency Record should be de-emphasised and with this end in view it will be necessary at each conference to give a common date for all registrations, the dates of use being only for information.

B. Broadcasting Services

- 1. The frequency bands of 6, 7 and 9 Mc/s should be split up in order to provide for the national Broadcasting on exclusive basis in each of these bands and the rest of the portion for the international broadcasting on exclusive basis.
- 2. Clear directives to the I.F.R.B. that the frequency management procedure should be operated in such a manner as to evolve ultimately a technically compatible plan from the same.
- 3. A limit should be placed on the number of frequencies used for identical programme.
- 4. When possible the Broadcasting Service should be allowed to share with the Fixed Services on the basis of time sharing.
- 5. Attention of the Plenipotentiary Conference is to be drawn to the fact that deliberate interference exists in the H.F. broadcasting bands in all violation of the Radio Regulations and that some suitable action in this matter is required to be taken.

GENEVA, 1959

Document No. DT 645-E

ADDENDUM No.1

2 November, 1959

SPECIAL GROUP, COMMITTEE 5

AN EXTRACT FROM A STATEMENT MADE BY THE DELEGATE OF THE BELGIAN CONGO:

What we are being called upon to do is to provide clear conclusions proposing simple, definite, and vigorous action.

In any event, the conclusions reached by us must have these characteristics, even though they be later emasculated by Committee 5 (assuming Committee 5 feels they are too radical). That, however, does not concern us in the Special Group.

We must, I think:

- 1. Clear all extraneous assignments from the high-frequency broad-casting bands, and to that end:
 - a) forbid the broadcasting of the same programmes on several frequencies in the same bands (an intolerable abuse);
 - b) forbid the use of the high-frequency broadcasting bands when frequencies in other bands would do (medium frequency or tropical broadcasting);
 - c) forbid wilful interference.
- 2. <u>Use the bands in a proper manner</u>, and to that end give absolute priority in the 6, 7, and 9 Mc/s bands to the broadcasting of national programmes.
- 3. As far as possible expand, certain bands which can be used for broadcasting, and to that end allow time-sharing with the fixed-services for national broadcasting in the 6 and 7 Mc/s bands, whenever feasible.
- 4. Provide an equitable apportionment of allocations for international broadcasting in the bands above 9 Mc/s, and in the bands below that figure, in so far as space is available.

We should recommend that the I.F.R.B. be instructed to take such action without delay.

As regards recommendation 8, on quartz crystals, it would be more realistic, I think, to recommend that each Administration should acquire such equipment and staff as may be needful to adjust its own crystals. Recourse night be had to Technical Assistance where necessary.

ADMINISTRATIVE RADIO COMPERENCE

GENEVA, 1959

Document No. DT 645-E 28 October, 1959

AD HOC GROUP COMMITTEE 5

DRAFT REPORT

of the Ad Hoc Group to Committee 5

Introduction

The Ad Hoc Group was set up at the twelfth meeting of Committee 5, consisting of five members representing the countries having the largest number of frequency assignments recorded in the Master Record with bands allocated exclusively to High Frequency Broadcasting between 5 950 kc/s and 27 500 kc/s, and five members representing the new and developing countries, with Mr. M.N. Mirza as the Chairman. The terms of reference of the Group were as follows:

"To study the practical needs of the new and developing countries, so as, after completing this study, to make recommendations to Committee 5 which will, if necessary, pass those recommendations to other working groups with a view to satisfying these needs."

It might be pointed out that certain discretion in the matter of terms of reference was given to the Ad Hoc Group.

The <u>U.S.S.R.</u>, <u>U.S.A.</u>, <u>United Kingdom</u>, <u>India and France</u> were nominated on the Ad Hoc Group as the five countries having the largest number of frequency assignments recorded in the Master Radio Frequency Record in the exclusive High Frequency Broadcasting Bands. Those elected to represent the new and developing countries were <u>Albania</u>, <u>Belgian Congo</u>, <u>Ethiopia</u>, <u>Pakistan and Paraguay</u>.

In order to carry out its terms of reference, the Group devised a questionnaire (Document No. DT 437 (Rev.)) which was employed by a Sub-Group in interviewing delegates who wished to express their points of view before the Sub-Group. The delegates of the following twenty-one countries were interviewed:

Belgian Congo	Greece	Malaya
Burma	India	Pakistan
Canada	Iran	Paraguay - Bolivia
Ceylon	Israel	Saudi Arabia
Ethiopia	Jordan	Sudan
French Overseas Terr.	Korea	Tunisia
Ghana	Libva	United Arab Republic

A. General Results of the Study

1. Relative importance of the Fixed and Broadcast Services

Delegations from the new and developing countries who were interviewed by the Ad Hoc Group were asked to indicate the relative importance they attached to their fixed and broadcasting services. The responses, while not uniform, indicated that in a very general way the order of importance was as follows:

- 1. International Fixed Services
- 2. National Broadcasting Services
- 3. National Fixed Services
- 4. International Broadcast Services

Some delegations, however, stated that they regarded all of these services to be of equal importance.

2. Comments on I.F.R.B. Draft Plans

Two-thirds of the delegations stated that the I.F.R.B. draft Plans do not satisfy their high frequency broadcasting needs. A very few thought such needs might be satisfied with slight adjustments. Equally few said the Plans satisfied their H.F. Broadcasting needs. The reasons given for rejecting the Plans were those already brought out in other conference groups. However, there was general support for the planned usage of the H.F. Broadcasting bands. It was also suggested by numerous delegations that the Draft Plans be improved or that some procedure for frequency management of these bands be approved, with a view to the ultimate evolution of the planned usage.

3. Indicated Requirements for Broadcast Channel Hours

The delegates were asked to indicate their present minimum requirements for channel hours in the H.F. Broadcasting bands. Owing to the pressure of time, an exhaustive study of these requirements could not be made. Most delegates stated that their H.F. Broadcasting Services suffered severely from interference. The extent of the interference was estimated variously between 50 to 100% of the channel time.

4. Observations of Delegates Regarding H.F. and Tropical Broadcasting.

Most delegates interviewed attributed their difficulties with interference to the state of congestion in the radio frequency spectrum. This resulted in their inability to broadcast on clear channels, necessitated frequent changes in operating frequencies, and, in some cases, required stations to engage in out-of-band operations. Simultaneous

broadcasting on more than one frequency, they said, aggravates this situation still further. A number of delegations recommended that the problem of international interference should be referred, if necessary, to the Plenipotentiary Conference and stated that a solution must be found. A special requirement to cover large national territories with a minimum number of broadcast stations exists in some countries owing to the practical difficulty of providing adequate coverage through the establishment of multiplicity of stations dictated by technical consideration.

Broadcasting in the bands below 5 Mc/s has not been found satisfactory in general. The very high atmospheric noise level in most cases seriously restricts the service areas of such stations.

5. Fixed Services

Most delegates complained that their national and international fixed services were subject to interference. The amount of interference, in general, is greatest in the morning and evening hours. Great concern was expressed over the inability to obtain interference-free frequencies over which to conduct national and international traffic.

Notification and recording procedures under present regulations were often not understood. Many delegates believed that an unfavourable finding of the I.F.R.B. on a frequency notification precluded them from employing the notified frequency, and they therefore attempted to find other frequencies for which favourable findings might be had. Unfavourable findings by the I.F.R.B. on notifications for changes in frequency usage were cited as ranging up to 90%. The I.F.R.B. has not been in a position to assist in finding the clear frequencies needed to satisfy urgent requirements.

Bilateral coordination of frequencies needed for international communications had not generally been employed by many of the countries under study, although some delegations stated that such coordination had been helpful. The formalities prescribed in the regulations for the resolution of interference cases were regarded by some delegations as too long and laborious to accomplish the desired results.

6. Observations of Delegations regarding their Fixed Services

The lack of interference-free frequencies was cited by most delegations as a deterrent to the operation and development of satisfactory national and international fixed services, leading in some cases, to the use of very long international circuits for communication between neighbouring countries. Two delegations pointed to the divided territories of their countries which required them to maintain adequate and reliable

radio communication between the several parts. Some countries have difficulty from interference originating in countries not members of the Union.

7. Situation regarding other services

The Ad Hoc Group was apprised of the difficulty some countries were experiencing in obtaining frequencies for medium wave broadcasts. In general, interference on the medium waves is experienced, especially during the evening hours. Some delegations pointed out that they were forced to increase the power of their m/w transmitters solely to overcome interference in the primary service areas of their stations.

A few delegations indicated that they had requirements for additional frequencies for maritime mobile services, but in general, most delegations stated that no particularly serious problems were being experienced in other than the fixed and high frequency broadcasting services.

8. Requirements for Technical Assistance

The Group was impressed by the fact that in the case of several countries the prime requirement seemed to be for technical assistance in the form of advice on special problems concerning radio propagation, radio frequency engineering, and training facilities to provide essential staff for the radio services. It was obvious to the Group that some countries are not in a position to help themselves in regard to such matters. Several delegations stated that the programmes of their countries for the necessary development of their fixed services were being retarded owing to a lack of suitable frequencies. These delegations were among those which require technical assistance. A few delegations offered to cooperate in an international monitoring programme by providing some of the necessary facilities for monitoring stations. However, they indicated that technical assistance would be required by them to equip and operate such stations. A point was made of the fact that great difficulty is experienced by some countries in obtaining the necessary crystals and the suggestion was offered that regional or sub-regional crystal grinding centres might be set up to assist countries which find themselves in difficulties in this regard.

B. Conclusions

1. Most new and developing countries whose delegations were interviewed attached great importance to their international fixed service and their national broadcast service.

- 2. The I.F.R.B. Draft Plans for the High Frequency Broadcasting bands are considered by most delegations to be unacceptable. However, the concept of making acceptable plans was generally supported.
- 3. In general, the broadcast service of the new and developing countries is unsatisfactory because of serious interference.
- 4. The fixed services of the new and developing countries are of great importance in providing for effective internal communication and vital links with the rest of the world. These fixed services are in many instances subject to harmful interference which has in some cases precluded necessary expansion owing to the inability to obtain interference-free frequencies.
- The procedures set forth in the Radio Regulations for the notification of frequency assignments and the significance of findings made by the I.F.R.B. are not fully understood in several new and developing countries. This results, in some cases, in unnecessary shifting of operating frequencies and a general dissatisfaction with present international procedures for the notification and use of frequencies in the fixed service.
- 6. There is a need to establish a procedure under which the I.F.R.B. could be authorized to suggest suitable frequencies, and adjustments in existing assignments in order to meet the essential needs of the new and developing countries (Document No. 302).
- 7. More effective bilateral coordination between the countries establishing and operating fixed services is necessary if new and developing countries are to improve the fixed services.
- 8. In many of the new and developing countries the use of frequencies below 5 Mc/s is generally unsatisfactory because of a very high level of atmospheric noise,
- 9. The I.T.U. should be equipped to give Technical assistance to new and developing countries in such matters as radio propagation studies for the selection of suitable frequency orders and radio frequency engineering to assist in selecting specific frequencies.

C. Recommendation

The Ad Hoc Group recommends that:

1. Within the framework of the I.T.U. Technical Assistance activities, the I.T.U. establishes a small staff of engineers whose duties would be specifically to provide the necessary information and technical

data including the detailed explanations of the Radio Regulations to the new and developing countries which will permit those countries to choose and obtain proper frequency assignments for their operations.

- 2. All Administrations should make special efforts to cooperate with the new and developing countries by furnishing monitoring information and such technical assistance as may aid these countries in obtaining proper frequency assignments for their operations.
- 2bis. All Administrations should be encouraged to establish at least basic Monitoring facilities. The I.T.U. should be in a position to furnish advice which will assist to this end.
- 3. Because of the congestion in the high frequency spectrum, all Administrations make every practicable effort to conserve spectrum space by:
 - a) reducing the number of their circuits to a minimum,
 - b) employing the latest spectrum conservation techniques in transmitting and receiving,
 - c) employing other means of communication where practicable, e.g., cables, microwave links, etc.,
 - d) by eliminating, as far as possible, simultaneous broadcasts within a band of identical programmes directed to the same area,
 - e) promptly deleting from the Master Frequency Record all unused assignments.
- 4. In cases of interference, all Administrations agree to cooperate at an operating level to assist in clearing this interference (See Article 14 of Radio Regulations).
- 5. Special I.T.U. staff referred to above assist in clearing any interference whenever so requested.
- 6. In the solution of interference problems consideration should be given in applying the procedure laid down in Article 14 to all factors involved and not only to the dates of use.
- 7. On the basis of the information supplied to this group by the delegations which were interviewed, the I.F.R.B. should be requested to comment on the possibility of accommodating, on the basis of the information available to the Board, these stated requirements for channel hours in the absence of approved plans for High Frequency Broadcasting.

8. In the interest of facilitating the procurement of crystals, Administrations should urge their manufacturers, in view of the situation in the Radio spectrum, to make every effort to shorten the time of delivery.

Document No. DT 646-E 29 October, 1959

COMMITTEE 4

AGENDA

Twenty-first Meeting of Committee 4 (Frequency Allocation)

Friday, 30 October, 1959, at 15.00 hours

- 1. Consideration of the Third Report of the Ad Hoc Group on Frequency Allocations for Space Research (Document No. 478).
- 2. Verbal reports by Chairmen of the Working Groups.
- 3. Draft Resolution on the use of the frequency bands 7 100 7 300 kc/s amateur and broadcasting services (Document No. 477).
- 4. Consideration of CORRIGENDUM No. 2 to Document No. 361 First Report by Working Group 4A to Committee 4 (No. 94a of the Radio Regulations).
- 5. Any other business.

Gunnar Pedersen Chairman

WORKING GROUP 4E

AGENDA

2nd meeting of the Ad hoc Working Group 4E

(Concerning frequencies for radioastronomy between 960 - 10 500 Mc/s)

Friday 30 October, 1959, at 9 a.m. - Room G

- 1. Consideration of document No. 452 in regards of frequencies for radioastronomy in the frequency range 2 000 3 000 Mc/s.
- 2. Proposals for frequencies for radioastronomy in the bands around 5 000 Mc/s.
- 3. U.S.S.R. proposals 5322, 5327, 5329 and 5333.

(Documents Nos. 76, 106, 183, 347, 360 and 452, and Proposal No. 4616 refer).

J.H.R. van der Willigen Chairman GENEVA, 1959

Document No. DT 648-E(Rev.)
29 October, 1959

COMMITTEE 6

AGENDA

Tenth Meeting - Committee 6 (Technical)

Friday, 30 October, 1959 at 09.00 hours - Room C

- 1. Summary Record of Fifth Meeting (Document No. 428).
- 2. Summary Record of Sixth Meeting (Document No. 429).
- 3. Definitions (Document No. 481).
- 4. Additional Definitions (Document No. 242 (Rev.), Section 9 (3), page 7).
- 5. Appendix 4 (Document No. 485).
- 6. Revision of Article 16 (Document No. 382 (Rev.).
- 7. Draft Recommendation Frequency Tolerance (Document No. 484).
- 8. Draft Recommendation Designation of Emissions (Document No. DT 624 (Rev.)
- 9. Appendix A (Annex 1 to Document No. DT 640).
- 10. Draft Recommendation Radio propogation, noise and I.F.R.B. Technical Standards (Annex 2 to Document No. DT 640).
- 11. Regulations 81 to 84 (Document No. 488).
- 12. Regulations 232 and 271 (Oral Statement by Chairman of Working Group 6B).
- 13. Requirement for further meeting of Sub-Group 6B2.
- 14. Other matters.

M.N. Mirza Chairman.

Document No. DT 648-E 29 October, 1959

COMMITTEE 6

AGENDA

Tenth Meeting - Committee 6 (Technical)

Friday, 30 October 1959 at 0900 hours - Room C

- 1. Summary Record of Fifth Meeting (Document No. 428).
- 2. Summary Record of Sixth Meeting (Document No. 429).
- 3. Definitions (Document No. 481)
- 4. Report of Working Group 6B (Document No. 485)
- 5. Draft Recommendation Frequency Tolerances (Document No. 484)
- 6. Draft Recommendation Designation of Emissions (Document No. DT 624)
- 7. Additional Definitions (Document No. 242(Rev.), Section 9(3), page 7)
- 8. Other matters.

M. N. Mirza Chairman

ADMINISTRATIVE RADIO CONFERENCE GENEVA; 1959

WORKING GROUP 5A

DRAFT

ARTICLE 11

NOTIFICATION AND RECORDING OF FREQUENCIES IN THE MASTER INTERNATIONAL FREQUENCY REGISTER

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	·	Page
Section II	Notification of new frequency assignments and of changes to assignments entered in the Master International Frequency Register	2
Section III	Procedure for the Examination of Notices	4
Section IV	Recording of Frequency Assignments	10
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Section VI	Modification and Cancellation of Frequency Recordings	.16
Section VII	Studies and Recommendations	17
Section VIII	Availability of Records and Preparation of Special Reports	.18
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ARTICLE 11

Title	MOD	Notification and recording of frequencies in the Master International Frequency Register*
Sect.I	SUP)	
309	SUP)	
310	SUP)	Numbers 309 to 313 were omitted from this draft text on the understanding that the basic principles con-
311	SUP }	tained in these paragraphs might be incorporated in other parts of Article 11.
312	SUP }	
313	SUP)	
Title	MOD	Section II. Notification of new frequency assignments and of changes to assignments entered in the Master International Frequency Register.
314	MOD	§ 2. (1) Any new assignment or any change to an assignment entered in the Master International Frequency Register for any station except a mobile, amateur, or station, shall be notified to the International Frequency Registration Board if the frequency notified / is to be used for international radiocommunication, or / is capable of causing harmful interference to any service of another country, or if it is desired to obtain international recognition of the use of the frequency.
315	MOD	(2) Similar notice shall be given for frequencies to be used in the operation of a particular service by mobile stations communicating with land stations.
315a	*	
316	MOD	(3) Specific frequencies prescribed by the Radio Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2,182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high-frequency bands, etc) shall not be notified to the Board.

^{*} Pending the result of the examination by Group 5B of the question of intership frequencies, in respect of which a proposal has been submitted by Spain and the United Kingdom.

317	MOD	§ 3. Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It should be made not earlier than ninety days before the date it is broughtinto use, but must be made not later than thirty days after it has been brought into use.
318	MOD	§ 4. (1) For any notification under 314 or 315, an individual notice for each new assignment or change to an assignment recorded in the Master International Frequency Register shall be drawn up as prescribed in Appendix 1, which specifies the basic characteristics to be furnished. The notifying Administration is recommended also to supply the additional data called for in that Appendix together with any such further data as it may consider appropriate.
318b	*	
319	SUP	
319a	ADD	(2a) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.
320	MOD	(3) The date of receipt by the Board of a complete notice shall establish the order of its consideration.
3 20a	ADD	§ 4a When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.

^{*} See number 315a

Title	NOC	Section III. Procedure for the Examination of Notices
320b	ADD	§ 4b. Any notice which is incomplete shall be returned by the Board immediately, by airmail, to the notifying Administration with the reasons therefor.
321	MOD	§ 5. Upon receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in a weekly circular sent by airmail to Administrations Members and Associate Members of the Union; this circular shall contain the particulars of all such notices received since the publication of the previous circular.
322	MOD	§ 6. The circular shall constitute the ackrowledge- ment to the notifying Administration of the receipt of a complete notice.
32 2a	ADD*	§ 6a. Complete notices shall be considered by the Board in the order specified in 320 and cannot be postponed unless the Board lacks sufficient data to render a decision in connection therewith. However, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until such time as it has reached a finding with respect to such earlier notice.
323	SUP	
324	SUP	
325	SUP	
326	NOC	§ 7 (1) The Board shall examine each notice with respect to:
327	SUP	
328	SUP	
328a	ADD	a) its conformity with the Convention, and with the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the probability of harmful interference);

^{*} Revised text of 369 (Art. 12)

329	NOC	b) the probability of harmful interference either to any service rendered by a station for which a frequency assignment has already been recorded in the Master International Frequency Register / with a date in the REGISTRATION COLUMN or to a service operating in accordance with the provisions of 328a, on a frequency recorded with a date in the NOTIFICATION COLUMN, but which has not, in fact, caused harmful interference.
330	MOD	§ 7. (2) Where appropriate, the Board shall also examine the notice as regards its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in numbers / 328 a and 329/, except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement.
331	SUP	
332	SUP	
333	MOD	§ 10. Depending upon the findings of the Board subsequent to the examination prescribed in 328a and 329, further action shall be as follows:
334	MOD	§ 10a.(1) Finding favourable with respect to 328a and 329
334a	ADD	(2) The assignment shall be recorded in the Master International Frequency Register, according to the provisions of numbers
334b	ADD	(3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods of solar activity is slightly greater than is considered desirable, a remark shall be included in the Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master International Frequency Register.

^{*} This text would require appropriate amendment in order to be applicable to bands not accorded Registration status by this Conference.

335 SUP 336 MOD § 10b.(1) Finding favourable with respect to 328a but unfavourable with respect to 329 336a ADD (2) The notice shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem. (3) Should the notifying Administration resubmit 337 MOD the notice with modifications which result, after reexamination, in a favourable finding by the Board with respect to 329, the assignment shall be recorded in the Master International Frequency Register according to the provisions of numbers or, as appropriate. The date to be entered in Column / 2.../ shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column. 338 MOD (4) Should the notifying Administration resubmit the notice. either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of 337 to be applied, and should this Administration insist upon reconsideration of this notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master International Frequency Register according to the provisions of numbers or, as appropriate; however, this entry shall

be made only if the notifying Administration informs the Board that the assignment has been in use for at least 60 days without any complaint of harmful interference

Colomn / 2 / shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the

having been received. The date to be entered in

Remarks Column.

338a	ADD	(5) Should the notifying Administration resubmit. the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the resubmitted notice shall be treated under 336a. Should the notice be resubmitted again, the date to be taken into consideration for entry in Column \(\sqrt{2} \)\(\sqrt{\sqrt{2}} \) shall be the date of receipt by the Board of the modified notice.
339	SUP	(Delete heading and first sentence, and trans- fer last sentence to an appropriate section).
339a	ADD	§ 10c.(1) Finding unfavourable with respect to 328a.
339Ъ	ADD	(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of number 88 of these Regulations, it shall be examined immediately with respect to 329, and the provisions of 339c or 339d applied, as appropriate.
33 9c	ADD	(3) If the finding is favourable with respect to 329, the assignment shall be recorded in the Master International Frequency Register, according to the provisions of numbers
339d	ADD	(4) If the finding is unfavourable with respect to 329, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master International Frequency Register, according to the provisions of numbers
339e	ADD .	(5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of number 88 of these Regulations, it shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339f ADD

(6) If the notifying Administration resubmits the notice with modifications which result after re-examination in a favourable finding by the Board with respect to 328a, the notice shall be examined with respect to 329 and treated subsequently according to the provisions of 334a or 334b or to those of 336a as appropriate. The date to be taken into consideration for entry in Column $\sqrt{2}$... shall be the date of receipt by the Board of this modified notice.

339g ADD

(7) In the case where the notifying Administration, however, insists upon reconsideration of the notice and the Board's finding remains unchanged, the notice shall be examined with respect to 329, and the provisions of 339h or 339i applied, as appropriate.

339h ADD

339i ADD

339j ADD (ex 346) § 10d.(1) Change to basic characteristics of frequency assignments already recorded in the Master International Frequency Register.

339k ADD

(2) A notice of a change to basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Columns 3, 4a and 11 of the Master International Frequency Register), shall be examined by the Board according to 328a and 329, and the provisions of numbers 334a to 339i inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.

33911 ADD

(3) However, in case of a change to basic characteristics of an assignment (except a change of frequency which exceeds half of the frequency band originally assigned) which is in conformity with 328a, should the Board reach a favourable finding as a consequence of the examination with respect to 329, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original dates in Column / 2 /. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

339 la ADD

§ 10e. In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than 180 days after the date of its return by the Board shall be considered as a new notice.

Title	NOC	Section IV - Recording of Frequency Assignments		
339m	G GA	§ 10f.(1) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 328a and 329, it shall be entered provisionally in the Master International Frequency Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.		
339n	VDD	(2) If the Board receives confirmation from the notifying Administration of the effective date of bringing into use within the period of thirty days after the projected date of bringing into use, the special symbol shall be deleted from the Remarks Column.		
3390	DD	(3) If the Board does not receive this confirmation within the period referred to in No. 339n, the entry concerned shall be cancelled.		
339p	ADD	(4) The provisions of Nos. 339m to 339o do not apply to frequency assignments which are completely in conformity with the allotment plans appearing in Appendices to these Regulations; such frequency assignments shall be entered in the Master International Frequency Register on receipt of the notice by the Board.		
339q	ADD	§ 10g. The procedure for recording frequency assignments in the Master International Frequency Register which shall be applied according to the frequency bands and services concerned, is described in numbers 339ra to 339y		
339ra	ADD	\$ 10h.(1) Frequency bands: \[\begin{array}{cccccccccccccccccccccccccccccccccccc		

^{*} Special provisions will be taken for the band 535 - 1,605 kc/s in Region 2.

339rb ADD (2) The provisions of numbers 339rc and 339rd shall apply. 339rc ADD (3) Any assignment to which the provisions of numbers 334a, 334b or 337 apply shall be recorded in the Master International Frequency Register with the relevant date entered in the REGISTRATION COLUMN. 339rd ADD Any assignment to which the provisions of numbers 338, 339c, 339d, 339h or 339i apply shall be recorded in the Master International Frequency Register with the relevant date entered in the NOTIFICATION COLUMN. 339sa ADD g 10i.(1) Frequency bands allocated exclusively to the Maritime Mobile Service between 4,000 kc/s and 27,500 kc/s for radiotelephone coast stations. ADD 339sb (2) The provisions of numbers 339sc to 339s shall apply. (The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B3 are known) 339ta ADD § 10j (1) Frequency bands allocated exclusively to the Aeronautical Mobile R Service between 2,850 kc/s and 27,500 kc/s. 339tb ADD (2) The provisions of numbers 339tc to 339t shall apply. (The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B2 are known) 339ua ADD Frequency bands allocated exclusively to the Aeronautical Mobile OR Service between 2,850 kc/s and 27,500 kc/s. 339ub ADD (2) The provisions of numbers 339uc to 339u shall apply. (The corresponding provisions will be decided upon when the results of the work of Sub-

Working Group 5B2 are known)

339va	ADD	§ 10 1. (1) Frequency bands allocated exclusively to the Broadcasting Service between 5.950 kc/s and 27.500 kc/s
339vb	ADD	(2) The provisions of numbers 339vc to 339v shall apply.
		(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B4 are known)
339wa	ADD	§ 10m. (1) Frequency bands between 3,950 kc/s (4,000 kc/s in Region 2) and 27,500 kc/s other than those allocated exclusively to the Aeronautical Mobile Service, Maritime Mobile Service or Broadcasting Service
339wb	ADD	(2) The provisions of numbers 339wc to 339we shall apply.
339w c	ADD	(3) Any assignment to which the provisions of numbers 334a, 334b or 337 apply shall be recorded in the Master International Frequency Register with:
339wd	ADD	(4) Any assignment to which the provisions of number 338 apply shall be recorded in the Master International Frequency Register with:
		a special symbol showing that the assignment has been recorded on the insistence of the notifying Administration.
339we	ADD	(5) Any assignment to which the provisions of numbers 339c, 339d, 339h or 339i apply shall be recorded in the Master International Frequency Register with:

339 x a	ADD	§ 10n. (1) Frequency bands between 27.5 Mc/s andMc/s allocated
		- to the fixed service, in frequency bands
		- to the broadcasting service. in frequency bands
339xb	ADD	(2) The provisions of numbers 339xc to 339x shall apply.
		(The corresponding provisions will be decided upon when the results of the work of Committee 4 are known)
339ya	ADD	§ 10c. (1) Frequency bands above 27.5 Mc/s other than those listed in 339xa*
339yb	ADD	(2) The provisions of numbers 339yc to 339y shall apply.

^{*} Sub-Working Group 5Al considers that:

^{1.} in a case where an Administration finds it necessary to notify a frequency assignment in these bands, the notice must be complete;

^{2.} technical examination by the I.F.R.B. is not necessary;

^{3.} the provisions to be laid down for recording in the Master International Frequency Register will be specified taking into account the provisions adopted for other bands.

Title (MOD)* Section V. Review of Findings (1) The review of a finding by the Board may be under-340 MOD 8 11. taken: - at the request of the notifying Administration. - at the request of any other Administration interested in the question, but only on the grounds of actual harmful interference, - on the initiative of the Board itself when it considers this is justified. 341 SUP 342 MOD (3) The Board, in the light of all the data at its disposal, shall review the matter, taking into account numbers 328a and 329, and shall render the appropriate finding, informing the notifying Administration prior to promulgation of its finding and any recording action. If a review of an unfavourable finding has been 342a ADD requested by the notifying Administration on the grounds of special assistance to meet an urgent and essential need in a case where harmful interference has been experienced, the Board shall consult immediately the Administrations concerned and shall make such suggestions as will facilitate the operation of the assignment of the Administration which asked for special assistance; such amendments as result from this consultation shall be made to the Master International Frequency Register. 343 MOD § 12. (1) After actual use for a reasonable period of an assignment which has been entered in the Master International Frequency Register on the insistence of the notifying Administration, following an unfavourable finding with respect to 329, this Administration may request the Board to review the finding. Thereupon the Board shall review the matter, first having consulted the Administrations concerned. 344 MOD (2) If the finding of the Board is then favourable, it shall enter in the Master International Frequency Register

the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

^{*} This drafting amendment applies to the French and Spanish texts only.

- 345 MOD
- (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry. If the Board makes a finding that harmful interference actually exists, it shall be "prima facie" evidence that the operation of the station is in violation of these Regulations.
- 345a ADD § 12a. In the case where a frequency assignment has been entered in the Master International Frequency Register on the insistence of the notifying Administration, following an unfavourable finding with respect to 329, and where the Board finds, after having consulted the Administrations concerned, that harmful interference has not, in fact, occurred, although the assignment has been in actual use, according to the notified characteristics, during a period covering all the phases of a solar cycle in which the assignment could be normally used, the Board shall amend the entry in the Master International Frequency Register in such a way that it shall appear in the future as if the original finding had been

favourable with respect to 329.

346 SUP (See 339j to 3391)

Title MOD

Section VI. Modification and cancellation of frequency recordings

346a ADD (ex 350) § 13a. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying Administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master International Frequency Register.

347 MOD

§ 14. Whenever it appears to the Board from the information available that a recorded assignment

- has not begun regular operation within two years following the date of receipt by the Board of the first notice;
- is not being used in accordance with the basic characteristics notified;
- is being used in contravention of the Convention or the Regulations;

the Board shall consult the notifying Administration and subject to its agreement, either cancel the entry or suitably modify it.

347a ADD

§ 14a. If, in connection with an enquiry by the Board under number 347, the notifying Administration has failed to supply the Board within \(\frac{90}{20} \) days with the necessary or pertinent information, the Board shall disregard the assignment concerned when acting upon any later notice until such time as it has been informed that the assignment is being used as notified or until it has received the information required. The Board shall enter suitable remarks in Column 13 of the Master International Frequency Register, to indicate the situation.

347b ADD

§ 14b. As far as possible, the Board shall maintain the entries in the Master International Frequency Register under continuous review for those frequency bands for which technical examination by the Board is prescribed in this Article, excepting those in conformity with the allotment plans contained in Appendices with a view to determining whether or not the assignments are being used in accordance with the notified basic characteristics, and shall take action under 347.

348 SUP

349 SUP

350 SUP (See 346a)

351 SUP

Title	e NCC	Section VII. Studies and Recommend	<u>ations</u>
352	MOD	§ 17. If it is requested by any Administr particularly by an Administration in need of speance, and if the circumstances appear to warrant Board, using such means at its disposal as are in the circumstances, shall conduct a study of problems of frequency utilization:	ecial assist- t, the appropriate
353	(MOD)	 a) in cases arising under 336 as to a alternative frequency assignment to probable harmful interference; 	
354	MOD	 in cases where a need arises for additional frequency assignments within a specific portion of the radio spectrum; 	
354a	ADD	c) in cases where, due to harmful inter or more frequencies of the same meg- are being used alternatively to mail cation on a circuit requiring only of that order; and	acycle order ntain communi-
355	MOD	d) in cases of alleged contravention of vance of these Regulations, or of he interference,	
355a	ADD	and shall prepare and forward to the Administra a report containing its findings and recommenda solution of the problem.	
356	MOD	§ 19. If the Board finds, in particular following a request from an Administration in need of special assistance, that, within a specific frequency range, a change in the basic characteristics of one or more assignments in full conformity with the provisions of 328a will:	
357	(MOD)	a) accommodate a new assignment, or	
358	(MOD)	 facilitate the solution of a problem interference; or 	n of harmful
359	MOD	c) otherwise facilitate the more effect particular portion of the radio spec	

and if such change is acceptable to the Administration or Administrations concerned, the change in basic characteristics shall be recorded in the Master International Frequency Register without change in the original date or dates.

359a ADD § 19a. In a case where, as a result of a study, the Board submits to one ore more Administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these Administrations within a period of thirty days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the Administrations which did not answer. If it was the requesting Administration which failed to answer within this period, the Board shall close the study.

Title MOD Section VIII. Availability of Records and Preparation of Special Reports

- MOD § 20. The Board shall promulgate to Administrations its findings and reasons therefor, together with all changes made to the Master International Frequency Register, through the weekly circular referred to in 321, which shall be published in the working languages of the Union as defined in the Convention. In carrying out the various procedures stipulated in this Article, the Board shall use this circular as a means of communication with Administrations to the maximum extent practicable.
- 360a ADD § 20a. The Board shall inform Administrations, at appropriate intervals, of the cases of special assistance which were studied under numbers 342a and 352 to 359a inclusive of these Regulations.
- 361 (MOD) § 21. In case a Member or Associate Member of the Union avails itself of the provisions of Article 25 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

Annex: 1

ANNEX

The two following paragraphs should be included in Article 11, as near as possible to number 338

- In the case of a frequency assignment recorded in accordance with the provisions of 338, the Board shall investigate the assignments that contributed to the unfavourable finding, using such means at its disposal as are appropriate in the circumstances, and, with the agreement of the notifying Administration concerned, shall effect any cancellations or amendments found to be necessary in order that the recordings in the Master International Frequency Register shall reflect the actual If, as a result, the Board is able to reach a favourfrequency usage. able finding with respect to 329 with regard to any assignment recorded under the provisions of 338, the appropriate changes shall be made in respect of the entry of that assignment in the Master International Frequency Register. If the finding remains unfavourable, the Board shall enter suitable remarks in the Master International Frequency Register for the entry or entries concerned which describe the situation as it has been found by the Board to exist.
- B. Moreover, if, as a result of investigations under A it is confirmed that an assignment recorded /according to No. 272 of the E.A.R.C. Agreement/is being used in accordance with the notified basic characteristics, a /Remark/shall be entered in the Master International Frequency Register to indicate this fact.

GENEVE, 1959

SOUS-COMMISSION 7B SUB-COMMITTEE 7B SUBCOMISION 7B

ORDRE DU JOUR

19ème séance - Sous-Commission 7B

(Procédure radiotélegraphique et radiotélephonique dans le service mobile)

Vendredi 30 octobre 1959 - La séance suivra celle de la Commission 7, à la Salle D

- Approbation du compte rendu de la quatorziéne séance (Document Nº 427). 1.
- Approbation des textes annexés au compte rendu de la quatorzième séance (Document Nº 427).
- 3. Divers.

AGENDA

Nineteenth meeting of Sub-Committee 7B

(Radiotelegraph and Radiotelephone Procedure in the Mobile Service)

Friday, 30 October 1959 - To follow Committee 7 in Room D

- 1. Approval of Summary Record of Fourtcenth Meeting (Document No. 427)
- Approval of texts in Annex to Summary Record of Fourteenth Meeting -Document No. 427
- 3. Any other business.

ORDEN DEL DÍA

19. a sesión de la Subcomisión 7B

(Procedimientos radiotelegráfico y radiotelefónico en los servicios móviles) Viernes, 30 octubre - Después de la Comisión 7 - Sala D

- Informe de la 14.ª sesión (Documento N.º 427)
- Aprobación del anexo al informe de la 14.ª sesión (Documento N.º 427)
- 3. Otros asuntos.

Le Président The Chairman El Presidente, R.M. Billington.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No DT 651-FES 29 octobre 1959

GROUPE DE TRAVAIL 7F WORKING GROUP 7F GRUPO DE TRABAJO 7F

ORDRE DU JOUR AGENDA ORDEN DEL DIA

Groupe de travail 7F - Lundi, 2 novembre 1959 Meeting on Monday, 2 November 1959 Grupo de trabajo 7F - Lunes, 2 de noviembre de 1959

- 1. Mandat du Groupe de travail Terms of reference of the Working Group Mandato del Grupo de trabajo
- 2. Propositions concernant ce mandat et ordre selon laquelle elles seront étudiées. Proposals concerning the terms of reference and order in which they shall be studied

Proposiciones relacionadas con este mandato y orden de estudio de las mismas.

Numero du RR	Proposition No	Page du canier de
		propositions ou NO du document
Number of RR	Proposal No.	Page of the set of proposals or
		No. of document
Número del RR	Proposición N.º	Página del cuaderno de proposiciones o
	-	N.O del documento

	<u>Article 15</u> <u>Articulo 15</u>	
392	1343 1344	319 Rev. 1 319 Rev. 1
	5451	Doc. Nº 191
393	1345	320
394	1346	320
	Appendice 2 Appendix 2 Apéndice 2	
₩.w	4536	679.1
_	4537	680 Rev. 1
ma	2705	680 Rev. 1
No.	2706	680 Rev. 1
Na	4538	680,1
	2707	681

Document No DT 651-FES Page 2

0

		Page du cahier de
Numéro du RR	Proposition N	propositions ou NO du document
Number of RR	Proposal No.	Page of the set of proposals or No. of document
Número del RR	Proposición N	Pagina del cuaderno de proposiciones N.º del documento
	Ar	ticle 42
		ticulo 42
1000	Pas de proposition	656
	No proposal	·
	Ninguna	
1001	11	6 56
1002	11	657 Rev. 1
1003	2660	657 Rev. 1
	2661	657 Rev. 1
	2662	657 Rev. 1
	2663	657 Rev. 1
7.004	4703	657 Rev. 1
1004	2664	657 Rev. 1 and 65 8
1005	Pas de proposition	658 ³
	No proposal Ninguna	
1006	1111guria 2665	658
1000	2666	658
1007		658
2001	Pas de proposition	0)0
	Winguna Ar	cicle 44
1016	Ar.	<u>iculo 44</u> 659.1
1017	2669	660 Rev. 1
	5482	Doc. Nº 221
1018	4527	660 Rev. 1
	2670	660 Rev. 1
•	5483	Doc. Nº 221
1019	Pas de propositions	0+
à, to, a	No proposals	660 Rev. 1 and 661 Rev. 1
1024	Ninguna	. y
Titre section		
Title of section	•	661 Rev. 1
Titulo de la se		
1025	2672	661 Rev. 1
1026	4528	661 Rev. 1
1027	Pas de propositions	661 Rev. 1 ănd 661.1
et, and, y 1028	No proposals	·
Titre section	Ningunas	
Title of section	on 2673	661.1
Titulo de la se	• •	007.1
1029	Pas de propositions	662 Rev. 1
à, to, a		COL MOVE I
1031	Ninguna	
1032	4529	662 Rev. 1
-	2674	662 Rev. 1

Document N^O DT 651-FES Page 3

0

Numéro du RR	Proposition	l NO	proposition	ge du cahier de ons ou N ^O du document
Number of RR	Proposal No		No.	ne set of proposals or of document
Numero del RR	Proposición	N.º		derno de proposiciones del documento
		Article 44 Articulo 4		
1033	Pas de proposit	cion		662 Rev. 1
Nouvelle sectio	Ninguna			
New section	 2675			662 Rev. 1
Nueva sección	2.0 ()			002 110 7. 1
1,40,4 50001011			. -	
		Appendice Appendix 1 Apéndice 1	.5	
Titre Title TItulo	3034			810
TI 0010	3035			810
Winds	3036			811
e _{tro}	3037			811
tas .	3038			811
	30 39			812 Rev. 1
eca.	3040			812 Rev. 1
	4594			812 Rev. 1
exa	3041			812 Rev. 1 a 814
-	3042 3043			814 and 815 815 ^y
	, , ,	Appendice 3 Appendice 3	5	
6:3 Pro	3049 4 7 24			820 Rev. 2 820 Rev. 2
		Appendice 8 Appendix 8 Apéndice 8	3	
essi.	2830			733
Section I	2831			733
Sección I		•		
	2832 2833			733 733
	2834			733
	2835			734
	2836			734
	2837			734
	2838			734
	2839			734
	2840			734

Numéro du RR	Proposition N^{O}	Page du cahier de propositions ou N ^O du document
Number of RR	Proposal No.	Page of the set of proposals or No. of document
Número del RR	Proposición N.º	Página del cuaderno de proposiciones o N.º del documento
	Appendice Appendix Apéndice	8
	2841 2842 2843 4712	734 735 Rev. 1 735 Rev. 1 735 Rev. 1
Section II Sección II	2844 2845	735 Rev. 1 735.1 et 736
Section III Sección III	2846	736 grad 737
Section IV	2847 2848 2849 2850 2851 2852 2853 2854 2855 2174 2856	737 737 737 737 737 738 et 738 Rev. 1 738 Rev. 1 739 et 534 and 535 739
Sección IV	2857 2858 2859	739 739 739 739
Section V Sección V	2860 2861 2862	739 739 740

- 3. Examen des propositions présentées en 2 Examination of proposals submitted in 2 Examen de las proposiciones enumeradas en el punto 2
- 4. Divers
 Any other business
 Otros asuntos

Le Président Chairman El Presidente

Carlos de Mesquita

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 652-FES 29 octobre 1959

GROUPE DE TRAVAIL 4D WORKING GROUP 4D GRUPO DE TRABAJO 4D

ORDRE DU JOUR

Douzième séance - Groupe de travail 4 D

(Tableau de répartition des bandes de fréquences 27,5-960 Mc/s)
Vendredi 30 octobre 1959, à 9 heures environ - Salle F

- 1. Suite de l'examen des attributions dans les bandes 132-137 Mc/s
- 2. Suite de l'examen des attributions dans les bandes 41-68 Mc/s, Région 1
- 3. Divers.

AGENDA

Twelfth Meeting of Working Group 4D

(Table of Frequency Allocations 27,5-960 Mc/s)
Friday, 30 October, 1959, at 9 a.m. (approx.) - Room F

- 1. Further consideration of allocations in the bands 132-137 Mc/s
- 2. Further consideration of allocations in the bands 41-68 Mc/s in Region 1
- 3. Other business.

ORDEN DEL DÍA

12.ª sesión del Grupo de trabajo 4D

(Cuadro de distribución de las bandas de frecuencias: 27,5-960 Mc/s) Viernes, 30 de octubre de 1959, a las 9 de la mañana (aprox.) - Sala F

- Continuación del examen de las atribuciones en las bandas comprendidas entre 132 y 137 Mc/s
- 2. Continuación del examen de las atribuciones en las bandas comprendidas entre 41 y 68 Mc/s (Región 1)
- 3. Otros asuntos.

Le Président The Chairman El Presidente

C.W. Sowton

CONFERENCE ADMINISTRATIVE DES. RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 653-FES 29 octobre 1959

GROUPE SPECIAL
COMMISSION 5

AD HOC GROUP
COMMITTEE 5

GRUPO ESPECIAL
COMISION 5

ORDRE DU JOUR

Quatrième séance du Groupe spécial - Commission 5 Vendredi 30 octobre 1959, à 15 heures - Salle E

- 1. Examen du Document Nº DT 620
- 2. Examen du projet de rapport à la Commission 5 (Document Nº DT 645)
- 3. Divers.

AGENDA

Fourth Meeting of the Ad Hoc Group - Committee 5 Friday, 30 October, 1959, at 3 p.m. - Room E

- 1. Consideration of the Document No. DT 620
- 2. Consideration of the Draft Report for Committee 5 (Document No. DT 645)
- 3. Any other business.

ORDEN DEL DÍA

4.ª sesión del Grupo especial - Comisión 5

Viernes, 30 de octubre de 1959, a las 3 de la tarde - Sala E

- 1. Examen del Documento N.º DT 620
- 2. Proyecto de Informe de la Comisión 5 (Documento N.º DT 645)
- 3. Otros asuntos.

Le Président du Groupe Spécial Chairman Ad Hoc Group El Presidente del Grupo especial

M.N. MIRZA

Document No. DT 654-E Rev.

ADDENDUM No. 1
16 November 1959

WORKING GROUP 4E

ADDENDUM

Draft First Report by Working Group 4E to Committee 4

Add the following sub-paragraph c) to paragraph 5.9 on page 4:

"5.9c) The Working Group decided to recommend that the following bands be assigned for space research, subject to no interference being caused to the other authorized services:

1 700-1 710 Mc/s 2 290-2 300 Mc/s."

N.B.: The Italian Delegation was against assignment of the band 2 290-2 300 $M_{\rm C}/s$, reserving the right to revert to the matter in Committee 4.

Replace paragraph 5.22 on page 6 by the following:

- "5.22 The Delegation of the United States proposed that, in addition, the band 8 300-8 400 Mc/s be assigned for space research, provided no interference was caused to other authorized services. The Italian Delegation, supported by other Delegations, proposed the band 8 400-8 500 Mc/s. After a lengthy debate, in which no agreement was reached, it was decided to take a vote. Question: Acceptance of the United States motion."
- In favour: (9) Federal Republic of Germany
 The United Kingdom of Great Britain
 and Northern Ireland
 New Zealand
 Brazil
 Japan
 Argentina
 Australia
 Canada
 United States

(5) Against: Italy

France Belgium

Czechoslovakia

Union of Soviet Socialist Republics

Abstentions: (10) People's Republic of Bulgaria

Denmark India

The Netherlands

The Federal People's Republic of Yugoslavia

Norway Sweden Switzerland Austria Paraguay

Second question: Acceptance of the Italian motion.

In favour: (12) Sweden

Switzerland

The Netherlands

Portugal

Japan

Italy

France

India

Denmark Australia

Austria

Belgium

(0) Against: None

Abstentions: (14) The United States

The People's Republic of Bulgaria

Canada

Argentina

Indonesia

Norway

New Zealand

The Federal People's Republic of Yugoslavia

The Federal Republic of Germany

The Union of Soviet Socialist Republics

Czechoslovakia

Paraguay

The United Kingdom of Great Britain and Northern Ireland Brazil

Accordingly, it was decided to refer this matter to Committee 4. The data given above may help the Committee to give a ruling.

> G.C. Braga Chairman, Working Group 4E

Document No. DT 654-E (Rev.) 6 November 1959

WORKING GROUP 4E

DRAFT REPORT

by Working Group 4E to Committee 4

- 1. At its eleventh meeting Committee 4 set up Working Group 4E with the following terms of reference: "To examine the proposals and questions relating to frequency band allocation between 960 and 10 500 Mc/s".
- 2. Meetings were held with the delegations of the following countries taking part:

Argentina
Australia
Austria
Belgium
Brazil
Bulgaria
Canada
China
Denmark
United States
Finland
France
Indonesia
Italy

Japan
Norway
New Zealand
Pakistan
Paraguay
Netherlands
Portugal
Federal Republic of Germany
United Kingdom of Great Britain

and Northern Ireland
Sweden
Switzerland
Union of South Africa
Union of Soviet Socialist

Republics

Representatives of C.O.S.P.A.R., I.A.U. and W.M.O. took part as observers.

3. The Working Groups set up by the Group together with their terms of reference and the names of the respective Chairmen are given below:

Working Group 4El - Frequency bands between 1 215 and 1 300 Mc/s and 2 900 and 4 200 Mc/s, Chairman:
Mr. S.M. Myers (United States)

Working Group 4E2 - Frequency bands between 1 300 and 1 700 Mc/s and 5 000 and 5 850 Mc/s, Chairman:

Mr. M. Chef (France)

Working Group 4E3 - Frequency bands between 1 700 and 2 700 Mc/s and 8 500 nd 10 500 Mc/s, Chairman:

Mr. E.W. Anderson (Australia)

Group 4E Ad Hoc - Examination of proposals relating to radioastronomy in the frequency band 960 -10 500 Mc/s, Chairman: Mr. J.H.R. van der Willigen (Netherlands) At the first meeting, and at the invitation of the Chairman, the <u>Delegate of Paraguay</u> nominated Mr. Walter García Ríos to act as Reporter to the Group. The Delegations of France (Mr. M. Chef), United States (Mr. S.M. Myers), the Union of South Africa (Mr. D.H. Mills) and Argentina (Mr. A.O. Planas) agreed to help with the drafting of the Report.

Mr. B. Iastrebov, Member of the I.F.R.B., and Messrs Arnold A. Matthey and V. Smirnov, of the I.F.R.B. Secretariat were invited to assist the Group.

- 4. With regard to the amendments to be made to the Table of Frequency Allocations, the Working Group issued the recommendations set out in the Annex to this document for the bands comprised between 960 and 10 500 Mc/s.
- 5. The following comments, observations and reservations with regard to the bands studied were made:
 - 960 1215 Mc/s band

No observations.

5.2 <u>1 215 - 1 300 Mc/s band</u>

- a) The <u>Yugoslav Delegation</u> felt that the sharing of this band would not benefit amateurs and consequently reserved the right to raise the matter again in Committee 4.
- b) The U.S.S.R. Delegation reserved the right to make its views known in Committee 4 in respect of:
 - 1) Whether the services in the note for the U.S.S.R. are substitutes for, or additions to those shown in the Table;
 - 2) The radiolocation service and the priority accorded to it.
- c) In addition, the request by the countries sponsors of Document No. 329 should not be overlooked.
- d) The <u>United States Delegation</u> questioned the inclusion of the countries mentioned in Document No. 329.

5.3 1 300 - 1 350 Mc/s band

The <u>United States Delegation</u> reserved the right to discuss footnete 104c) proposed by the U.S.S.R. which had reserved the right to raise the matter again.

5.4 <u>1 350 - 1 400 Mc/s band</u>

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

$\frac{1400 - 1427 \text{ Mc/s band}}{}$

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

5.6 <u>1 427 - 1 535 Mc/s band</u>

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

5.7 1535 - 1660 Mc/s band

(Ex DT 432 page 4 104-XI)

- a) See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).
- b) The <u>United Kingdom of Great Britain and Northern Ireland Delegation</u> reserved its attitude with regard to footnote 104g) by Austria.
- c) The <u>United States and the United Kingdom Delegations</u> reserved their position with regard to this band, **since** the footnotes did not ensure priority for the aeronautical radionavigation service.
- d) The <u>U.S.S.R. Delegation</u> likewise made reservations with regard to this band since it did not approve world-wide distribution for the aeronautical radionavigation service.

5.8 <u>1 660 - 1 700 Mc/s band</u>

No comments.

5.9 <u>1 700 - 2 300 Mc/s band</u>

a) As regards the use of the fixed services in the 1 700 - 2 300 Mc/s band, the Group agreed to recommend that the relevant Committee (probably Sub-Committee 6B) should be asked to examine the following point:

Resolution No. 55 of the International Radio Consultative Committee (Los Angeles 1959) informs the A.R.C. of the channel arrangements and the central frequencies for wide-band radio relay systems mentioned in various International Radio Consultative Committee recommendations.

In the course of discussion on the allocation of the 1 700 - 2 300 Mc/s frequency band, it was agreed that the most suitable place for mentioning the channel arrangement and the central frequencies was No. 396 of the RR and not the Table of Frequency Allocation.

- b) The <u>United States Delegate</u> stated that if the majority in the Group were in favour of the recommendation, he would raise no objection; he could not, however, support it since a recommendation of that nature would be incompatible, in most cases, with the RR, because in many of the plans, based on the channels recommended by the International Radio Consultative Committee, radio channels within or outside the band limits established by the RR were being proposed in contravention of No. 89 of the RR.
- 5.10 2 300 2 450 Mc/s band

The <u>U.S.S.R.</u> Delegation did not agree with the radiolocation allocation in Region 1.

5.11 2450 - 2550 Mc/s band

The <u>U.S.S.R.</u> <u>Delegation</u> did not agree with the radiolocation allocation in Region 1.

- 4E3 5.12 2 550 2 700 Mc/s band
- 4E3 5.13
 - 5.14 2 700 2 900 Mc/s band

No comments.

5.15 2 900 - 3 100 Mc/s band

No comments.

- 5.16 3 100 3 300 Mc/s band
- DT 509, a) The <u>Delegate of the People's Republic of Bulgaria</u> asked that page 3, the countries mentioned in Document No. 329 should be included in the note 4 note 109b).

- b) The <u>United States Delegate</u> queries the inclusion of all the countries mentioned in Document No. 329.
- DT 509, c) The <u>U.S.S.R.</u> <u>Delegate</u> reserved the right to say later, in page 3, connection with note 109b) whether the services were to be additional to, note 4 or alternative to, that mentioned in the Table.

5.17 3300 - 4200 Mc/s band

- DT 509,
 page 4

 the Union of Soviet Socialist Republics Delegation, asked that, in notes
 110a) and 110f), all the countries listed in Document No. 329 be included.
 - b) The <u>United States Delegate</u> reserved the right to revert to the Bulgarian request in Committee 4.
- DT 509, c) The <u>U.S.S.R. Delegate</u> reserved the right to say, in connection page 4 with notes 110a) and 110f), whether the services were to be additional to, or alternative to, those shown in the Table.

5.18 $\frac{4\ 200 - 4\ 400\ \text{Mc/s}}{}$ band

- a) The <u>Delegate of the United Kingdom of Great Britain and Northern Ireland</u> reserved the right to discuss the note lllb) by the Delegations of Norway and Sweden, about use of auxiliary wide-band channels.
- b) The <u>Delegations of the United States</u> and <u>Greece</u> reserved the right to give their views on the note llla) proposed by the U.S.S.R.
- c) The <u>Delegate of the People's Republic of Bulgaria</u> asked for inclusion of the countries mentioned in Document No. 329, in the Soviet note 111a).
- d) The Group agreed that No. 260 of the Redio Regulations should be deleted.

.5.19 4 400 - 5 000 Mc/s band

The <u>Delegate of the People's Republic of Bulgaria</u> asked that the countries mentioned in Document No. 329 be mentioned in the Soviet note 111c).

5.20 5 000 - 5 850 Mc/s band

- DT 519; a) The <u>U.S.S.R. Delegate</u> reserved the right to revert to allocation page 4 of bands to radiolocation and to note 112b), in connection with its category, whether additional or alternative.
 - b) The <u>Delegate of Czechoslovákia</u> asked that the countries mentioned in Document No. 329 be included in the Soviet note 112b).

5.21 <u>5 850 - 5 925 Mc/s band</u>

No comments.

5.22 5 925 - 8 500 Mc/s band

No comments.

5.23 General Comments

- 5.24 With regard to the assignment of a 1 Mc/s band for space research in the 1 400 1 427 Mc/s band, in connection with the recommendation made in the Annex to Document No. 397 (second report), the Group could reach no favourable agreement, since radio astronomy has specific requirements in this band. Most people were of opinion that an assignment in adjacent bands should be recommended.
- The Group wishes to invite the attention of Committee 4 to the following understanding in the use of rule 7(0) of Document No. 242 (Rev.) which applies throughout the draft new Table attached hereto. An allocation made in a footnote "additionally" or "alternatively" means that this allocation has equal status with the primary or full-status allocation in the Table for the band concerned. Furthermore, that a footnote providing for an "allocation alternatively" to a single service means that the band is allocated exclusively to this service with equal status to the primary or full-status allocation for the band concerned whether or not the service in question also appears in the Table.

Rapporteur W. García Ríos G.C. Braga Chairman, Sub-Committee 4E

Annex: 1

A N N E X

TABLE OF FREQUENCY ALLOCATIONS

960-10 500 Mc/s

			Allocation to services			
		Frequency band Mc/s	World-wide		Regional	
•	·		Region 1	Region 2	Region 3	
Table	MOD	960 - 1 215	Aeronauti- cal radio- navigation 100a)	·		

214a ADD

100a) The frequency bands 960-1 215 Mc/s, 1 535-1 660 Mc/s, 4 200-4 400 Mc/s, 5 000-5 250 Mc/s and 15 400-15 700 Mc/s are reserved throughout the world for the use and development of airborne electronic aids and associated ground installations.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	1 215-1 300	a)Radio- loca- tion * b) Amateur lol) lola) lolb)			
215	MOD	101) In Alb Czechoslovakia a Mc/s is allocate	and the U.S.S	S.R., the fre	quency band	1 215-1 300
215a	ADD	101a) In Pra 1 215-1 300 Mc/s navigation servi	is allocate			
215b	ADD	101b) In Jap 1 300 Mc/s is al services		zerland, the itionally to		

^{*} The rediclocation service is the primary service. The anateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region l	Region 2	Region 3		
Table	MOD	1 300+1 350	a) Aero- nautical radio- naviga- tion * b) Radio- location 104a) 104b) 104c)					
216	SUP	102)				•		
217	SUP	103)						
218	SUP	104)			•			
218a	ADD	the aeronautic ground based r transponders w	the aeronautical radionavigation service is restricted to ground based radars and in the future to associated airborne transponders which transmit only on frequencies in this band and only when actuated by the radars also operating in this					
218b	ADD	104b) In N 1 300-1 350 Mc service.	orway and the /s is allocate					
218c	ADD	104c) In A Czechoslovakia 1 550 Mc/s is and aeronautic	allocated alte	.R., the fre	quency band the fixed,	1 300-		

^{*} Aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	1 350-1 400	Radio- location 104c) 104d) 104e)		•	
Table	MOD	1 400-1 427	Radio- astro- nomy 104c)			
Table	MOD	1 427-1 535		1 427-1 535 a)Fixed b)Mobile except aero- nauti- cal mobile 104c)	1 427-1 435 a)Fixed b)Mobile 1 435-1 535 a)Mobile* b)Fixed	1 427-1 535 a)Fixed b)Mobile

218d ADD 104d) In Austria, Denmark, France, Italy, Norway, the Nether-lands, Portugal, the Federal Republic of Germany, Sweden and Switzerland, the frequency band 1 350-1 400 Mc/s is allocated additionally to the fixed and mobile services.

218e ADD 104e) In Region 2, the existing installations of the radionavigation service may continue to operate temporarily in the frequency band 1 350-1 400 Mc/s.

^{*} In Region 2, the mobile service is the primary service. The fixed service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

•	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	1 535~1 660	Aero- nautical radio- naviga- tion 100a) 104c) 104f) 104g) 104h)			

214a ADD 100a) (See the frequency band 960-1 215 Mc/s)

218f ADD 104f) In Italy, the frequency band 1 535-1 600 Mc/s is allocated alternatively to the fixed service. However, when the aeronautical radionavigation systems in the frequency 1 535-1 600 Mc/s have developed further Italy will examine the extension of the use of this band in Italy to the aeronautical radionavigation service.

218g ADD 104g) In Austria, the frequency band 1 535-1 660 Mc/s is allocated additionally to the fixed and mobile service.

218h ADD 104h) In Albania, Bulgaria and the U.S.S.R., the frequency band 1 550-1 660 Mc/s is allocated alternatively to the fixed service.

- -	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	1 660 –1 700		a) Meteorolog- ical aids b) Fixed 104j) 104k)	a) Meteoro —logical aids b) Fixed c) Mobile	

- 218j ADD 104j) In France, Italy, Morocco and the United Kingdom, the frequency band 1660-1 700 Mc/s is allocated additionally to the aeronautical radionavigation service.
- 218k ADD 104k) In Austria and Finland, the frequency band 1 660-1 700 Mc/s is allocated on a primary basis to the meteorological aids service.
- 218 1 ADD 104 1) In Region 2, the frequency band 1 660-1 670 Mc/s is allocated to the meteorological aids service, until operations are transferred to the frequency band 1 670-1 700 Mc/s or another band allocated to the meteorological aids service.

	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	1 700–2 300		a) Fixed * b) Mobile 105a)	a) Fixed b) Mobile	a) Fixed b) Mobile

219 STP 105)

219a ADD 105a) In France and Switzerland, the frequency band 1 700-2 300 Mc/s is allocated elteratively to the fixed and mobile services except aeronautical mobile service.

^{*} The fixed service is the primary service. The mobile service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	2 300-2 450 106)		a) Fixed * b) Amateur c) Mobile d) Radiolo- cation 106a)	a) Radiolo- cation ** b) Amateur c) Fixed d) Mobile	a) Radiolo- cation * b) Amateur c) Fixed d) Mobile

220 ? 106) (I.S.M. ?) (Working Group 4E3)

220a ADD 106a) In the United Kingdom, the frequency band 2 300-2 450 Mc/s is allocated on a primary basis to the radiolocation service and on a secondary basis to the amateur, fixed and mobile services.

220b ADD 106b) In Japan, the frequency band 2 300-2 450 Mc/s is allocated alternatively to the fixed, mobile and radiolocation services.

^{*} In Region 1, the fixed service is the primary service. The amateur, mabile and radiologation services are secondary services as defined in Document No. 242 (Rev.) paragraph 7...

^{**} In Regions 2 and 3, the radiolocation service is the primary service. The amateur, fixed and mobile services are secondary services as defined in Document No. 242 (Rev.) paragraph 7A.

	Mc/s	World-wide	Region l	Region 2	Region 3
Table MOD	2 450–2 550		a) Fixed * b) Mobile * c) Radiolo- cation 107a)	a) Fixed b) Mobile c) Radiolo- cation	a) Fixed b) Mobile c) Radiolo -cation

221 SUP 107)

221a ADD 107a) In the United Kingdom, the frequency band 2450-2 550 Mc/s is allocated on a primary basis to the radiolocation service and on a secondary basis to the fixed and mobile services.

^{*} In Region 1, the fixed and mobile services are primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

Table MOD

Mc/s	World-wide	Region l	Region 2	Region 3
2 550-2 700	a) Fixed b) Mobile			

(Working Group 4E3).

•	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	2 700-2 900	a)Aero- nautical radio- naviga- tion * b)Radiolo- cation 108a)			

222 SUP 108)

ADD 108a) The use of the frequency band 2 700-2 900 Mc/s by the aeronautical radionavigation service is restricted to ground-based radars and in the future to associated airborne transponders which transmit only on frequencies in this band and only when actuated by the radars also operating in this band.

222b ADD 108b) In the frequency band 2 700-2 900 Mc/s the meteorological aids service (ground-based radars) is on an equal footing with the aeronautical radionavigation service.

^{*} The aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	2 900–3 100	a) Radio— naviga— tion *109a) b) Radio— location			

223 SUP 109)

223a ADD 109a) In the aeronautical radionavigation service, the use of the frequency band 2 900-3 100 Mc/s is limited to ground based radars

^{*} The radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

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		Mc/s	World-wide	Rogion 1	Region 2	Region 3	
Table	MOD	3 100- 3 300	Radiolocation 109b) 109c) 109d)				
223b	ADD	Czechoslovakia	s is allocated	., the frequ	oncy band		
223 c	ADD	109c) In Sweden and Switzerland, the frequency band 3 100-3 300 Mc/s is allocated additionally to the radionavigation service.					
223d	ADD	109d) In the frequency band 3 100-3 300 Mc/s existing racons and shipborne radars in merchant ships are permitted to operate within the frequency band 3 100-3 266 Mc/s.					
224	SUP	110)		•			

⁽Radio astronomy 3 165-3 195 Mc/s - U.S.S.R. - Special Group).

Table MOD

Mc/s World	wide Region 1	Region 2	Region 3
3 300-4 200	3 300-3 400 Radioloca- tion 110a) 110b) 110c)	3 300-3 500 a) Radio- location* b) Amateur	3 300-3 500 a) Radio- location* b) Amateur llOd)

- 224a ADD 110a) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 3 300-3 400 Mc/s is allocated alternatively to the radionavigation service.
- 224b ADD 110b) In the Netherlands and Portugal, the frequency band 3 300-3 400 Mc/s is allocated alternatively to the fixed, mobile and radionavigation services.
- 224c ADD 110c) In Austria and Sweden, the frequency band 3 300-3 400 Mc/s is allocated additionally to the fixed and mobile services.
- 224d ADD 110d) In Japan, the frequency band 3 300-3 500 Mc/s is allocated additionally to the fixed and mobile services.

^{*} In Regions 2 and 3, the radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	3 300-4 200 (cont'd)	,	3 400-3 600 a) Fixed b) Mobile c) Radio- location 110e) 110f) 110g) 110j) 110k)	a) Fixed b) Mobile c) Radio- loca- tion	3 3 30-3 500 (cont'd) 3 500-3 700 a) Radio- location* b) Fixed c) Mobile 110h) 110i)
				a) Fixed** b) Mobile llOj)	3 700-4 200 a) Fixed b) Mobile	3 700-4 200 a) Fixed b) Mobile 1101)
22 4 e		110e) In Aust 3 600 Mc/s is all	ria and Switz ocated additi			

- In Albania, Bulgaria, Hungary, Poland, Roumania, 224f ADD Czechoslovakia and the U.S.S.R. the frequency band 3 400-3 600 Mc/s is allocated exclusively to the fixed service.
- ADD In France and the Netherlands, the frequency band 3 400-224g; 3 600 Mc/s is allocated on a primary basis to the fixed and mobile services.
- In China and Japan, the frequency band 3 500-3 700 Mc/s 224h ADD is allocated on a primary basis to the fixed and mobile services.
- 224i ADD In Japan, in the frequency band 3 620-3 700 Mc/s, the radiolocation service is excluded.
- In the United Kingdom, the frequency band 3 400-3 770 224j ADD Mc/s is allocated alternatively to the radiolocation service.
- ADD In the United Kingdom, the frequency 3 400-3 475 Mc/s 224k is also allocated on a secondary basis to the amateur service.
- In Australia, the frequency band 3 700-3 770 Mc/s is 2241 ADD allocated additionally to the radiolocation service.

In Region 3, the radiolocation service is the primary service. The fixed and mobile services are secondary services as defined in Document No. 242 (Rev.) paragraph 7A.

In Region 1, the fixed service is the primary service. The mobile service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	4 200-4 400	Aeronautical radio- navigation 110a) 111) 111a) 111b)			
21 4 a	ADD	100a) (See t	the frequency b	and 960 – 1 21	5 Mc/s)	
225	MOD	111) In Chi allocated on a s	ina, the freque secondary basis			s is also
225a	ADD	llla) In Alk Czechoslovakia a Mc/s is allocate		., the frequ	ency band 4 2	200-4 400
2 25b	ADD	lllb) In Nor				00-4 210

	Mc/s	World-wide	Region l	Region 2	Region 3
Table MOD	4 400-5 000	a) Fixed b) Mobile lllc)			

225c ADD lllc) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 4 800-4 810 Mc/s is also allocated on a secondary basis to the radio-astronomy service. (Subject to results of discussion in 4E Special Group on radio-astronomy).

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	ADD	5 000–5 250	Aeronautical Radionavigation 100a)			
Table	MOD	5 250-5 350	Radiolocation 112a) 112b)			
Table	MOD	5 350-5 460	a) Aeronautical radionaviga- tion 112c)			
			b) Radiolocation 112b)			

214a ADD 100a) (See the frequency band 960-1 215 Mc/s

226 SUP 112)

226a ADD 112a) In Austria, Sweden and Switzerland, the frequency band 5 250-5 350 Mc/s is allocated additionally to the radionavigation service.

226b ADD 112b) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 5 250 - 5 650 Mc/s is allocated alternatively to the radionavigation service

226c ADD 112c) The use of the frequency band 5 350-5 470 Mc/s by the aeronautical radionavigation services is limited to airborne radar and associated airborne beacons.

The aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

•	•	Mc/s	World-wide	Region 1 Region 2	Region 3
Pable .	MOD	5 460 - 5 470	a)Radio- navigation * 112c) b)Radio- location 112b) 112d)		
Table	MOD .	5 470-5 650	a)Maritime radio- navigation ** b)Radiolocation 112b) 112d) 112e)		-
2 2 6d				requency band 5 460-5 ronautical radionaviga	

e.

227 SUP 113)

¹¹²e) In the frequency band 5 600-5 650 Mc/s, the meteorological aids service (ground-based radars) is on an equal foot-226e ADD ing with the maritime radionavigation service.

The radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

The maritime radionavigation service is the primary service. radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

	Mc/s	World-wide	Region l	Region 2	Region 3
Table MOD	5 650-5 850	a) Radio+ location * b) Amateur 113a) 113b) 113c) 113d) 11			

- 227a ADD 113a) In Albania, Bulgaria, Hungrary, Poland Roumania,
 Czechoslovakia, and the U.S.S.R., the frequency band 5 6505 800 Mc/s is allocated alternatively to the amateur service,
 and the frequency band 5 800-5 850 Mc/s is allocated alternatively
 to the fixed and mobile services.
- 227b ADD 113b) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 5 800-5 815 Mc/s is allocated additionally to the radio-astronomy service.
- 227c ADD 113c) In the Federal Republic of Germany, the frequency band 5 775-5 850 Mc/s is allocated alternatively to the fixed service.
- 227d ADD 113d) In Indonesia and Japan, the frequency band 5 650-5 850 Mc/s is allocated additionally to the fixed and mobile services.
- 227e ADD 113e) In Belgium, France, Norway, Portugal and Switzerland, the frequency 5 750 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 75 Mc/s of that frequency.
- MOD 114) The frequency 5 850 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 75 mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

^{*} The radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 71.

Mc/s World-wide Region 2 Region 1 Region 3 5 850-5 925 a) Redio-Table MOD a) Fixed a) Fixed ** b) Mobile location * b) Mobile ** b) Amateur c) Radio-114) location

^{*} In Region 2, the radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A

^{**} In Region 3, the fixed and mobile services are primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

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		Mc/s	World-wide	Region l	Region 2	Region 3		
Table	MOD	5 925-8 500	a) Fixed b) Mobile 115) 115a) 115b)					
229	SUP	115)						
2 29a	229a ADD 115a) In Italy, the frequency band 6 275-6 575 Mc/s is alloca additionally to the radiolocation service.							
229ზ	ADD	115b) In th				8 250-8 500 Mc,		

GENEVA, 1959

Document No. DT 654-E 24 October, 1959

WORKING GROUP 4E

DRAFT REPORT

by Working Group 4E to Committee 4

- 1. At its eleventh meeting Committee 4 set up Working Group 4E with the following terms of reference: "To examine the proposals and questions relating to frequency band allocation between 960 and 10 500 Mc/s.
- 2. Meetings were held with the delegations of the following countries taking part:

Argentina
Australia
Austria
Belgium
Brazil
Bulgaria
Canada
China
Denmark
United States
Finland
France
Indonesia

Italy

Japan
Norway
New Zealand
Pakistan
Paraguay
Netherlands
Portugal
Federal Republic of Germany
United Kingdom of Great Britain
and Northern Ireland
Sweden
Switzerland
Union of South Africa
Union of Soviet Socialist

Representatives of C.O.S.P.A.R., I.A.V. and W.M.O. took part as observers.

3. The Working Groups set up by the Group together with their terms of reference and the names of the respective Chairmen are given below:

Working Group 4El - Frequency bands between 1 215 and 1 300 Mc/s and 2 900 and 4 200 Mc/s, Chairman:
Mr. S.M. Myers (United States).

Republics

Working Group 4E2 - Frequency bands between 1 300 and 1 700 Mc/s and 5 000 and 5 850 Mc/s, Chairman:
Mr. M. Chef (France).

Working Group 4E3 - Frequency bands between 1 700 and 2 700 Mc/s and 8 500 and 10 500 Mc/s, Chairman:

Mr. E.W. Anderson (Australia)

Group 4E-ad hoc - Examination of proposals relating to radio-astronomy in the frequency band 960 - 10 500 Mc/s, Chairman: Mr. J.H.R. van der Willigen (Netherlands).

At the first meeting, and at the invitation of the Chairman, the <u>Delegation of Paraguay</u> nominated Mr. Walter García Ríos to act as Reporter to the Group. The Delegations of France (Mr. M. Chef), United States (Mr. S.M. Myers), and the Union of South Africa (Mr. D.H. Mills), were responsible respectively for the French and English versions of the Report, while the Delegation of Argentine (Mr. A.O. Planas) helped with the drafting of the text in Spanish.

- Mr. B. Iastrebov, Member of the I.F.R.B., and Messrs. Arnold A. Matthey and V. Smirnov, of the I.F.R.B. Secretariat were present at the meetings of the Group and took part in its work and in the preparation of the relevant documents.
- 4. With regard to the amendments to be made to the Table of Frequency Allocations, the Working Group issued the recommendations set out in the Annex to this document for the bands comprised between 960 and 10 500 Mc/s.
- 5. The following comments, observations and reservations with regard to the bands studied were made:
 - 5.1 960 1 215 Mc/s band

No observations.

1.215 - 1.300 Mc/s band

- a) The Yugoslav Delegation felt that the sharing of this band would not benefit amateurs and consequently reserved the right to raise the matter again in Committee 4.
- b) The U.S.S.R. Delegation reserved the right to make its views known in Committee 4 in respect of:
 - 1) Whether the services in the note for the U.S.S.R. are substitutes for, or additions to those shown in the Table;
 - 2) The radiolocation service and the priority accorded to it.
- c) In addition, the request by the countries sponsors of Document No. 329 should not be overlooked.
- d) The <u>United States Delegation</u> questioned the inclusion of the countries mentioned in Document No. 239.

1300 - 1350 Mc/s band

The Delegation of the United States reserved the right to discuss footnote 104c) proposed by the U.S.S.R. which had reserved the right to raise the matter again.

5.4 1 350 - 1 400 Mc/s band

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

5.5 1 400 - 1 427 band

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

5.6 1 427 - 1 535 Mc/s band

See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).

5.7 1 535 - 1 660 Mc/s band

(DT 432 page 4 104-X1)

- a) See United States observation on footnote 104c), proposed by the U.S.S.R. (5.3 above).
- b) The <u>United Kingdom of Great Britain and Northern Ireland Delagation</u> reserved its attitude with regard to footnote 218j) by Austria.
- c) The <u>United States and the United Kingdom Delegations</u> reserved their position with regard to this band, since the footnotes did not ensure priority for the aeronautical radionavigation service.
- d) The <u>U.S.S.R. Delegation</u> likewise made resorvations with regard to this band since it did not approve world-wide distribution for the aeronautical radionavigation service.

5.8 <u>1 660 - 1 700 Mc/s band</u>

No comments.

5.9 1.700 - 2.300 Mc/s band

a) As regards the use of the fixed services in the 1 700 - 2 300 Mc/s band, the Group agreed to recommend that the relevant Committee (probably Sub-Committee 6B) should be asked to examine the following point:

Resolution No. 55 of the International Radio Consultative Committee (Los Angeles 1959) informs the A.R.C. of the channel arrangements and the central frequencies for narrow-band radio relay systems mentioned in various International Radio Consultative Committee recommendations.

In the course of discussion on the allocation of the 1 700 - 2 300 Mc/s frequency band, it was agreed that the most suitable place for mentioning the channel arrangement and the central frequencies was No. 396 of the RR and not the Table of Frequency Allocation.

b) The <u>United States Delegate</u> stated that if the majority in the Group were in favour of the recommendation, he would raise no objection; he could not, however, support it since a recommendation of that nature would be incompatible, in most cases, with the RR, because in many of the plans, based on the channels recommended by the International Radio Consultative Committee, radio channels within or outside the band limits established by the RR were being proposed in contravention of No. 89 of the RR.

5.10 2 300 - 2 450 Mc/s band

The U.S.S.R. Delegation did not agree with the radiolocation allocation to Region 1.

5.11 2 450 - 2 550 Mc/s band

The U.S.S.R. Delegation did not agree with the radiolocation allocation to Region 1.

4E3 5.12 2 550 - 2 700 Mc/s band

4E3 5.13

- 5.14 <u>2 700 2 900 Mc/s band</u> No comments.
- 5.15 <u>2 900 3 100 Mc/s band</u>
 No comments.
- 5.16 3 100 3 300 Mc/s band

DT 509, a) The <u>Delegate of the People's Republic of Bulgaria asked that</u> page 3, the countries mentioned in Document No. 329 should be included in the note 4 note...

- b) The <u>Delegate of the United States</u> queries the inclusion of all the countries mentioned in Document No. 329.
- DT 509, c) The <u>Delegate of the Union of Soviet Socialist Republics</u> reserved page 3, the right to say later, in connection with note... whether the services note 4 were to be additional to or substitutive of, that mentioned in the Table.

5.17 $3\,300 - 4\,200\,\text{Mc/s}$ band

DT 509, page 4

- a) The Delegate of the Poople's Republic of Bulgaria, supported by the Union of Soviet Socialist Republics Delegation, asked that, in notes 110a) and 110e), all the countries listed in Document No. 329 be included.
- b) The <u>Delegate of the United States</u> reserved the right to revert to the Bulgarian request in Committee 4.

DT 509, page 4

c) The Delegate of the Union of Soviet Socialist Republics reserved the right to say whether, in connection with notes 110a) and 110e), the services were to be additional to, or substitutive of, those shown in the Table.

5.18 4 200 - 4 400 Mc/s band

- a) The <u>Delegate of the United Kingdom of Great Britain and Northern Ireland</u> reserved the right to discuss the note by the Delegations of Norway and Sweden, about use of auxiliary wide-band channels.
- b) The Delegations of the United States and Greece reserved the right to give their views on the note proposed by the Union of Soviet Socialist Republics.
- c) The <u>Delegate of the People's Republic of Bulgaria</u> asked for inclusion of the countries mentioned in Document No. 329, in the Soviet note.

5.19 4 400 - 5 000 Mc/s band

The <u>Delegate of the People's Republic of Bulgaria</u> proposed that the countries mentioned in Document No. 329 be mentioned in the Soviet note.

5.20 5.000 - 5.850 Mc/s band

DT 509, page 4

The <u>Delegate of the Union of Soviet Socialist Republics</u> reserved the right to revert to allocation of bands to radiolocation and to note 112b), in connection with the type of service (substitutive).

5.21 5 850 - 5 925 Mc/s band

The <u>Delegate of Czechoslovakia</u> asked that the countries mentioned in Document No. 329 be included in the Soviet note.

5.22 5.925 - 8.500 Mc/s band

No comments.

5.23 General Comments

5.24 With regard to the assignment of a little 1 Mc/s band for special research in the 1 400 - 1 427 Mc/s band, in connection with the recommendation made in the Annex to Document No. 397 (second report), the Group could reach no favourable agreement, since radio astronomy has specific requirements in this band. Most people were of opinion that an assignment in adjacent bands should be recommended.

Reporter

Chairman, Sub-Committee 4E,

W. Garcia Rios

G.C. Braga

Annex: 1

Λ N N E X

TABLE OF FREQUENCY ALLOCATIONS

960 - 10 500 Mc/s

		Allocation to services			
	Frequency band Mc/s	World-wide	Regional		
			Region l	Region 2	Region 3
Table MOD	960~1 215	Aeronauti- cal radio- navigation 100a)			

214a ADD

100a). The frequency bands 960-1 215, 1 535-1 660, 4 200-4 400, 5 000-5 250 and 15 400-15 500 Mc/s are reserved throughout the world for the use and development of airborne electronic aids working in collaboration with ground installations.

Annex to Document No. DT 654-E Page 8

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	1 215-1 300	a)Radio- loca- tion * b) Amateur 101) 101a) 101b)			
215	MOD	101) In Alba Czechoslovakia a Mc/s is allocate	nd the U.S.S		quen c y band	1 215-1 300
215a	ADD	101a) In Fra 1 215-1 300 Mc/s navigation servi	is allocate			
215b	ADD	101b) In Japa 1 300 mc/s is all services		erland, the tionally to		

^{*} The radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD .	1 300-1 350	a)Aero- nautical radio- naviga- tion * b)Radio- location 104a) 104b) 104c)			
216	SUP	102)				
217	SUP	103)				
218	SUP	104)				
218a	ADD	104a) In the permitted by the ground based rad transponders whi and only when ac	ars and in t ch transmit	l radionavig he future fo only on freq	ation servic r associated uencies in t	ce are for lairborne this band
218b	VDD	104b) In Nor 1 300-1 350 Mc/s service.	way and the is allocate			
218c	ADD	104c) In Alb the Ukraine, Rou frequency band 1 the fixed, mobil	300-1 550 M	oslovakia an c/s is alloc	d the U.S.S. ated alterna	R., the tively to

^{*} Aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242(Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	1 350-1 400		Radio- location 104c) 104d)	a)Radio- loca- tion b)Aero- nauti- cal radio- navi- gation	Radio- location
Table	MOD	1400-1 427	Radio- astro- nomy 104c)			
Table	MOD	1 427-1 535		1 427- 1 435 a)Fixed b)Mobile	1 427- 1 435 a)Fixed b)Mobile	1 427- 1 535 a)Fixed b)Mobile
				except aero- nauti- cal mobile 104c) 104 e)	1 435- 1 535 a)Mobile* b)Fixed	

218d ADD 104d) In Austria, Denmark, France, Italy, Norway, the Netherlands, Portugal, the Federal Republic of Germany, Sweden and Switzerland, the frequency band 1 350-1 400 Mc/s is allocated additionally to the fixed and mobile services.

218e ADD 104e) In Albania, Bielorussia, Bulgaria, Hungary, Poland, the Ukraine, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 1 427-1 535 Mc/s is allocated additionally to the aeronautical mobile service.

^{*} In Region 2, the mobile service is the primary service. The fixed service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	1 535-1 660	Aero- nautical radio- naviga- tion 100a) 104¢) 104f) 104g) 104h)			
214a	ADD	100a) (See th	ne frequency	band 960 -1	215 Mc/s)	
218f	ADD	104f) When the frequency 1 535-1 examine the extender aeronautical radio	nsion of the	ve developed use of this	d further I	taly will
218g	ADD	104g) In Austallocated addition	tria, the fre			
2 1 8h	ADD	104h) In Albaband 1 550-1 660 service.	ania, Bulgari Mc/s is allo			

Concerning 218f ADD 104f) Alternative text: "In Italy, the frequency band 1 535-1 600 Mc/s is allocated alternatively to the fixed service."

- -	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	1 660-1 700			a) Meteoro —logical aids b) Fixed c) Mobile	a)Meteor -olog- ical aids b)Fixed: c)Mobile
	·		104j) 104k)	104 1)	

- 218j ADD 104j) In France, Italy, Morocco and the United Kingdom, the frequency band 1660-1 700 Mc/s is allocated additionally to the aeronautical radionavigation service.
- 218k ADD 104k) In Austria and Finland, the frequency band 1 660-1 700 Mc/s is allocated on a primary basis to the meteorological aids service.
- 2181 ADD 1041) In Region 2, the frequency band 1 660- 1670 Mc/s is allocated temporarily to the meteorological aids service, until operations are transferred to the frequency band 1 670-1 700 Mc/s or another band allocated to the meteorological aids service.

	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	1 700–2 300		a) Fixed * b) Mobile 105a)	a) Fixed b) Mobile	a) Fixed b) Mobile

219 SUP 105)

219a ADD 105a) In France and Switzerland, the frequency band 1 700-2 300 Mc/s is allocated on a primary basis to the fixed and mobile services except aeronautical mobile service.

^{*} The fixed service is the primary service. The mobile service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region l	Region 2	Region 3
Table	MOD	2 3 00 - 2 450		b) Amateur c) Mobile	cation **	a) Radiolo- cation * b) Amateur c) Fixed d) Mobile
220	?	106) (I.S.	.M. ?) (Workin	ng Group 4E3))	
220a	ADD	106a) In this allocated on				300-2 450 Mc/s service.

220b

ADD

services.

In Japan, the frequency band 2 300-2 450 Mc/s is

allocated on a primary basis to the fixed, mobile and radiolocation

^{*} In Region 1, the fixed service is the primary service. The amateur, mobile and radiolocation services are secondary services as defined in Document No. 242 (Rev.) paragraph 7A.

^{**} In Regions 2 and 3, the radiolocation service is the primary service. The amateur, fixed and mobile services are secondary services as defined in Document No. 242 (Rev.) paragraph 7A.

Mc/s Region 2 Region 3 World-wide Region 1 Table MOD 2 450-2 550 a) Fixed * a) Fixed a) Fixed b) Mobile * b) Mobile b) Mobile c) Radioloc) Radioloc) Radiolo cation cation -cation

221 SUP 107)

221a ADD 107a) In the United Kingdom, the frequency band 2450-2 550 Mc/s is allocated on the primary basis to the radiolocation service.

^{*} In Region 1, the fixed and mobile services are primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

Table MOD

Mc/s	World-wide	Region l	Region 2	Region 3
2 550–2 700	a) Fixed b) Mobile			

(Working Group 4E3).

	Mc/s	World-wide	Region l	Region 2	Region 3
Table MOD	2 700-2 900	a) Aero- nautical radio- naviga- tion * b) Radiolo- cation 108a)			

222 SUP 108)

222a ADD 108a) (Text to be confirmed in Working Group 4E)

^{*} The aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

	Mc/s	World-wide	Region 1	Region 2	Region 3
Table MOD	2 900–3 100	a) Radio- naviga- tion 109a) b) Radio- location		,	

223 SUP 109)

223a ADD 109a) In the radionavigation service, the use of the frequency band 2 900-3 100 Mc/s for aeronautical radionavigation purposes is limited to ground based radars.

^{*} The radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	3 100-3 300	Radioloca- tion 109b) 109c) 109d)			
22 3 b	ADD	109b) In Albania, Bielorussia, Bulgaria, Hungary, Poland, th Ukraine, Roumania, Czecholslovakia and the U.S.S.R., the frequen band 3 100-3 300 Mc/s is allocated alternatively to the radio-navigation service.				
2 2 3c	ADD	109c) In Swe 3 300 Mc/s is all service.	eden and Switze: llocated additio	,	- •	
223 d	ADD	109d) In the and shipborne rewithin the frequency		nt ships are	permitted t	
224	SUP	110)				

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	3 300 - 4 200		3 300- 3 400 Radio- location 110a) 110b)	3 300- 3 500 a) Radio- location* b) Amateur	3 300- 3 500 a) Amateur b) Radio- location 110d)

(Radio astronomy 3 165-3 195 Mc/s - U.S.S.R. - Special Group).

- 224a ADD 110a) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 3 300-3 400 Mc/s is allocated alternatively to the radionavigation service.
- 224b ADD 110b) In the Netherlands and Portugal, the frequency band 3 300-3 400 Mc/s is allocated alternatively to the fixed, mobile and radionavigation services.
- 224c ADD 110c) In Austria and Sweden, the frequency band 3 300-3 400 Mc/s is allocated additionally to the fixed and mobile services.
- 224d ADD 110d) In Japan, the frequency band 3 300-3 500 Mc/s is allocated additionally to the fixed and mobile services.

^{*} In Region 2, the radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD	MOD 3 300-4 200 3 400- 3 600 (cont'd) a) Fixed b) Mobil c) Radio	3 600 a) Fixed b) Mobile c) Radio- location 110e) 110f) 110g) 110j) 110k)	3 400-3 500 (cont'd) 3 500- 3 700 a) Fixed b) Mobile c) Radio- loca- tion	3 400- 3 500 (cont'd) 3 500- 3 700 a) Radio- location* b) Fixed c) Mobile llOh) llOi)	
				4 200 a) Fixed** b) Mobile 110j)	3 700- 4 200 a) Fixed b) Mobile	3 700- 4 200 a) Fixed b) Mobile 1101)
22 4 e	ADD	110e) In Austria and Switzerland, the frequency band 3 400-3 600 Mc/s is allocated additionally to the radionavigation service				
22 4f	ADD	•	ania, Bulgaria	a, Hungary, F	oland, Rouma	nia,

- e.
- Czechoslovakia and the U.S.S.R. the frequency band 3 400.3 600 Mc/s is allocated exclusively to the fixed service.
- ADD 224g, In France and the Netherlands, the frequency band 3 400-3 600 Mc/s is allocated on a primary basis to the fixed and mobile services.
- 224h ADD In China and Japan, the frequency band 3 500-3 700 Mc/s is allocated on a primary basis to the fixed and mobile services.
- 110i) 224i ADD In Japan, in the frequency band 3 620-3 700 Mc/s, the radiolocation service is excluded.
- In the United Kingdom, the frequency band 3 400-3 770 224j ADD Mc/s is allocated alternatively to the radiolocation service.
- In the United Kingdom, the frequency 3 400-3 475 Mc/s 224k ADDis also allocated on a secondary basis to the amateur service.
- ADD In Australia, the frequency band 3 700-3 770 Mc/s is 2241 allocated additionally to the radiolocation service.

In Region 3, the radiolocation service is the primary service. The fixed and mobile services are secondary services as defined in Document No. 242 (Rev.) paragraph 7A

In Region 1, the fixed service is the primary service. mobile service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

			i '	i		1	
		Mc/s	World-wide	Region 1	Region 2	Region 3	
Table	MOD	4 200-4 400	Aeronautical radio- navigation 110a) 111) 111a) 111b)				
214a	ADD	100a) (See t	the frequency b	and 960-1 21	.5 Mc/s)		
225	MOD	111) In China, the frequency band 4 200-4 400 Mc/s is also allocated on a secondary basis to the fixed service.					
2 25 a	ADD	111a) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 4 200-4 400 Mc/s is allocated additionally to the fixed and mobile services.					
225b	ADD	111b) In Nor is also allocate Recommendation N		, the freque to the fixe	ency band 4 20 d service (Re	00-4 210 Mc/s ef. C.C.I.R.	

	•	Mc/s	World-wide	Region 1	Region 2	i
Table	MOD	4 400-5 000	a) Fixed b) Mobile lllc)			

225c ADD 111c) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 4 800-4 810 Mc/s is also allocated on a secondary basis to the radio-astronomy service. (Subject to results of discussion in 4E Special Group on radio-astronomy).

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	ADĐ	5 000-5 250	Aeronautical Radionavigation 100a)		·	
Table	MOD	5 250 – 5 3 50	Radiolocation 112a) 112b)			
Table	MOD	5 350 – 5 460	a) Aeronautical radio- navigation * 112c) b) Radiolocation 112b)			

214a ADD, 100a) (See the frequency band 960-1 215 Mc/s

226 SUP **1**12)

226a ADD 112a) In Austria, Sweden and Switzerland, the frequency band 5 250-5 350 Mc/s is also allocated additionally to the radionavigation service.

226b ADD 112b) In Albania, Bulgaria, Hungary, Poland Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 5 250 - 5 650 Mc/s is allocated alternatively to the radionavigation service

226c ADD 112c) The frequency band 5 350-5 470 Mc/s may be used by aeronautical radionavigation services only for airborne radar and beacons.

The aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	Mod	5 460–5 600	a) Maritime radio- navigation * b) Radiolocation 112b) 112c) 112d)			
Table	MOD	5 600-5 650	a) Meteoro- logical aids ** b) Maritime Radio- navigation ** c) Radiolocation ll2b) ll2d) ll2e)		,	

226d ADD 112d) In Switzerland, the frequency band 5 460-5 650 Mc/s is allocated additionally to the aeronautical radionavigation service

226e ADD 112e) (Text to be confirmed in WG 4E)

227 SUP 113)

^{*} The maritime radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A

^{**} The meteorological aids and maritime radionavigation services are primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

:	Mc/s	World-wide	Region l	Region 2	Region 3
Table MOD	5 650-5 850	a) Radio- location * b) Amateur 113a) 113b) 113c) 113d) 113e)			

- 227a ADD 113a) In Albania, Bulgaria, Hungrary, Poland Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 5 650-5 800 Mc/s is allocated on a primary basis to the amateur service, and the frequency band 5 800-5 850 Mc/s is allocated alternatively to the fixed and mobile services.
- 227b ADD 113b) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency band 5 800-5 815 Mc/s is allocated additionally to radioastronomy.
- 227c ADD 113c) In the Federal Republic of Germany, the frequency band 5 775-5 850 Mc/s is allocated alternatively to the fixed service.
- 227d ADD 113d) In Indonesia and Japan, the frequency band 5 650-5 850 Mc/s is allocated additionally to the fixed and mobile services.
- 227e ADD 113e) In Belgium, France, Norway, Portugal and Switzerland, the frequency 5 750 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 75 Mc/s of that frequency.

^{*} The radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A

		Mc/s	World-wide	Region 1	Region 2	Region 3
Table	MOD .	5 850 – 5 925		a) Fixed b) Mobile	a) Radio- location * b) Amateur	a) Fixed ** b) Mobile ** c) Radio- location
228	?	114) (I.S.	M. ?) (W.G 4	E3)		100201011

^{*} In Region 2, the radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A

^{**} In Region 3, the fixed and mobile services are primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Mc/s	World-wide	Region 1	Region 2	Region 3	
ble	MOD	5 925 - 8 500	a) Fixed b) Mobile 115) 115a) 115b)				
9	MOD		e U.S.S.R., t				

- allocated additionally to the meteorological aids service.
- 115a) In Italy, the frequency band 6 275-6 575 Mc/s is allocated additionally to the radiolocation service. ADD 9a
- 115b) In the United Kingdom, the frequency band 8 250-8 500 Mc/s is allocated additionally to the radiolocation service. · ADD 9b

GENEVE, 1959

COMMISSION 4 COMMITTEE 4 COMISION 4

PROJET DE CORRIGENDUM Nº 2 AU DOCUMENT Nº 361 "Premier Rapport du Groupe de travail 4A à la Commission 4"

94a ADD Texte inchangé

Outre les dispositions qu'ils ont la faculté de prendre aux termes du Numéro 92, deux ou plusieurs pays Membres ou Membres associés de l'Union peuvent coordonner l'utilisation de fréquences distinctes dans toutes les bandes de fréquences visées à l'Article 5 avant la notification des changements dans l'utilisation des fréquences. Ils en avisent, le cas échéant, l'organisme de l'Union chargé de l'inscription des assignations de fréquences.

DRAFT CORRIGENDUM No. 2 TO DOCUMENT No. 361 "First Report by Working Group 4A to Committee 4"

Replace proposed text of paragraph 94A by the following text to align with the French version.

94a ADD Besides the action they can take in accordance with 92, two or more Members or Associate Members of the Union may coordinate the use of individual frequencies in all frequency bands covered by Article 5 before notifying changes in frequency usage. They shall, in all appropriate cases, inform the organ of the Union responsible for registering frequency assignments of such coordination.

PROYECTO DE CORRIGENDUM N.º 2 AL DOCUMENTO N.º 361 "Primer Informe del Grupo de trabajo 4A a la Comisión 4"

Sustitúyase por el siguiente el texto propuesto para el N.º 94A.

ADD Además de las disposiciones que puedan tomar en virtud del N.º 92, dos o más países Miembros o Miembros asociados de la Unión podrán coordinar la utilización de cualquier frecuencia en todas las bandas a que se refiere el Artículo 5, antes de notificar cambios en la utilización de las frecuencias al organismo de la Unión encargado de la inscripción de las asignaciones de frecuencias.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 656-FES 30 octobre 1959.

GROUPE DE TRAVAIL 7A7 WORKING GROUP 7A7 GRUPO DE TRABAJO 7A7

ORDRE DU JOUR

Séance du Groupe de travail 7A7

Lundi 2 novembre 1959, à 15 heures - Salle D

- Nomenclature des stations de radiolocalisation
 Propositions N^{OS} 1469, 1470 et 1472 du Cahier des propositions, pages 357
- 2. <u>Nomenclature des stations effectuant des services spéciaux</u>
 Propositions N^{OS} 1473 à 1476 du Cahier des propositions, pages 358 et 359.
- 3. Revision du numéro 467 du Règlement
- 4. Divers.

AGENDA

Meeting of Working Group 7A7

Monday, 2 November, 1959 at 15.00 hours - Room D

- List of Radiolocation Stations
 Proposals Nos. 1469, 1470, 1472, Yellow Book, pages 357 358.
- 2. <u>List of Special Service Stations</u>
 Proposals Nos. 1473 to 1476, Yellow Book, pages 358 359.
- 3. Revision of paragraph 467 of the Radio Regulations.
- 4. Other business.

ORDEN DEL DÍA

Sesion del Grupo de trabajo 7A7

Lunes, 2 de noviembre de 1959, a las 3 de la tarde - Sala D

- 1. Nomenclator de las estaciones de radiolocalización

 Proposiciones N. OS 1469, 1470, 1472, paginas 357 y 358 del Cuaderno amarillo.
- 2. <u>Nomenclator de las estaciones que efectuan servicios especiales</u>

 Proposiciones N. OS 1473 a 1476, paginas 358 y 359 del Cuaderno amarillo.
- 3. Revision del N.º 467 del Reglamento de Radiocomunicaciones
- 4. Otros asuntos.

Le Président, The Chairman, El Presidente,

E. Ron

SUB-COMMITTEE 7A

AGENDA

Meeting on Monday, 2 November, 1959, at 9 a.m., in Room D

- 1. Approval of the Summary Record of the Fifteenth Meeting (Document No. 399).
- 2. Approval of the Summary Record of the Sixteenth Meeting (Document No. 401).
- 3. Approval of the Summary Record of the Seventeenth Meeting (Document No. 444).
- 4. Approval of the Summary Record of the Eighteenth Meeting (Document No. 451).
- 5. Approval of the Summary Record of the Nineteenth Meeting (Document No. 465).
- 6. Approval of the Annex to Document No. 399.
- 7. Approval of the Annex to Document No. 401.
- 8. Approval of the Annex to Document No. 444.
- 9. Approval of the Annex to Document No. 465.
- 10. Study of Documents Nos. 456 and DT 617 (Article 19 Philippines).
- 11. Approval of Document No. DT 595 (Report, Working Group 7A5).
- 12. Approval of Document No. DT 401 (Rev.1) (Report, Working Group 7A1).
- 13. Approval of Document No. DT 642 (Report, Working Group 7A1).
- 14. Noting of Document No. DT 582 (Report, Working Group 7A3).
- 15. Continuation of the study of Proposals relating to Article 20, Appendices 6 and 7.
- 16. Any other business.

P. Bouchier Chairman

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 658-E 30 October, 1959

SUB-COMMITTEE 7A

REPORT

Working Group 7A7 to Sub-Committee 7A

The Working Group have been entrusted to prepare a draft Recommendation of Committee 7 to the Plenary with a view to putting into immediate effect the surpression of the List of Aeronautical and Aircraft Stations as decided in Sub-Committee 7Λ .

In considering its task the Working Group came to the conclusion that the changes introduced in general in Article 20 will justify the adoption by the Plenary of a <u>Resolution</u> the draft of which is submitted for consideration as an Annex to this Document.

E.Ron Chairman

 Λ nnex: 1

ANNEX

DRAFT RESOLUTION

The Administrative Radio Conference

considering:

that the early implementation of the provisions of (Article 20 and Appendix 6) \ast would be of general advantage,

resolves

that the Secretary General may implement, partly or as a whole, these provisions at his discretion in advance of the effective date of the Radio Regulations.

^{*} may be altered by Committee 8.

GENEVA, 1959

SUB-WORKING GROUP 5B4

REPORT

Ad Hoc Drafting Group

- 1. The Ad Hoc Drafting Group has revised the frequency management procedure contained in Document No. DT 459, taking into account wherever possible, the proposals that have been put forward and the discussions which have taken place in Sub-Working Group 5B4. The revised procedure appears in Annex 1 to this Document.
- 2. The revised procedure is regarded by the Ad Hoc Drafting Group as being flexible and practicable, particularly so far as the I.F.R.B. is concerned, and allows full scope for the exercise of goodwill and mutual cooperation between Administrations and the I.F.R.B. in achieving compatible operations for the HF Broadcasting Service.
- International Frequency Register was discussed and it was concluded that if this procedure is adopted, certain principles could be recommended (Annex 2 refers), but that detailed consideration of the transfer could either be left to a specialized Ad Hoc Group or possibly Working Group 5A. Such detailed considerations would include particularly the date of entry into force of the new Register, and the date of cessation of the E.A.R.C. Interim Procedure for notification and registration.
- Provision has been made in paragraph 4 of the revised procedure for the prior coordination of seasonal schedules between two or more Administrations. In this connection, attention is directed to RR 92 of Article 4 which at present precludes such coordination, and it may therefore be necessary to transmit an appropriate recommendation to Committee 4 which is currently considering this Article.
- The Form of Notice to be used by Administrations in submitting seasonal schedules is being considered by the I.F.R.B. members on the Ad Hoc Group, taking into account the U.S. Proposal 4535 (page 679 Rev. 1), together with other proposals in the Yellow Book referring to Appendix I, and it is expected that a third annex to this report will be published shortly showing the proposed format.
- 6. The revised procedure makes provision in paragraph 11 for special consideration to be given by the I.F.R.B. to those services which Administrations regard as being essential. It was envisaged that such assistance

should be very beneficial to those countries developing new services, and it was the opinion of the Group that for the cases where special assistance was received as a result of negotiations between Administrations and the I.F.R.B., appropriate notices could be included in one of the I.F.R.B.'s publications in accordance with Proposal 5119 of Document No. 302.

7. A recommendation has been made in Annex 2 that the I.F.R.B. publish annually a recapitulative list of all frequency usage established in the Master Schedules. It was felt that this list might eventually supersede the broadcasting listings in the Master International Frequency Register, and that in the meantime, in conjunction with the Master Schedules it would furnish useful guidance to Administrations when preparing the seasonal schedules.

M. Strohfeldt Chairman

Annexes: 2

ANNEXI

A PROCEDURE FOR FREQUENCY MANGEMENT IN THE HIGH FREQUENCY BROADCASTING BANDS

- Periodically, Administrations shall send to the I.F.R.B. advance notice of the projected seasonal schedules of their broadcasting stations operating in the bands allocated to the broadcasting service between 5 950 kc/s and 26 100 kc/s.
- 2. Schedules shall be submitted to cover each of the following seasonal propagation periods:

March Schedule - March and April

May Schedule - May, June, July and August

September Schedule - September and October

November Schedule - November, December, January and

February.

Schedules will be changed at Ol.00 G.M.T. on the first Sunday in the seasonal period.

- 3. The first schedule, to become effective on 4th September, 1960, for the September-October period (1960) should be received by the I.F.R.B. by 1 March, 1960. The closure dates for subsequent schedules will be set by the I.F.R.B., so that the advance period will be reduced gradually to the minimum found practicable by the I.F.R.B. Schedules for which the details in Paragraph 6 will not change may be submitted up to a list of one year in advance. In such cases, confirmation of each schedule is still required by the closure date of submissions for the respective seasonal periods. The I.F.R.B. will take appropriate steps to remind Administrations so that the above can be complied with.
- 4. Two or more Administrations may submit joint schedules containing their agreed projected frequency usage for one or more of the High Frequency Broadcasting Bands.
- 5. The frequencies shown in the schedules must be frequencies that actually will be used for that particular seasonal period. It is urged that each Administration prepare its schedules from season to season using wherever possible the same frequencies in any particular band as were used in previous schedules.

- 6. The schedules shall be submitted in a prescribed form containing the following technical data:
 - a) Frequency (kc/s) intended to be used.
 - b) Suggested alternative frequency or frequencies, or the desired band.
 - c) Call-sign or other identification.
 - d) Transmitter location.
 - e) Time (G.M.T.) of operation (and days, if other than daily).
 - f) C.I.R.A.F. reception zone, or specific area if less than an entire zone.
 - g) Transmitter power into the transmission line.
 - h) Type of Antenna*
 - i) Azimuth, angle of elevation, and absolute gain of the major lobe for directive antennas.
- *) The nomenclature of the C.C.I.R. book of "Antenna Diagrams" should be used wherever it is applicable.
- 7. The frequencies shown in the schedules must be in conformity with RR 327 and RR 328, and to the extent practicable the frequencies chosen should correspond to listings already in the Master International Frequency Register. Those Administrations not having suitable listings in the Master International Frequency Register may suggest any frequency considered appropriate, or may, if they so desire, show only the frequency band.
- 8. Upon receipt of the seasonal schedules, including advices of the continuing validity of schedules for the preceding seasonal period, the I.F.R.B. shall incorporate the proposed frequency usage of all Administrations into a composite schedule to be known as the Tentative High Frequency Broadcasting Schedule for the particular seasonal period. This schedule shall include:
 - a) All specific projected frequency usage where no alternatives were given.
 - b) The selection made by the I.F.R.B. in cases where alternatives were given.
 - c) Frequencies to be suggested by the I.F.R.B. in relation to all services for which no specific frequency was notified, such suggestions to be made with due overall consideration for Paragraph 11 (relating to essential services), compatiblity within the schedule, and possible changes to the projected frequency usage which might be desirable to achieve more equitable satisfaction of Administrations' requirements.

- d) Such indications of apparent incompatibility within the schedule as the I.F.R.B. can make within the time available.
- 9. The I.F.R.B. shall commence the work outlined in Paragraph 8 sufficiently in advance that the Tentative High Frequency Broadcasting Schedule will be printed and transmitted to Administrations not later than 2 months prior to the date of commencement of the seasonal period.
- 10. The I.F.R.B. shall proceed to examine technically the Tentative High Frequency Broadcasting Schedule on the basis of the Board's current standards for the High Frequency Broadcasting Service, such standards to be under constant review, taking into account the relevant C.C.I.R. recommendations, together with past experience in broadcasting planning and the experience with the new procedure. The I.F.R.B. shall aim at not only identifying, and correcting where possible, conflicts in frequency usage which become apparent in the technical examination, but also to improve the technical aspects of the composite schedule by amendments to be agreed upon in consultation with the Administrations concerned.
- 11. In the case of a service which an Administration regards as essential, the I.F.R.B. shall, on request, give it special consideration so far as is practicable, when formulating suggestions for improving compatibility in the composite schedule, provided the Administration concerned has either no suitable existing list in the Master International Frequency Register, or no alternative listing which could reasonably be used for the service in question. If a frequency conflict arises in connection with an essential service, the I.F.R.B. shall examine the conflict in consultation with the Administrations concerned, and shall suggest suitable amendments to the schedules in an effort to accommodate the requirements of Administrations requesting assistance.
- 12. In formulating suggestions to Administrations, the I.F.R.B. shall take into account all available information such as monitoring observations and published data. However, in the case of frequency usage apparently not in conformity with submitted schedule data, the I.F.R.B. shall first confirm its information by reference to the Administration concerned.
- 13. Administrations having considered the Tentative High Frequency Broadcasting Schedule and any advice from the I.F.R.B., should notify the I.F.R.B. as soon as possible, preferably before the date of commencement of the seasonal period, of any amendments to the Schedule which are intended for implementation.
- 14. Changes in the schedules of High Frequency Broadcasting stations operating in the High Frequency Broadcasting bands, which are to be implemented after the date of commencement of the seasonal period, shall be notified to the I.F.R.B. as soon as possible.

- 15. For changes notified in accordance with Paragraphs 13 and 14, the I.F.R.B. shall complete the same procedure of examination and recommendation as performed for the regular schedule. These amendments and changes in schedules shall be published in the I.F.R.B. weekly circulars.
- 16. After the amendments and changes for the seasonal period, the composite schedule will be published as the Master High Frequency Broadcasting Schedule for that particular seasonal period. In this Master Schedule, symbols will be used to indicate these assignments which were found in practice to be unsatisfactory. The Master Schedule will also include and indicate with suitable symbols any frequency usage date not included in the submitted schedules but which has been taken into account in the examination by the I.F.R.B.

ANNEX 2

RECOMMENDATIONS RELATING TO THE MASTER INTERNATIONAL FREQUENCY REGISTER

- 1. All listings in the Master Radio Frequency Record should be transferred to the Master International Frequency Register, complete with column 2 (c) dates.
- 2. No additional listings should be made in the new Register excepting:
 - a) any special assignments and any adjustments to existing listings arising from action at this Conference, the procedure for which will presumably be determined by the Conference;
 - b) new usage established in the Master High Frequency Broadcasting Schedule, which is not covered by existing entries in the new Master Register. These new entries would be given column 2 (c) dates corresponding to the date of commencement of the seasonal period in which the assignment was first used.
- A recapitulative frequency list should be published annually commencing at the end of the first year of implementation of the procedure, showing all frequency usage established in the Master High Frequency Broadcasting Schedules. This list could be issued as a supplement to the new International Frequency List, and it would have a similar though not necessarily identical format. It would include all technical data of transmission, together with symbols to indicate those assignments which were found to be unsatisfactory in practice, as well as symbols to indicate the seasonal periods for which each assignment was used.

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

Document No. DT 662-E 30 October, 1959

SUB-WORKING GROUP ADA (REGION 1)

TEXT OF DRAFT FOOTNOTE RELATING TO THE BAND 68-88 Mc/s

In, the bands 68 - 73 Mc/s and 76 - 87.5 Mc/s are allocated (alternatively / on a permitted basis) to Broadcasting, subject to separate agreement being reached with interested and affected Administrations on the frequency assignment and other technical characteristics (including power and location) of each broadcasting station that might give rise to harmful interference. In arriving at such agreements account shall be taken specially of the need to avoid such interference.

The median field strengths to be protected at the limits of the service area shall be in accordance with C.C.I.R. Recommendations (provisionally, a figure of 5 microvolts per meter shall be applied for the Fixed and Land Mobile services).

GENEVE, 1959

Document N° DT 663-FES 30 octobre 1959

SOUS-GROUPE DE TRAVAIL 4D10 SUB-WORKING GROUP 4D10 SUBGRUPO DE TRABAJO 4D10

ORDRE DU JOUR

Deuxième séance du Sous Groupe de travail 4D10

Lundi 2 novembre 1959 à 15 heures - Salle G

- 1. Examen des propositions relatives à la modification du Tableau de répartition des bandes de fréquences dans la Région 1, entre 790 et 960 Mc/s, ainsi que des renvois qui s'y rapportent (Document Nº 122, Addenda NºS 19 et 20).
- 2. Divers.

AGENDA

Second meeting of Sub-Working Group 4D10

Monday, 2 November, 1959, at 3 p.m. Room G

- 1. Proposals for changes in the Frequency Allocation Table (Region 1), between 790 and 960 Mc/s, and in the relevant footnotes (Document No. 122, Addenda Nos. 19 and 20).
- 2. Any other business.

ORDEN DEL DÍA

2.ª sesión Subgrupo de trabajo 4D10

Lunes, 2 de noviembre de 1959, a las 3 de la tarde - Sala G

- 1. Examen de las proposiciones relativas a la modificación del Cuadro de distribución de las bandas de frecuencias (Región 1), comprendidas entre 790 y 960 Mc/s y de las notas correspondientes (Documento N.º 122, Addenda N.ºS 19 y 20).
- 2. Otros asuntos.

Le Président The Chairman El Presidente

C. Terzani

GENEVE, 1959

SUB-WORKING GROUP 4E3
SUBGRUPO DE TRABAJO 4E3

ORDRE DU JOUR

Sixième séance - Sous-Groupe de travail 4E3

Lundi 2 novembre 1959, à 9 heures

- 1. Examen du Document N° DT 637 et du CORRIGENDUM N° 1
- 2. Examen du Document Nº 473 en ce qui concerne la bande de fréquences 1 700 et 2 300 Mc/s (besoins des services de l'espace)
- 3. Divers.

AGENDA

Sixth Meeting - Sub-Working Group 4E3

Monday, 2 November, 1959 at 9 a.m.

- 1. Consideration of Document No. DT 637 and CORRIGENDUM No. 1
- 2. Examination of Document No. 478 with relation to the frequency band 1 700 2 300 Mc/s (space requirements)
- 3. Other business.

ORDEN DEL DÍA

6. a sesión - Subgrupo de trabajo 4E3

Lunes, 2 de noviembre de 1959, a las 9 de la mañana

- 1. Examen del Documento N.º DT 637 y del CORRIGENDUM N.º 1
- 2. Examen del Documento N.º 478 en lo que respecta a la banda de frecuencias 1 700 2 300 Mc/s (Atribuciones para la investigación espacial)
- 3. Otros asuntos.

Le Président,
The Chairman, E.W. Anderson
El Presidente,

GENEVE, 1959

GROUPE DE TRAVAIL 4E WORKING GROUP 4E GRUPO DE TRABAJO 4E

ORDRE DU JOUR

Deuxième séance du Groupe spécial 4E (Fréquences pour la radioastronomic entre 960 et 10 500 Mc/s)

Lundi 2 novembro 1959, à 15 houres - Salle H

- 1. Examen du Document N^o 452 pour ce qui concerne les fréquences pour la radioastronomic entre 2 000 et 3 000 Mc/s
- 2. Propositions d'attributions à la radioastronomie autour de 5 000 et de 8 000 Mc/s
- 3. Propositions 5 322 et 5 327 (U.R.S.S.) (Voir les Documents N° 76, 106, 183, 347, 360 et 452 ainsi que la proposition N° 4616)

AGENDA

Second Meeting of the Ad Hoc Working Group 4E (Concerning frequencies for radioastronomy between 960 - 10 500 Mc/s)

Monday, 2 November, 1959 at 3 p.m. - Room H

- 1. Consideration of Document No. 452 in regard of frequencies for radioastronomy in the frequency range 2 000 - 3 000 Mc/s
- 2. Proposals for frequencies for radioastronomy in the frequency bands around 5 000 Mc/s and 8 000 Mc/s
- 3. U.S.S.R. Proposals Nos. 5322 and 5327 (Documents Nos. 76, 106, 183, 347, 360 and 452, and Proposal No. 4616 refer)

ORDEN DEL DÍA

2. c scsion del Grupo especial 4E

(Frecuencias para la radioastronomía entre 960 y 10 500 Mc/s)

Lunes, 2 de noviembre de 1959, a las 3 de la tarde - Sala H

- 1. Examen del Documento N.º 452 en lo que se refiere a las frecuencias para la radioastronomía de la banda 2 000 3 000 Mc/s
- 2. Proposiciones de atribución de frecuencias a la radioastronomía en los alrededores de las bandas 5 000 Mc/s y 8 000 Mc/s
- Proposiciones de la U.R.S.S. N. os 5322 y 5327 (Documentos N. os 76, 106, 183, 347, 360 y 452, y Proposición N. 4616).

Le Président, The Chairman, El Presidente,

Document No. DT 666-E 30 October 1959

COMMITTEE 4 AD HOC

Paper prepared by the U.S.A. Delegation according to the Meeting of the Ad Hoc Group of Committee 4 held on Thursday, 29 October 1959

- 1. After thorough discussion the Ad Hoc Committee agreed that the principal contribution which this Conference could make to the solution of the frequency problems confronting Administrations would be to devise some means by which the pressures on the radio spectrum between 4 27.5 Mc/s could be relieved. It was further agreed that progress in this direction would necessarily be made slowly.
- 2. As to the means by which this objective could best be obtained, it was concluded that certain basic policies would have to be formulated and accepted by Administrations before any concrete program could be instituted.
- 3. As to the nature of such policy decisions, the Ad Hoc Committee considered matters such as the following:
 - a) There are many uses of the 4-27.5 Mc/s spectrum which could, from a technical and operational point of view, be accommodated by means other than the use of the 4-27.5 Mc/s spectrum.
 - b) The eventual transfer of such operations to other parts of the radio spectrum or their accommodation by means other than the use of radio will necessarily be a slow process.
 - c) The willingness of Administrations to undertake such a program would probably be dependent upon the outlining of clear policy criteria and the acceptance of certain policy decisions in this respect by all Administrations.
 - d) The ability of Administrations (as distinguished from their willingness) to undertake such a program is intimately linked to the financial implications involved. This is because it is much cheaper and much more convenient in many cases to use frequencies between 4 27.5 Mc/s rather than the alternate means now available.
 - e) Unless the Union can devise a method of realistically taking these financial implications into account in such a way as to enable

Administrations generally to satisfy some of their requirements by means other than frequencies between 4 and 27.5 Mc/s, it is the conclusion of the Ad Hoc Committee that the present trends towards congestion and saturation in the radio spectrum between 4-27.5 Mc/s will continue. If this estimate of the situation is correct, the Ad Hoc Committee then envisages that the 4-27.5 Mc/s portion of the spectrum will become progressively less useful to Administrations generally.

- f) On the assumption that Committee 4 would desire the Ad Hoc Committee to formulate a specific proposition for discussion in Committee 4 for the purpose of arresting the present trends and planning for eventual utilization of the spectrum between $4-27.5~\rm Mc/s$ on a more logical and rational basis, the Ad Hoc Committee has concluded that the first step in the direction of reform should be the taking of the necessary policy decisions.
- Since the time available at this Ordinary Administrative Radio Conference would not even permit the formulation of a detailed agenda for study by Administrations in preparation for the taking of the aforementioned policy decisions, it is the recommendation of the Ad Hoc Committee that this Ordinary Administrative Radio Conference take steps to have such an agenda prepared. This could be done by a panel of experts (or other appropriate body) which would be assigned the task of preparing a comprehensive study and detailed agenda of matters to be discussed at (an Extraordinary Administrative Radio Conference) convened for this purpose. The agenda so prepared by the aforementioned panel of experts (or other appropriate body) could be submitted to the Administrative Council, together with the recommendations of the (Panel) which prepares the agenda as to whether or not such an Extraordinary Administrative Radio Conference should be convened. It would have to be understood that such an Extraordinary Administrative Radio Conference would not consider the amendment of the Table of Frequency Allocations but rather would concentrate solely on the task of finding ways and means to relieve the pressures on the spectrum between 4 - 27.5 Mc/s without amendment of the Table.
- h) Attachment 1 constitutes the Terms of Reference for the aforementioned panel of experts or other appropriate body which would draw up the detailed agenda for the aforementioned E.A.R.C.
- 4. The Ad Hoc Committee also gave consideration to other fundamental aspects of the existing and future frequency problems in other parts of the radio spectrum. It was concluded that the program recommended above for the spectrum between 4 27.5 Mc/s would not necessarily be applicable for other portions of the radio spectrum and it is believed that these matters should be given separate consideration.

- It was also concluded that there are significant improvements in techniques, equipment standards, operational practices and other areas which can and should be made in the present uses of radio between 4 27.5 Mc/s. It was the consensus of the Ad Hoc Committee, however, that the Convention and the Radio Regulations already give guidance to Administrations in these matters. It is for Committee 5 to decide whether the I.F.R.B. has sufficient authority to assist Administrations in making significant progress in these areas.
- 6. Included among the improvements in utilization which could be made voluntarily by Administrations in these areas are the following:
 - a) Paying more heed to Nos. 234 and 235 of the Radio Regulations.
 - b) The need to employ the most modern equipment and techniques with a view to maximum spectrum economy.
 - c) The formulation of operational solutions, especially where grouping or consolidation can be effected.
 - d)* The voluntary transfer by Administrations (pending the formulation of agreed policies as outlined above) of all possible operations to portions of the radio spectrum other than the 4-27.5 Mc/s band or the introduction of facilities which do not require the use of radio.
 - e) The satisfaction of all possible new requirements by means other than the use of the spectrum between 4-27.5 Mc/s. (In other words, slowing down the present continued increase in saturation of the spectrum between 4-27.5 Mc/s.)
- 7. In submitting this Report the Ad Hoc Committee invites the attention of Committee 4 to the fact that the present pressures (which are continuing to increase under present policies) will not be reduced merely by the adoption of regulations such as Nos. 234 and 235 and other similar Regulations, Recommendations and Resolutions unless a realistic method can first be found for agreeing as to the categories of usage requirements which should be satisfied by means other than frequencies between 4 27.5 Mc/s.
- 8. It is further concluded that a realistic program for the installation of such alternate facilities must actually be instituted before there can be any significant reduction in the pressures on the spectrum between 4 27.5 Mc/s.
- 9. /Annex 2 contains recommendations (Messrs. Sathar and Sastry) for inclusion in the final acts of this Conference which are intended to be of an interim nature pending the instituting of the broader and more basic program referred to in Annex 1/

The Ad Hoc Committee recommends that Committee 4 adopt Annexes 1 and 2.

Annex: 1

ANNEX 1

TERMS OF REFERENCE FOR /PANEL OF EXPERTS OR OTHER APPROPRIATE BODY/ WHICH WILL BE ORGANIZED FOR THE SOLE PURPOSE OF DEVISING WAYS AND MEANS TO RELIEVE THE PRESSURES ON THE RADIO SPECTRUM BETWEEN 4-27.5 Mc/s.

(It is considered that the decision as to the composition and organization of this Panel of experts or other appropriate body should be taken by the Conference only after the following Terms of Reference have been agreed upon; if Committee 4 approves the following terms of reference, it could then consider this matter.)

- 1. The Panel shall not consider the question of the allocation of radio frequencies.
- 2. The $\sqrt{Panel/}$ shall tabulate all existing uses of radio between 4 27.5 Mc/s and group these uses into appropriate categories for study purposes.
- 3. The Panel shall study each such category of usage with a view to determining which uses represent communication requirements which could be satisfied by means other than the use of frequencies between 4 27.5 Mc/s.
- 4. Thereafter, the \sqrt{P} anel shall itemize the technical, operational, financial and other implications involved in such transfers.
- 5. The \overline{Panel} shall not recommend that any category of usage should be accommodated by means other than the use of frequencies between 4-27.5 Mc/s.
- 6. The \overline{P} anel/ shall give particular attention to the formulation of a realistic proposal for the rendering of financial assistance to countries which would require it if it is later decided by an \overline{E} .A.R.C./ to institute a program for the accommodation of communication requirements now being satisfied between 4 and 27.5 Mc/s in other parts of the radio spectrum or by means other than the use of radio.
- 7. In this connection, the Panel shall give careful study to the availability of such international financing through existing international organizations and shall consult the appropriate organ of the United Nations accordingly with a view to obtaining all pertinent facts in this matter for

inclusion in the Report of the \sqrt{Panel} . On this aspect of its work, the \sqrt{Panel} shall submit specific recommendations.

Report to the Administrative Council together with recommendations as to the further steps that should be taken for the purpose of relieving the pressures on the radio spectrum between 4 - 27.5 Mc/s. These recommendations should include the views of the Panel as to whether or not an Extraordinary Administrative Radio Conference is required for the purpose of adopting the policies which would be necessary in order to carry out a program for the relief of pressures on the radio spectrum between 4 - 27.5 Mc/s. In any event, the recommendations of the Panel shall include a detailed and specific agenda which, when approved by the Administrative Council, would be the agenda of whatever body (E.A.R.C. or otherwise) would consider the policy decisions necessary to relieve the pressures on the radio spectrum between 4 and 27.5 Me/s without amendment of the 1959 Table of Frequency Allocations.

Document No. DT 667-E 30 October, 1959

WORKING GROUP 7A4

REPORT

Working Group 7A4 (Ad Hoc) to Working Group 7A4

- In accordance with its terms of reference, Working Group 7A4 (Ad Hoc), comprised of Delegates from Australia, China, Federal Republic of Germany, Italy, Portugal and the U.S.A., has considered the question of formulating proposals which would co-ordinate those submitted by the Delegations of U.S.A., China and the Federal Republic of Germany and which relate to the identification of stations taking into account C.C.I.R., Recommendation No. 323 (Los Angeles).
- 2. The proposals examined were:

No.	Page in Yellow Book or
	Pocument No.
4014	334 (Rev. 1)
4015	334.1
4016	334 . 1
4017	3 34. 2
4020	334.3
5 1 10	Document No. 63
1444 to 1446	349
1447 to 1449	350 and 351
1450	351

- 3. The Ad Hoc Group recommends to Working Group 7A4 that it should accept, for reference to Sub-Committee 7A, the attached draft regulations for inclusion as the first two sections of Article 19.
- 4. It also proposes that the existing Section I should become Section III under the revised title of "Assignment of Call Signs".
- For the purpose of clarification and to facilitate examination, the attached draft includes certain provisions which have been considered by Working Group 7A4. Explanatory notes have been added alongside each proposed regulation.

L. Keith Chairman

Annex: 1

ANNEX

CHAPTER VII

Identification of Stations

ARTICLE 19

Identification of Stations and Formation of Call Signs

Section I. Requirement for Identification

1. All stations are forbidden to carry out transmissions without identification or with false identification.

FOOTNOTE: Considering the present state of the art it is recognised that the transmission of identifying signals for certain specialised radio systems, (e.g. radiodetermination and radio relay systems) is not always possible.

2. In order that stations may be readily identified each station must transmit its identification as frequently as practicable during the course of transmissions, including those conducted for tests, adjustments or experiments. However, during such transmissions identification must be transmitted at least hourly, preferably within the period from 10 minutes before to 10 minutes after the hour (G.M.T.), unless to do so would cause unreasonable interruption of traffic. To meet these identification requirements, administrations are urged to ensure that, wherever practicable, superimposed indentification methods be employed in accordance with C.C.I.Rl recommendations.

Section II. Methods of Identification

- The identification transmissions shall consist of either a call sign or other recognised means of identification. Such recognised means of identification may be one or more of the following necessary for complete identification: name of station, location of station, operating agency, international registration number, characteristic signal, characteristic of emission, or other clearly distinguishing features readily recognised internationally.
- 4. The identification transmission shall be transmitted by methods which, in accordance with C.C.I.R. recommendations, do not require the use of specialised terminal equipment for reception.

REMARKS

Proposal 4010 (Adopted by 7A4)

Proposal 4011 (Deferred by 7A4)

Proposal 4012 (Adopted by 7A4 as amended)

Proposal 4013 (Adopted by 7A4 as revised in Yellow Document No. DT 571)

New Proposal which also takes care of Reg. 385.

Proposal 4020 modified by Ad Hoc Group and which it is suggested should replace existing Regulations 428 to 433 (Proposal 4039)

New Proposal

Annex to Document No. DT 667-E Page 3

5. If superimposed identification is employed `the signal QTT shall precede the identification.

New Proposal which it will be necessary to review unless it is decided to remove the mandatory provisions contained in Regs. 414 and 415.

6. When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on difference frequencies, as far as practicable each station shall transmit its own identification or the identifications of all such stations.

Proposal 1447 modified by Ad Hoc Group

Section III. Assignment of Call Signs

Existing Section I as may be modified by Working Group 7A4.

GENEVE, 1959

Document Nº DT 668-FES 31 octobre 1959

SOUS-GROUPE DE TRAVAIL 5B4 SUB-WORKING GROUP 5B4 SUBGRUPO DE TRABAJO 5B4

ORDRE DU JOUR

12ème séance - Sous-Groupe de travail 5B4

(Radiodiffusion à hautes fréquences)

Mardi 3 novembre 1959, à 15 heures

- 1. Examen du compte rendu de la llème séance du Sous-Groupe de travail 5B4 (Document N° DT 501)
- 2. Examen du rapport du Groupe spécial (Document Nº DT 659)

AGENDA

Twelfth Meeting of Sub-Working Group 5B4

(High Frequency Broadcasting)

.Tuesday, 3 November, 1959, at 15.00 hours

- 1. Consideration of the Summary Report from the Eleventh Meeting of Sub-Working Group 5B4 (Document No. DT 501)
- 2. Consideration of the Report from the Ad Hoc Group (Document No. DT 659)

ORDEN DEL DÍA

12.ª sesión del Subgrupo de trabajo 5B4

(Radiodifusión por altas frecuencias)

Martes, 3 de noviembre de 1959 a las 3 de la tarde

- 1. Informe de la 11.ª sesión del Subgrupo de trabajo 5B4 (Documento N.º DT 501)
- 2. Informe del Grupo especial (Documento N.º DT 659)

Le Président The Chairman El Presidente

Sven Gejer

GENEVE, 1959

Document No DT 669-FES 31 octobre 1959

GROUPE DE TRAVAIL 6A WORKING GROUP 6A GRUPO DE TRABAJO 6A

ORDRE DU JOUR

Quinzième séance du Groupe de travail 6A (Définitions)

Mardi 3 novembre 1959 à 9 heures - Salle C

- 1. Compte rendu de la treizième séance (Document Nº 487)
- 2. Rapport du Sous-Groupe de travail 6A4 (Document N° DT 569)
- 3. Termes restant à définir (Documents Nos DT 536, DT 111, 326, 326 ADD. 1)
- 4. Constitution d'un Sous-Groupe de travail chargé de coordonner les définitions
- 5. Proposition Nº 2697 (Inde) (Cahier des propositions, page 671, Rev. 2)
- 6. Divers.

. AGENDA

Fifteenth Meeting - Working Group 6A (Definitions) Tuesday, 3 November, 1959 at 0900 hours - Room C

- 1. Summary Record of the Thirteenth Meeting (Document No. 487)
- 2. Report of Sub-Working Group 6A4 (Document No. DT 569)
- 3. Remaining terms to be defined (Documents Nos. DT 536, DT 111, 326, 326 ADD.1)
- 4. Formation of Sub-Working Group on Coordination of Definitions
- 5. Proposal No. 2697, page 671, Rev. 2 (India)
- 6. Other matters.

ORDEN DEL DÍA

15. a sesión del Grupo de trabajo 6A (Definiciones)

Martes, 3 de noviembre de 1959, a las 9 de la mañana - Sala C

- 1. Informe de la 13.ª sesión (Documento N.º 487)
- 2. Informe del Subgrupo de trabajo 6A4 (Document N.º DT 569)
- 3. Términos no definidos todavía (Documentos. N.ºS DT 536, DT 111, 326 y 326 ADD: 1)
- 4. Formación de un Subgrupo de trabajo sobre Coordinación de las definiciones
- 5. Proposición N.º 2697, página 671, Rev. 2 (India)
- 6. Otros asuntos.

Le Président The Chairman El Presidente

E.W. Allen

GENEVE, 1959

Document N.º DT 670-FES 31 octobre 1959

SOUS-COMMISSIONS 7B ET 7C SUB-COMMITTEES 7B AND 7C SUBCOMISIONES 7B Y 7C

ORDRE DU JOUR.

Une séance mixte des Sous-Commissions 7B et 7C aura lieu

Mardi 3 novembre 1959 à 9 heures, à la Salle D

- 1. Rapport du Groupe de travail 7B4
- 2. Divers

AGENDA

A joint meeting of Sub-Committees 7B and 7C will be held on

Tuesday, 3 November, 1959 at 9 a.m. - Room D

- 1. Report of Working Group 7B4
- 2. Any other business

ORDEN DEL DÍA

Sesión conjunta de las Subcomisiones 7B y 7C

Martes, 3 de noviembre de 1959, a las 9 de la mañana - Sala D

- 1. Informe del Grupo de trabajo 7B4
- 2. Otros asuntos

Le Président The Chairman El Presidente R.M. Billington

GENEVE, 1959

Document N° DT 671-FES 2 novembre 1959

GROUPE DE TRAVAIL 4G
WORKING GROUP 4G
GRUPO DE TRABAJO 4G

ORDRE DU JOUR

Septième séance - Groupe de travail 4G

(Tableau de répartition des bandes de fréquences 10 500 - 40 000 Mc/s)

Mercredi 4 novembre 1959, à 15 heures

- 1. Examen des propositions relatives à la radioastronomie (voir les Documents Nos 183 et 452)
- 2. Réexamen du rapport à la Commission 4 en ce qui concerne la possibilité de supprimer certains renvois (Document N° 449)
- 3. Divers.

AGENDA

Seventh Meeting of Working Group 4G

(Table of Frequency Allocations 10 500 - 40 000 Mc/s)

Wednesday, 4 November 1959 at 3 p.m.

- 1. Consideration of Radio Astronomy proposals (Documents Nos. 183 and 452 refer)
- 2. Re-consideration of the Report to Committee 4 with regard to possible deletion of some of the footnotes (Document No. 449 refers)
- 3. Other business.

ORDEN DEL DÍA

7.º sesión del Grupo de trabajo 4G

(Cuadro de distribución de las bandas de frecuencias 10 500 - 40 000 Mc/s)

Miércoles, 4 de noviembre de 1959, a las 3 de la tarde

- 1. Examen de las proposiciones relativas a radioastronomía (Documentos N.ºS. 183 y 452).
- 2. Nuevo examen del informe a la Comisión 4, en lo que respecta a la posible supresión de algunas notas (Documento N.º 449)
- 3. Otros asuntos.

Le Président The Chairman El Presidente

S.M. Myers

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 4C

REPORT

of Working Group 4C Ad Hoc to Working Group 4C

- 1. Working Group 4C Ad Hoc considered proposals Nos. 489 and 490 (BEL, F, F/OPTA, I, HOL) which had already been discussed in Sub-Working Group 4Cl (Document No. DT 481, item 4.7.1).
- 2. After thorough consideration of the two proposals it was agreed:
 - a) that the allocation of only one small frequency band of approximately 50 kc/s width would be recommended for the exclusive use of ship stations (telegraphy) in either of the bands 25 010 25 600 kc/s or 26 100 27 500 kc/s; and
 - b) taking into account harmonic relations to lower maritime bands, possible interference with fixed services, availability of equipment, etc., to recommend that one of the following frequency bands be considered:
 - 25 105 25 155 kc/s (50) 25 070 - 25 110 kc/s (40) 25 070 - 25 120 kc/s (50) 25 060 - 25 110 kc/s (50) 27 450 - 27 500 kc/s (50).
- With respect to the repercussions of any of such allocations on the fixed services of the other countries, it was agreed to remit the two proposals to Working Group 4C (and possibly to Committee 4) for reconsideration in the light of the suggestions made in paragraph 2 above.

H. Pressler Chairman, Working Group 4C Ad Hoc

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

WORKING GROUP 4C

DRAFT RECOMMENDATION

CONCERNING AN EXCLUSIVE ALLOCATION
OF 50 KC/S TO SHIP STATIONS (TELEGRAPHY) IN THE 25-27.5 MC/S BANDS

The Ordinary Radio Conference,

considering

- a) the need of frequencies for ship stations (telegraphy) during high solar activity;
- b) the heavy load of traffic in the exclusive maritime mobile service 22 Mc/s band during high solar activity;
- c) the considerations of the Ordinary Radio Conference, Geneva 1959 (Document No. DT 672);

recommends

that the next Ordinary or Extraordinary Radio Conference allocates a band of about 50 kc/s width for exclusive use of ship stations (telegraphy) in either the band 25 010 - 25 600 kc/s or 26 100 - 27 500 kc/s.

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 4C

$\mathbb{A} \ \mathbb{G} \ \mathbb{E} \ \mathbb{N} \ \mathbb{D} \ \mathbb{A}$

Eleventh Meeting of Working Group 4C (Table of Frequency Allocations, 4 000-27 500 kc/s)

Tuesday, 3 November 1959, 15.00 hours

- 1. Summary Records of Minth and Tenth Meetings (Documents Nos. 464 and 491)
- 2. Consideration of proposals 489 and 490 (BEL, F. F/OPTA, I, HOL) (Report of Working Group 4C Ad Hoc Document No. DT 672)
- 3. Consideration of the draft Final Report by Working Group 4C to Committee 4 (Document No. DT 636).
- 4. Any other business.

H. Pressler Chairman, Working Group 4C

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

AD HOC WORKING GROUP OF 7B

REPORT

by Ad Hoc Working Group established to study and make recommendations regarding the introduction of a phonetic figure table

- 1. The ad hoc group was comprised of Delegates from Argentine, Canada, France, Netherlands, Portugal, United States of America, United Kingdom and the Representative of I.C.A.O.
- The group had to consider whether the proposed French phonetic figure table ("Zero", "Wun", "Bis", "Ter", etc.) (page 780 of the Yellow Book), or the I.C.A.O. figure table ("Zero", "Wun", "Too", "TREE", etc.) should be recommended to the Sub-Committee 7B for adoption.
- The group decided that its first task was to assemble as much information as possible about the two tables and the following points of interest were established:

a) The I.C.A.O. Phonetic Figure Table

- the figure table used by I.C.A.O. does not have, as yet, the same standing as the letter alphabet, inside I.C.A.O. In the publication "Aeronautical Telecommunications" (Annex 10 to the Convention on International Civil Aviation) the letter alphabet is a "Standard" whereas the figure table is a "Standard" only when the English language is being used as the aeronautical radiotelephone language and is, therefore, not applicable when the language used is different from English.
- ii) the figure table is still undergoing exhaustive speech tests in a number of countries, Contracting States of I.C.A.O. However, although some slight amendments may be expected as a result of these tests, an increasing number of I.C.A.O. Contracting States appear to be satisfied that international civil aviation communications based on the English language, are working satisfactorily in actual practice.
- iii) the figure table has been in use inside I.C.A.O. for a number of years and no complaints have been made regarding its effectiveness in use. It would seem that the present table or a slightly amended one on the same basis, is, and will be, perfectly satisfactory for civil aviation use.

- iv) the table is based upon the English language equivalent for figures.
- v) the English language is extensively used in the Civil Aeronautical service.

b) The French Phonetic Figure Table

- i) this table is based on the roots of words, in use in numerous languages, having similarly pronounced prefixes, etc. which indicate a cypher meaning, e.g. BIScuit (two), PENTAgon (five), etc.
- ii) the table has not yet been tried out under actual operational conditions.
- iii) extensive small-scale trials have been given to the table among delegates to C.I.R.M. meetings, which has a membership of representatives from 26 nations, embracing numerous mother-tongues. These tests proved eminently satisfactory.
 - iv) a possible conflict with the spelling table was "EXO" (for figure "6") with the letter alphabet "ECHO" (for letter "E").

 This has now been altered to "SAXO" which eliminates this possible conflict.
- 4. After establishing the above information the group agreed unanimously:

That neither table was sufficiently firmly established that it could be included in the Radio Regulations, at this time, in any mandatory form or as a table for general use in international communications.

5. The group then considered whether one of the tables could be included in Appendix 11 as a recommended table for use only "in case of language difficulties". Opinion was equally divided and no conclusion could be reached.

The supporters of the I.C.A.O. table maintained that this table was spelt out in a phonetic pronunciation form, was well established in civil aviation circles throughout the world, was perfectly satisfactory for their use, and that they would be very reluctant to get involved in a second figure table in any form.

The supporters of the figure table proposed by France maintained that the I.C.A.O. figure table was merely an addition to a spoken language viz. English, that practice has shown that operators speaking their mother-tongue were most difficult to understand because they speak it too quickly and with their own phonetic accent. For this reason they stated that any

figure table based on a national language would be dangerous in the cases of maritime distress, and that a table based as they suggest would be much easier of understanding, even by the lesser educated operators speaking any language.

- 6. The group agreed unanimously that the French table should be evaluated in the special "International Radiotelephone Code" proposed by France and O.P.T.A. on page 777 of the Yellow Book.
- 7. In summary the ad hoc group decided:
 - 1. That neither figure table was sufficiently firmly established or finalised as to be suitable at this time for inclusion in the Radio Regulations in any mandatory form or as a table for general use in international communications.
 - 2. That no conclusion could be reached in the group as to which could be included in Appendix 11 as recommended for use "in case of language difficulties", i.e. when two operators have not the facility of a common language for exchanging communications.
 - 3. That the French table could be evaluated in the special "International Radiotelephone Code" on page 777 of the Yellow Book.

(Note: During discussions in the group it was disclosed that there appears to be two interpretations of the present para. 3 of App. 11. Whether this is the result of an accident of printing, or whether it was intended, we could not establish, but some Administrations use "A" (Amsterdam) for figure 1, "B" (Baltimore) for figure 2, etc. because they appear on the same horizontal lines, whilst others consider this is an interpretation that was not intended.

In any case the group did not consider this a possible solution for a phonetic figure table).

W. Blow Chairman

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

SUB-COMMITTEE 4A

DRAFT

Third Report of Sub-Committee 4A to Committee 4

- 1. Sub-Committee 4A was set up (Document No. DT 532) to consider Indian Proposal No. 5530 (Document No. 342), dealing with an amendment to No. 253 of the Radio Regulations.
- 2. What follows will be more readily understood if we reproduce the existing No. 253, together with Proposal No. 5530:
 - No. 253 Within the Tropical Zone, the broadcasting service has priority over the other services with which it shares those bands listed in 244.
 - Proposal No. 5530 Within the Tropical Zone, the broadcasting service operating in the bands listed in 244 is the main service and the other services sharing these bands are the permitted services.
- As will be readily seen, this proposal makes use of the terminology proposed by Sub-Committee 4F (Document No. 242, paragraph 7B). This terminology was adopted by Committee 4, and the Committee's Sub-Committees are obviously bound to use it.
- 4. The deliberations in Sub-Committee 4A shewed that other delegations thought differently.
 - They feel that reference should be made to paragraph 7A of Document No. 242 to define the priority accorded to tropical broadcasting.

Hence they urge adoption of the following wording:

In the Tropical Zone; broadcasting in the bands listed in 244 shall be the primary service, the services sharing these bands with the broadcasting service being secondary ones.

5. Should this latter wording be adopted and abruptly and incautaiously applied, the countries at present running radio services other than broadcasting in the bands listed in 244, by virtue of agreed plans and lists, would find themselves in difficulty.

The reason for this, of course, is that if broadcasting is considered the primary service, the other, "secondary" services can lay claim to no protection against any harmful interference this primary service may cause.

This problem has already been evoked in a more general way in Sub-Committee 4F. The upshot was a proposal for amendment of Document No. 242, paragraph 10 (Corrigendum 2). This was adopted by Committee 4.

However, the view has been expressed in Sub-Committee 4A that especial attention should be given to services other than broadcasting in the bands listed in 244, since they used low-powered transmitters, while powerful transmitters and considerable bandwidths were used for broadcasting.

- 6. The position does not appear hopeless, for the following reasons:
 - a) Nobody denies that broadcasting in the bands listed in 244 will in future have to be the primary service.
 - b) Nobody denies that for the time being existing services must be protected, especially those to be run in accordance with the lists adopted at this Conference.
- 7. Hence the obvious course would be for the Conference to adopt a resolution on the following lines:

As soon as the new Regulations become effective:

- a) In the Tropical Zone, broadcasting in the bands listed in 244 would become the primary service.
- b) In the bands listed in 244, new frequency assignments to services other than broadcasting would be considered as assignments to stations of secondary services.
- c) Existing services, other than broadcasting, operated in the bands listed in 244, would be considered permissible services until the next Administrative Radio Conference. In relation to them, broadcasting would be the principal service.

- d) Throughout this period, an attempt would be made to transfer these permissible services outside the bands listed in 244. The next Administrative Radio Conference would decide whether such services as might still be in these bands at that time should be considered secondary services.
- 8. Sub-Committee 4A believes that the production of a resolution along these lines is outside its terms of reference, but does not feel it has gone beyond them in setting forth the lines on which this difficult problem might so it considers be settled.

If the above ideas were accepted, No. 253 might be worded as in paragraph 4 above, with a reference to the appropriate resolution. Thus:

"In the Tropical Zone, broadcasting in the bands listed in 244 shall be the primary service, the services sharing these bands with the broadcasting service being secondary ones (see Resolution)."

C. Loyen Chairman, Sub-Committee 4A

GENEVE, 1959

Document Nº DT 677-FES (Rev) 3 novembre 1959

COMMISSION 6 COMISION 6

ORDRE DU JOUR

Onzième séance - Commission 6 (Commission technique)

Mercredi 4 novembre 1959, 9 heures (Salle C)

- 1. Compte rendu de la cinquième séance (Document № 428)
- 2. Compte rendu de la septième séance (Document Nº 483)
- 3. Définitions (Document № 487)
- 4. Proposition concernant la réunion du Groupe linguistique (Déclaration orale faite par le Président)
- 5. Bande de garde autour de la fréquence 2 182 kc/s.
- 6. Divers.

AGENDA

Eleventh Meeting - Committee 6 (Technical)

Wednesday, 4 November, 1959 at 0900 hours - Room C

- 1. Summary Record of Fifth Meeting (Document No. 428)
- Summary Record of Seventh Meeting (Document No. 483) 2.
- Definitions (Document No. 487) 3.
- 4. Proposal for Meeting of Linguist Group (Chairman Oral Statement)
- 5. Guard band for 2 182 kc/s.
- 6. Other Matters.

ORDEN DEL DÍA

11. a sesión - Comisión 6 (Técnica)

Miércoles, 4 de noviembre, a las 9 de la mañana - Sala C

- Informe de la 5.ª sesión (Documento N.º 428)
- Informe de la 7.ª sesión (Documento N.º 483)
- 3. Definiciones (Documento N.º 487)
- Proposición relativa al Grupo de redacción (Informe verbal del Presidente)
- 5. Banda de seguridad para 2 182 kc/s.

Le Président :

6. Otros asuntos. The Chairman:

M.N. Mirza

El Presidente:

GENEVE, 1959

Document N° DT 677-FES 2 novembre 1959

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- 5. Otros asuntos.

Le Président The Chairman El Presidente

M.N. Mirza

Document No. DT 679-E 2 November 1959

GENEVA, 1959

SUB-WORKING GROUP 4D8

TENTATIVE PROPOSAL FOR ALLOCATIONS IN THE BAND 223 - 235 Mc/s SUPPORTED BY THE MAJORITY OF THE SUB-WORKING GROUP

Aeronautical radionavigation

Fixed

Mobile

1) 2) 3) 4)

1. In Austria and Switzerland the band 223-230 Mc/s is allocated to broadcasting only, on a secondary basis and the band 230-235 Mc/s to the fixed and mobile services only.

Repeat of notes applying already to the band 216-223 Mc/s.

- 2. In France the provisions of note 1) for the band 216-223 Mc/s apply up to 225 Mc/s.
- 3. In Italy the band 216-225 Mc/s is additionally allocated to the fixed service according to paragraph 70 of Document No. 242 revised.
- 4. In the United Kingdom the band 216-225 is also allocated to the radiolocation service on a secondary basis.

Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania and the U.S.S.R. favour Broadcasting in the band 223-230 Mc/s as a service with equal rights and Aeronautical radionavigation in the band 230-235 Mc/s.

Document No. DT 680-E
ADDENDUM No. 1
3 November, 1959

Question 1.

Should the duties and functions of the I.F.R.B. be altered? If so, in what way?

The Soviet Delegation considers that the main tasks and obligations of the body that will register frequencies in the future must generally speaking remain those provided for in Article 6 of the Convention and Article 10 of the Radio Regulations. However, when an analysis is made of the work carried out by the I.F.R.B. over the last ten years, it must be admitted that the Board was in a position to carry out only one task more or less satisfactorily. This was the production of a methodical list of frequency notifications made by various countries (Article 6, paragraph la) of the Convention).

With regard to the other two tasks mentioned in Article 6, lb) and lc) of the Convention, the I.F.R.B. was unable to make any practical contribution towards their fulfillment. The Board has shrunk from the obligation to provide Members and Associate Members with advice on how to obtain maximum channel utilization in those parts of the spectrum where harmful interference may arise. The Board has also been unable to carry out any of those additional tasks with regard to the notification and utilization of frequencies which were laid down by competent conferences of the Union and the Administrative Council.

The fact that the Board is unable to draw up a list for the fixed service and draft plans for the high-frequency broadcasting service as it was instructed to do in Articles 10 and 11 of the E.A.R.C. Agreement is a sufficiently convincing example of the above statement.

The fact that the I.F.R.B. has not been in a position to carry out the main task ascribed to it in Article 6 of the Convention may be explained in part by the peculiarities of the way in which the spectrum is at present being used in particular in the bands of the fixed service and high-frequency broadcasting services in the range between 3 950 (4 000 kc/s in Region 2) and 27 500 kc/s.

If it be borne in mind the fact that the position will remain the same for the next five or six years, it may be pointed out that the main activity of the I.F.R.B. or of any similar body in the course of the next few years will essentially be limited to organizing the registration of frequency notifications. This must be taken into consideration when deciding the question of the future structure of the I.F.R.B.

With regard to registration procedure itself, past experience has shown that under present conditions the so-called technical examination (Article 11 of the Radio Regulations and Article 33 of the E.A.R.C.

Agreement) still does not in any way represent a regularization of the use of the spectrum. Technical examination is exceedingly theoretical and is far removed from actual conditions in the use of telecommunications.

The analysis of the statistical data given in the Report by the I.F.R.B. to the Administrative Radio Conference compels us to conclude that no technical examinations were carried out especially in the fixed and high-frequency service bands, because the final results of the registration procedure with the use of technical examinations hardly differ from procedure of the free registration of frequencies. It is clear from the report on the matter that all frequency notifications declared by Administrations were in fact recorded in the Master Radio Frequency Record.

Such a position with regard to registration procedure for frequencies based on the "technical examination" of frequency notifications, can hardly be considered normal. Moreover, if a technical examination is carried out, the registration of frequencies is unjustifiably delayed and this has important economic results for the International Telecommunication Union.

As a result of this the Soviet Delegation considers that the procedure for the registration of frequencies in the Master Radio Frequency Record should be changed and that in particular it is necessary to stop the "technical examination" of frequencies. The Soviet Delegation has already submitted to the Conference for its consideration the proposal that in future the registration of frequencies should be carried out by the I.F.R.B. according to the following principles:

- conformity to the Table of Frequency Allocations;
- conformity to the other provisions of the Convention and Radio Regulations which deal with the notification and use of frequencies;
- conformity to previously accepted lists and plans of frequency allocations;
- the provision of full particulars for every frequency notification in accordance with Appendix 1 to the Radio Regulations.

If the above mentioned principles are observed, this will allow each frequency notification to receive registration status and international recognition. At the same time this guarantees the priority use of frequencies brought into use in accordance with agreed lists and plans.

In the opinion of the Soviet Delegation the technical staff of the I.F.R.B., which was previously busy making calculations for technical examinations, could be more effectively employed on the tasks laid down in Article 6, item 1c) of the Convention.

In the course of this Conference the delegates of many countries have expressed a wish to receive recommendations from an authoritative international body on questions concerning the use of their telecommunications and the choice of frequencies required. This duty can be entrusted to the future organ of the I.T.U. However it should be taken into account that the solution of questions concerning the actual use of this or that particular frequency will always be the subject of a direct agreement between the administrations concerned, and the future I.T.U. organ will be able to act as a negotiator in such agreements.

Question 2.

Should any changes be made in the present structure of the I.F.R.B. in the light of the answer to Question 1, bearing in mind the need to ensure that the tasks entrusted to this organ are efficiently and economically performed?

In view of the considerations adduced above, this Delegation considers that the existing structure of the I.F.R.B. can be simplified. The International Frequency Registration Board could be reorganized as an international frequency registration office, headed by a director and two deputies.

The staff of the I.F.R.O. should be composed of highly qualified specialists recruited from widely different countries and well versed in the organizational and operating conditions of radio communication in specific parts of the world, for the more efficient performance of the functions set out in Article 6, 1b) of the Convention.

CONFERENCE INTERNATIONALE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document Nº DT 681-FES 2 novembre 1959

GROUPE DE TRAVAIL 5B2
WORKING GROUP 5B2
GRUPO DE TRABAJO 5B2

PROPOSITION DU BRESIL PROPOSAL OF BRAZIL PROPOSICIÓN DE BRASIL

A la page 28 du Document \mathbb{N}° DT 613, remplacer le numéro 107 par le texte suivant :

"Lorsque l'assignation est conforme aux numéros 103, 105 et 106, mais non au numéro 104, la date du 3 décembre 1951 est inscrite dans la colonne 2b si la protection indiquée dans la Partie I, Section II, Paragraphe 5 de l'Appendice 16 bis est accordée à d'autres allotissements figurant dans le plan."

Ce nouveau texte constitue un remaniement du texte du paragraphe précité et rend plus clair le sens de ce paragraphe.

It is proposed that in Document No. DT 631, page 28, the following text replace the existing paragraph 107:

"When the listing is in conformity with Nos. 103, 105, and 106, but not in conformity with 104, the date of 3 December 1951 shall be entered in column 2b provided protection is afforded to other allotments in the plan as set forth in Appendix 16 bis, Part I, Section II, paragraph 5."

The proposed text represents an editorial rearrangement of the existing paragraph and assists in understanding the intent of the paragraph.

Se propone que, en el Documento N.º DT 631, página 28, se sustituya el actual número 107 por el texto siguiente:

"Cuando una inscripción se ajuste a los números 103, 105 y 106, pero no al número 104, se consignará la fecha 3 de diciembre de 1951 en la columna 2b, siempre que se conceda protección a las demás atribuciones del plan indicadas en el Apéndice 16 bis, Parte I, Sección II, punto 5."

El texto propuesto constituye una modificación de redacción del existente y facilita su comprensión.

GENEVA, 1959

SUB-COMMITTEE 7A

PROPOSAL OF THE UNITED STATES OF AMERICA WITH REGARD TO ARTICLE 20 AND APPENDICES 6 AND 7 OF THE RADIO REGULATIONS

Comments regarding the Proposals of the U.S.A. for the Revision of Chapter VIII (Article 20)

Proposal No. (Yellow Book)

The text of the Radio Regulations should, so far as practicable, contain general provisions only and the details of instructions or implementation should be included in appendices to the Radio Regulations. Accordingly, it is proposed that Article 20 contain only the statements necessary to: 1) place responsibility for publication of service documents with the Secretary-General; 2) prescribe the publication schedules to be met by the Secretary-General; 3) provide that Administrations are to furnish the data to be published by the Secretary-General in the service documents; 4) provide that the items of information for inclusion in List I must not be changed, although permitting the format to be re-arranged at the discretion of the Secretary-General; and, 5) provide general instructions applicable to all documents.

Except for List I, some flexibility should be permitted with regard to items of information to be contained in service documents which, generally, are used for information purposes. The Secretary-General should be authorized, therefore, to make necessary changes in those documents to meet current requirements of users, without having to wait for such changes to be made at a subsequent Radio Conference.

In preparing this proposal the U.S.A. undertook a re-evaluation of the presently published service documents from the standpoint of its own needs. This resulted in the conclusion that there is insufficient justification for the continued publication of the following:

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				(,
Ref. No.				4046
449		List of	Fixed Stations, in its present form	(\mathtt{contd})
450	-		Broadcasting Stations, except High-	,
		Freque	ency B/C Stations	
452	_	List of	Aeronautical and Aircraft Stations	
453		List of	Radiolocation Stations	
454	_	List of	Special Service Stations	
461	_	Maps		
466		General	Radiocommunication Statistics	
			•	

However, the List of Broadcasting Stations would be retained in part by a List of High-Frequency Broadcasting Stations and the information now contained in the List of Special Service Stations and the List of Radiolocation Stations would in part be included as briefly as practicable in the new List of Coast and Ship Stations. In respect of certain of the data which would not be published by the I.T.U. under this proposal, it has been found that more current and accurate data are available in the publications of other international organizations. This latter fact is important, particularly with respect to radionavigation aids, since the circulation of obsolete information regarding these aids could well represent a hazard to the safety of life.

While the United States is of the opinion that other Administrations in their evaluation of the service documents will arrive at similar conclusions, it would be sympathetic to the proposals of other Administrations for additional service documents should such be necessary to meet their particular requirements.

ARTICLE 20*)

(*) The text of this Article is intended as a complete substitute for the Atlantic City text).

Ref.No.	Service Documents										
446	shall be publish	service documents and supplements thereto listed below 4 c published by the Secretary-General, in accordance with edules specified in Appendix 6:									
447	List I	-	International Frequency List	4048							
448	List II	-	List of Coast and Ship Stations	4049							
449	List III	_	Alphabetical List of Call Signs	4050							

Ref.No.				Proposal No. (Yellow Book)
450	List IV	H	Seasonal Schedules of High-Frequency Broadcasting Stations	4051
451	List V	=	List of High-Frequency Broadcasting Stations	4052
452	List VI	-	International Monitoring Stations	4053
453	List VII	Year.	Coloured Charts (international and regional allocations of the radio frequency spectrum)	4054

Reason:

To charge the Secretary-General with the responsibility for publishing service documents and meeting schedules specified to ensure that, as practicable, current information will be made available to users of these documents.

2. Administrations shall furnish the Secretary-General 4055 currently with the pertinent items of information indicated in Appendix 6 for each document, subject to the provisions of No. 456, such data as are not furnished the International Frequency Registration Board and available to the Secretary-General through the notifications of frequency assignments in accordance with Article 11. This information shall be used by the Secretary-General as the authentic source of data appearing in each such published document.

Reason:

To ensure that Administrations will furnish the International Telecommunication Union with the items of information required for each document so that the Secretary-General may use those items as the authentic source of data for publication in each document.

The International Frequency List (List I) shall be 4056 published in accordance with the pertinent provisions of Appendix 6, and shall contain all of the data specified therein. However, the format of List I may be re-arranged at the discretion of the Secretary-General in collaboration with the I.F.R.B. should such re-arrangements improve the capabilities of the machine records system maintained by the Board.

Reason:

The data specified to be published in List I are vital to the administration of frequencies internationally,

Rei No.	
paras.	
455 (contd)	because a notificati assignment
	/ - \

because a change in a basic characteristic of a frequency notification may directly affect an adjacent frequency assignment. It is important, therefore, that the items (columns) of information be rigidly controlled for List I. Latitude should be provided, however, in the arrangement of the format of List I to allow more flexibility in the machine record keeping of the Board. Time and work of the Board saved through this flexibility is of direct benefit to all Administrations.

4056 (contd)

4. In the case of the Lists other than the International Frequency List, the items of information shown in the Appendix shall be used as a guide, subject to such changes as may be necessary to meet the future requirements of the users of those Lists.

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4057

457 a) However, before any change of substance in an item of information may be made, the Secretary-General must obtain the concurrence of a majority of all the Members of the Union.

4058

458 b) Other changes, including the format of the List, may be made at the discretion of the Secretary-General should such changes result in improvement of the maintenance or use of the List.

405**9**

Reason:

It is believed that greater flexibility should be provided with regard to the items of information of lists other than List I which, generally, are used for information purposes rather than to meet administrative needs as in the case of List I. Accordingly, the Secretary-General should be authorized to make necessary changes in those Lists to meet current requirements of users, without having to wait for such changes to be made at a subsequent Radio Conference. In addition, latitude should be provided in the arrangement of the format of each list to allow more flexibility in the machine or other record keeping systems maintained by the Union, since time and work saved through this flexibility is of direct benefit to all Administrations.

5. Information concerning the method of use of the documents shown in Appendix 6 shall be given in the prefaces thereto. Each entry shall be accompanied by the appropriate symbol, as indicated in Appendix 7, to designate the class of

4060

Ref.No.

Proposal No. (Yellow Book)

459 (contd) station concerned. Additional symbols, where necessary, may be selected by the Secretary-General, any such new symbols being notified by the Secretary-General to the Administrations.

4060 (contd)

Reason:

To provide for the inclusion in each document of appropriate symbols and the necessary instructions for using each document.

460 6. For the purpose of these documents, a country shall be understood to mean the territory within the limits of which the station is located; a colony, an overseas territory, a territory under suzerainty or mandate, or a protectorate shall also be considered as a country for this purpose.

4061

Reason:

It is necessary to define the term "country" for the purpose of the service documents.

Comments Regarding the Proposals of the U.S.A. for the Revision of Appendix 6

The U.S.A. proposal for Appendix 6 is directed toward improving the procedures for obtaining and disseminating radiocommunication data, so that current and accurate data will be available to meet the needs of users at all times. Experience indicates, in this regard, the desirability of effecting a closer relationship between the notification of frequency assignments and the data intended for publication in the several service documents. The following four points are considered of basic importance:

Proposal No. (Yellow Book)
4549

- 1. All particulars concerning uses of radio which are required to be notified to the I.T.U. for all documents and records should, in so far as practicable, be contained in a single submission by administrations, in lieu of multiple notifications for individual publications.
- 2. The total file of information so supplied should be maintained in such a manner that the data therein may be extracted and mechanically reproduced by machine selection in various formats, including those which may be requested by individual administrations.
- 3. All applicable I.T.U. service documents stipulated by the Radio Regulations should be derived from the record referenced in point 2 above. In addition, special lists which may be requested by administrations or recognized agencies may be furnished, to the extent feasible, provided that the information is derived from the same record.
- 4. Certain changes in the formats and frequency of publication of the service documents appear desirable with a view toward improving their utility. Further, non-recapitulative supplements have proven unwieldy. To remedy this defect, certain documents should be published with more frequent intervals and, when supplements are necessary, they should be recapitulative.

APPENDIX 6*

(*The text of this Appendix is intended as a complete substitute for the Atlantic City text.)

Service Documents

(See Articles 10, 11, 18 and 20)

List 1. International Frequency List.

a) This List shall contain details of frequency assignments recorded in the Master International Frequency Register in accordance with the provisions of Article 11 (see No. 320a). These details shall include the data enumerated in e) below.

Proposal No. (Yellow Book)
4550

Reason: To provide for the items of information to be shown in List 1.

b) The List shall show also those specific frequencies and bands of frequencies prescribed by these Regulations for common use by stations of a given service (for example, 500 kc/s and the high frequency ship telegraphy bands).

4551

Reason: To provide for the items of information to be shown in List 1.

c) The International Frequency List shall be republished each year, and shall be kept up to date by the issue of bi-monthly recapitulative supplements. Each entry appearing for the first time in a recapitulative supplement shall have a symbol placed next to it to indicate it has not appeared in previous supplements. The recapitulative supplements shall contain three sections as follows:

4552

SECTION A shall contain new entries and modifications of entries already listed in the International Frequency List; SECTION B shall contain entries, as they appear in the International Frequency List, the frequency, location, call sign (identification) or class of station of which are modified by entries in Section A; SECTION C shall contain entries in the International Frequency List which have been deleted in their entirety.

Reason :

There is a great need among the administrations for information concerning the current status of assignments entered in the Master Register. It is believed that bi-monthly recapitulative supplements would not exceed the capabilities of the present system. Such a schedule as proposed would be a substantial improvement over the publishing schedule which has been followed in the past.

Proposal No.
(Yellow Book)
4552
(contd)

The proposed new Section B of the supplements of the International Frequency List is required by administrations using a machine record system in order to take advantage of machine capabilities in identifying and deleting machine records of entries which have been modified. It is necessary to list in Section B only those entries, the frequency, location, call sign (identification) or class of station of which are modified because these are the four primary identifying characteristics of an assignment.

d) The necessary additions, modifications and deletions affecting List 1 are to be obtained by the Secretary General from the notifications of frequency assignments made in accordance with Article 11, Nos. 314 and 318, for the purpose of the Master Register.

Reason: To show the source of changes in data appearing in List 1.

4553

e) List 1 - International Frequency List

۲	Assigned Frequency (kc/s or Mc/s)
22	Date of Registration (1)
25	Date of Notification (1)
2c	Date of Putting into Use
w.	Call Sign (Identification)
4	Class of Station and Nature of Service
52	Name of Location of Transmitting Station
5 b	Longitude and Latitude of Transmitting Site (2)
5c	Country in which Station is Located
6	Point(s) or Area(s) of Reception
7	Hours of Use of the Frequency
ဟ	Power (LW)
9	Class of Emission and Bandwidth
10	Supplementary Information to Column 9 (4)
L	Name, Postal and Telegraph Address (3)
12a	Remarks by Notifying Country (4)
12b	Remarks by I.F.R.B. (3)

Proposal No. (Yellow Book)
4554

- (1) For the significance of these dates see Article 11.
- (2) In degrees and minutes (Meridian of Greenwich), except for radionavigation stations for which the position will be given in degrees, minutes and seconds.
- (3) Column 11 will contain only reference letter to lists to be printed in front of volume.
- (4) Columns 10 and 13 will contain code letters or numbers to information published in front of the volume.

4556

List II. List of Coast and Ship Stations annoxed to which Proposal No. is a Table and a Chart showing the zones and hours of ser- (Yellow Book) vice of ships of the second category (see Appendix 13).

4555

- a) This List shall contain separate sections for coast telegraph stations, coast telephone stations, ship telegraph stations and ship telephone stations. When it is applicable, a coast station or a ship station will appear in the telegraph and telephone sections. The listing of coast stations shall include, when applicable, an appropriate indication that the coast station transmits:
 - 1) Time signals;
 - 2) Regular meteorological bulletins (weather reports);
 - 3) Notices to navigators; and provides
 - 4) Direction finding service.

Reason :

There is a general need for such a publication. To meet the needs of users of this document, separate sections are recommended for (1) coast telegraph stations, (2) coast telephone stations, (3) ship telegraph stations, and (4) ship telephone stations. When a coast or ship station utilizes both telegraph and telephone for communication, such a station will appear in both pertinent sections of the list. Certain material relating to coast stations, now contained in the List of Special Service Stations, e.g., stations transmitting time signals, regular meteorological bulletins, medical advice and the like, will be more useful if included with other pertinent station particulars in the List of Coast and Ship Stations.

b) This List shall contain, in addition to the data mentioned above, the items of information shown in Parts A, B and C below, subject to modification as permitted by Article 20, No. 456.

4557

Reason:

To provide for the items of information to be shown in List II.

c) List II List of Coast and Ship Stations Part A. Proposal No. Alphabetical index of coast stations. (Yellow Book) 4558

Name of the station.	Call Sign (Identification)	See Part B page
1	2	3

PART B. PARTICULARS OF COAST STATIONS

Name of the Country
Names of the Stations

in alphabetical order

Proposal No. (Yellow Book)
4559

u	Emission	Ser	vice	9	ical)			me g.	Me ⁻ Bulle	t. etins	Notic Navig	es to ators	Med.	Di	rection Finding		
Name of Station Call Sign	Frequencies (1)	Class	Power (3) Nature	Hours (4)	Charges (5) (Exact Geograph Position (2	Remarks (7)	Time (G.M.T.)	Method (8)	Time (G.M.T.)	Remarks (9)	Time (G.M.T.)	Remarks (10)	Charges	Frequency for calling the Direction-Finding Station	Frequency for transmitting to the Direction-Finding Station the Signals necessary for tak-ing bearings	Remarks (11)
1 2	3	4	5 6	7	8	9	10	11	12	13	14	15	16.	17.	18	19	20

- (1) The normal working frequency is printed in heavy type. In the case of duplex telephony, frequencies used for transmission and reception are indicated in conformity with No. 810.

 Frequencies used for services indicated in Columns 11 through 19 are designated by symbols.
- (2) In degrees, minutes and seconds. (Meridian of Greenwich).
- (3) In the case of directive antennas, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from true North clockwise.
- (4) Greenwich Mean Time (G.M.T.).
- (5) The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given at the end of the present list.
- (6) If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should be stated, if necessary.
- (7) Special information concerning the times for calling, for the transmission of traffic lists, and the times during which the coast station keeps watch on the various frequencies, etc.
- (8) General instructions concerning time signals.
- (9) General instructions concerning Meteorological Bulletins, including code used.
- (10) General instructions concerning times of transmissions of notices to navigators.
- (11) Sectors in which bearings are normally accurate and reference to national or international publications other than this list.

Further Explanation of U.S.A. Proposal 4559

"Particulars of Coast Stations"

This list could be changed from the present $7^n \times 9^n$ to $8^n \times 12^n$ - more information could then go on each page and the list would not be so bulky.

A. The Addition of Time Signals to this List

Col. 1 Col. 2 Col. 3 Col. 4 Col. 11 Col. 12

Name of Station Call Sign Frequency Emission Time of Method of Transmission mission

The information concerning time signals would be brief and would not contain time charts as are now in the Special Service List.

B. Meteorological Stations

Column 1 through 4 same as A above. Columns 13 and 14 would indicate time and general instructions with respect to meteorological transmission.

C. Notice to Navigators

Column 1 through 4 same as A above. Columns 15 and 16 would indicate time and brief remarks concerning notices to navigators.

D. Medical Advice

Column 1 through 4 same as A above. Column 7 would indicate hours this service is available and Column 17 would indicate whether or not a charge is made.

E. Direction Finding

Column 1 through 4 same as A above. Columns 18 and 19 would indicate frequencies for calling the D.F. station and frequency for transmitting to the D.F. station the signals necessary for taking bearings.

This information in one Volume would be much more useful and easier for the ship operators to consult.

Part C. Particulars of ship stations

Proposal No. (Yellow Book)

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

4560

1st line:

- call sign, name of the ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names; in that case the name and the call sign are separated by a fraction bar; then the service symbols (see Appendix 7);
- peak power of main transmitter in kW;
- nature of service;
- hours of service in the form of a symbol or a reference.

Times indicated otherwise than by a symbol must be given in Greenwich Mean Time (G.M.T.).

2nd and 3rd lines:

- below the call sign is shown the ship charge, followed by a note to indicate the administration or private enterprise to which the accounts for charges must be addressed. In the case of change of address of the operating authority, a second note after the charge gives the new address and the date from which the change will take effect;
- when two or more ships of the same nationality bear the same name, and also where the accounts for charges must be sent direct to the owner of the ship, the name of the shipping line or of the firm to whom the ship belongs is given by means of a note;
- country to which the station is subject (abbreviated indication);
- indication of the classes of emission and frequency bands.

Proposal	No.
(Yellow	Book)

The bands of frequencies are indicated by means of the following abbreviations printed in heavy type:

4560 (contd)

U Telegraph, 110 + 535 kc/s
V Telephone, 1 600 - 3 500 kc/s
W Telephone, 30 - 40 Mc/s
X Telephone, 150.8 - 174 Mc/s
Y Telegraph, 2 - 23 Mc/s
Z Telephone, 4 - 23 Mc/s

These abbreviations are, if necessary, followed by references to brief notes and indications of the frequencies for which the transmitter is adjusted, the normal working frequencies being printed in heavy type, which appear at the end of the List.

d) The List of Coast and Ship Stations shall be republished every nine months without supplements between editions.

4561

Reason

To specify the schedule of publication of this List.

e) The administrations shall inform the Secretary-General of the additions, modifications and deletions affecting List II, except for those obtainable by him from the notifications of frequency assignments submitted for List I in accordance with Article 11.

4562

Reason

To show the source of changes in data appearing in List II.

List III Alphabetical List of Call Signs

4563

a) This List shall include the call signs of all stations included in Lists I and II having call signs from the international series, with the exception, however, of amateur and experimental stations.

4564

Reason

4564 (contd)

To indicate which call signs should appear in List III.

b) This List is preceded by the table of allocation of call signs given in Article 19 and by a table indicating the form of call signs assigned by each administration to its amateur and experimental stations.

4565

Reason

To provide information regarding the allocation and assignment of call signs internationally.

c) Entries in this List shall be obtained from the current data appearing in the Master International Frequency Register, Columns 3, 4 and 5a and the corresponding columns of information of List II arranged in appropriate order for publication, subject to modification as permitted by Article 20, No. 456.

4566

Reason

To specify the source of information to be shown in this List.

d) This List shall be re-published at least every nine months, and shall be kept up to date by the issue of monthly recapitulative supplements.

4567

Reason

To provide a publication schedule which will make current information available to users. It is recommended that this List be published coincident with the publication of List II.

e) The necessary changes to List III are obtained by the 4568 Secretary-General from the information he receives in regard to Lists I and II.

Reason

To show the sources of changes in data appearing in List III.

4570

4571

4572

List IV Seasonal Schedules of High Frequency Broadcasting 4569 Stations

a) This List of projected seasonal schedules of broadcasting stations between 5 950 and 26 100 kc/s shall contain the items of information shown in the table, subject to modification as permitted by Article 20, No. 456. The preface to the List shall contain a map showing the areas established by the High Frequency Broadcasting Conference of Mexico City, 1948/1949 (C.I.R.A.F.).

Reason

To provide information for use in the orderly planning of broadcasting schedules on a seasonal basis.

b) This List shall be published four times each year, in sufficient time to ensure receipt by administrations not later than the date the schedules contained therein are to become effective. There shall be a separate issue for each of the seasonal periods March 1 through April; May 1 through August; September 1 through October; and November 1 through February.

Reason

To specify the schedule of publication of this List.

c) The data for this publication are derived from the Master Broadcasting Schedules maintained by the I.F.R.B. (See Article 11, Section V).

Reason

To show the source of data for List IV.

d) List IV. <u>Seasonal Schedule of High Frequency Broadcasting</u> 4573

<u>Stations</u>

(examples are illustrative only)

		m	
kc/s 00	01 02 03 04	T. M. G G. M. T. 05 06 07 08 09 10 11 12 13 14 15	
9 655		IND (BHOPAL) B	G (LONDON) A 18,27-29
9 660		SUI (SCHWAR ZENBURG)	

List V List of High Frequency Broadcasting Stations

4575

4576

a) This List shall contain, subject to modification as permitted by Article 20, No. 456, those broadcasting stations appearing in the four preceding issues of List IV, arranged alphabetically by name of the country and transmitter location (see c)).

Reason

To provide for the items of information to be shown in List V, which is proposed to serve as a reference by location to the high frequency broadcasting stations in List IV.

b) This List shall be published annually.

4577

Reason

To specify the schedule of publication of this List.

c) List V List of High Frequency Broadcasting Stations

4578

Transmitter Location	Frequency (kc/s)	Call Sign (Identification)	Power*	Notifying Administration
1	2	3	4	5

*A - 50 kW and over

B - 10 kW to 49.9 kW

C - 1.1 kW to 9.9 kW

D - 1 kW and under

List VI* List of International Monitoring Stations

4579

a) This List shall contain, alphabetically by country those monitoring stations participating in the international monitoring system, including an appropriate symbol to distinguish those stations meeting the technical standards recommended by the I.F.R.B. for international monitoring stations from those stations meeting lower technical standards, as adopted by the I.F.R.B. for special monitoring coverage.

4580

Reason

To provide for the publication of an up to date listing of the international monitoring stations referred to in Article 18, No. 402a, including a description of their technical qualifications and other data for the use of centralizing offices for monitoring and administrations in implementing the applicable provisions of the Radio Regulations.

b) Each monitoring station listed shall be assigned an identification symbol consisting of one digit and two letters as selected by the I.F.R.B. The digit should indicate the main monitoring area in which the monitoring station is located; the letters should be the individual identification of the monitoring station.

4581

Reason

To provide identification symbols for the purpose, in reports of monitoring observations, of distinguishing one monitoring station located within a specific monitoring area from another monitoring station located within the same monitoring area. For example, Union of South Africa monitoring station located at Derdepoort, Pretoria, which is located in I.F.R.B. main monitoring area No. 6, would be assigned the symbol "6DE". Likewise, the symbol "1AN" would indicate United States monitoring station at Anchorage, Alaska, which is within I.F.R.B. main monitoring area No. 1.

c) This List shall contain the items of information shown in e), including a table of contents and a statement of the current technical standards for performance to be observed by international monitoring stations, subject to modification as permitted by Article 20, No. 456.

4583

^{*}See also No. 411 regarding the publication of summaries of monitoring data.

Proposal No. (Yellow Book)

Reason

4583 (contd)

To provide for the items of information to be shown in List VI.

d) This List shall be re-published each year if required, and shall be kept up to date by the issue of supplements as necessary.

4584

Reason

To provide for publication of this List periodically so that, within practicable limits, up to date data will be available to users.

International Monitoring Stations e) List VI.

al No. Book)																
Proposal (Yellow 1 4585	Monitoring	FREQUEN(CY MEASUR	REMENTS	FIELD S	FIELD STRENGTH MEASUREMENTS					DIRECTION FINDING			OCCUPIED BANDWIDTH MEASUREMENTS		
Monitoring Stations	l c	Hours of Service (G.M.T.)	Range of Frequencies	Precision of Measurements	Hours of Service (G.M.T.)	Range of Frequencies	Minimum and Maximum of Measur- able Field Strength	Precision of Measurements	Hours of Service (G.M.T.)	Range of Frequencies	Precision of Measurements	Hours of Service (G.M.T.)	Range of Frequencies	Precision of Measurements	Remarks	
nal Mc	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
ਬੀ																

National Centralizing Office:

Postal Address

Telegraphic Address

Proposal No. (Yellow Book)

List VII Coloured Chart showing international and regional allocations of the radio frequency spectrum

4586

Reason

To meet the requirements of administrations for an accurate, large scale reproduction of the frequency allocation table appearing in the Radio Regulations.

APPENDIX 7

Service Document Symbols

(See Article 20 and Appendix 6)

×	station on board a warship or a military or naval aircraft.								
A	automatic alarm apparatus.								
	station classified as situated in a region of heavy traffic (Article 33).	,							
0 .	by day								
0	by night								
[]	a ship which carries lifeboats equipped with radio apparatus; a number inside the brackets shows the number of such lifeboats.								
\triangle	radio direction finder on board a mobile station.	2793							
	(List of Coast and Ship Stations)								
R(radar on board a mobile station	2794							
AG	aeronautical radio direction-finding station								
AL	aeronautical radionavigation land station								
AM	aeronautical radionavigation mobile station								
AP	aeronautical radiobeacon station	2797							
AX	aeronautical fixed station								

		Proposal No. (Yellow Book)
BA	broadcasting station, amplitude modulation	2795
BF	broadcasting station, frequency modulation	
BT	broadcasting station, television	
С	continuous operation during hours shown	
CO	station open to official correspondence exclusively	2796
CP	station open to public correspondence	
CR	station open to limited public correspondence	2798
CA	station open exclusively to correspondence of a private agency	
D 30°	directive antenna having maximum radiation in the direction of 30° (expressed in degrees from true North, from 0 to 360° clockwise).	
DR	directive antenna provided with a reflector	
FA	aeronautical station	2799
FB	base station	
FC	coast station	
FL	land station	2800
FR	receiving station only, connected with the general network of telecommunication channels	
FS	land station established solely for the safety of lif	Ĉe
FX	fixed station	
GMT	Greenwich mean time	
	station maintaining a scheduled operation	2801
Н8	station maintaining 8 hours of service, also applicable to a ship station of the second category carrying on 8 hours of service	2802

		Proposal (Yellow	
н16	station maintaining 16 hours of service, also applicable to a ship station of the second category carrying on 16 hours of service	2803	
H24	station having a continuous day and night service		
HD	station utilizes this frequency on a daytime basis only	2804	V.
HJ	station open from sunrise to sunset (day service)		
HN	station utilizes this frequency on a night-time basionly	<u>s</u> 280 <i>5</i>	
HT	station utilizes this frequency on a transition basionly	s	
HX	station having no specific working hours		•
I	station having specific working hours; however, transmissions are intermittent	2806	
LP	land radiopositioning station		
MA	aircraft station		
ML	land mobile station .		
MO	mobile station		
MP	mobile radiopositioning station	•	
MS	ship station		,
NL	maritime radionavigation land station		
OT	station open exclusively to operational traffic of the service concerned		
RC	non-directional radiobeacon		
RD	directional radiobeacon		
RG	radio direction-finding station		

		Proposal No. (Yellow Book)
RL	radionavigation land station	2807
RM	maritime radionavigation mobile station	
RT	revolving radiobeacon	2808
SM	meteorological aids station	2809
SS	standard frequency station	2810

Reason

To bring current the provisions concerning symbols to be used in service documents; to provide more definitive symbols; to incorporate into the Appendix symbols presently used by the I.F.R.B. to describe operations in the International Frequency List.

CONFERERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document № DT 683-FES

3 Novembre 1959

GROUPE DE TRAVAIL 7A7
WORKING GROUP 7A7
GRUPO DE TRABADO 7A7

ORDRE DU JOUR

Séance du Groupe de travail 7A7

Mercredi 4 novembre 1959, à 15 houres - Salle H

- 1. Proposition relative à l'inclusion de quatre colonnes supplémentaires dans la "Partie B, Etats signalétiques des stations côtières" (proposition 4559 des. Etats-Unis, modifiée par l'Australie).
- 2. Approbation des textes des numéros 451 à 468 du Règlement; (voir le Document de travail publié séparément).
- 3. Divers.

AGENDA

Meeting of Working Group 7A7

Wednesday, 4 November 1959, at 15.00 hours - Room H

- 1. Proposal regerding the inclusion in to "Part B, Particulars of Coast Stations" (U.S.A. proposal 4559 modified by Australia) of four additional columns.
- 2. Approval of texts for paragraphes 451 468 of the Radio Regulations (see Working paper issued separately).
- 3. Any other business.

ORDEN DEL DÍA

Sesión del Grupo de trabajo 7A7

Miércoles, 4 de noviembre 1959, a las 3 de la tarde - Sala H

- 1. Proposición relativa a la inclusión en la "Parte B, Estado descriptivo de las estaciones costeras" (Proposicion 4559, de Estados Unidos de América, modificada por Australia) de cuatro columnas adicionales.
- 2. Aprobación de los textos para los números 451 468 del Reglamento de Radiocommunicaciones (Véase el documento de trabajo que se publica por separado).
- 3. Otros asuntos.

Le Président :

The Chairman:

E. Ron

El Presidente:

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 684-FES 3 novembre 1959

SOUS-GROUPE DE TRAVAIL 4B2 SUB-WORKING GROUP 4B2 SUBGRUPO DE TRABAJO 4B2

ORDRE DU JOUR

<u> 5ème séance - Sous-Groupe de travail 4B2</u>

Jeudi 5 novembre 1959, de 15h à 18h 30 - Salle A

- 1. Examen des propositions 726, 890, 891, 894 et 3283 (relatives au nouveau renvoi proposé 3 bis) pour la bande 70 130 kc/s.
- 2. Examen du projet de Tableau de répartition des bandes de fréquences 70 150 kc/s (Document Jaune N° DT 685)
- 3. Divers.

AGENDA

Fifth Meeting Sub-Working Group 4B2

Thursday, 5 November, 1959 1500-1830 - Room A

- 1. Consideration of proposals 726, 890, 891, 894 and 3283 (relative to proposed new footnote 3bis) in connection with the band 70-130 kc/s
- 2. Consideration of Draft Frequency Allocation Table 70-150 kc/s (Yellow Document No. DT 685)
- 3. Any other business.

ORDEN DEL DÍA

5.ª sesión del Subgrupo de trabajo 4B2

Jueves, 5 de noviembre de 1959, de 3 a 6,30 de la tarde - Sala A

- 1. Examen de las Proposiciones N. 08 726, 890, 891, 894 y 3283 (relativas a la nueva nota 3 bis), en relación con la banda 70-130 kc/s.
- 2. Examen del proyecto de Cuadro de distribución de las bandas de frecuencias entre 70 y 150 kc/s (Documento amarillo N.º DT 685).
- 3. Otros asuntos.

Le Président The Chairman El Presidente K.A. Williams

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

SUB-WORKING GROUP 4B2

70 - 150 KC/S - DRAFT FREQUENCY ALLOCATION TABLE

- 1. A draft Frequency Allocation Table in respect of the band $70-150~\rm kc/s$ is attached as Annex 1. The draft has been prepared in the light of general agreement and/or opinion expressed in Sub-Working Group 4B2.
- 2. Reservations concerning Annex 1 have been made as indicated hereunder:
 - a) By France, Italy, Federal Ropublic of Germany with reference to the extension of the band 112 115 kc/s to 112 117.6 kc/s (footnote 7);
 - b) By Japan with reference to footnotes 4 and 7;
 - c) By the <u>United Kingdom</u> with reference to footnote 6, last sentence;
 - d) By France, Portugal, the United Fingdom with reference to Fixed service in band 130 150 kc/s;
 - e) By the U.S.S.R. with reference to footnote 12.

K. A. Williams
Chairman

Annex: 1

ANNEX

Frequency Band kc/s	World-wide	Region l	Region 2	Region 3
70 - 90	1)	a. Fixed 2)b. Maritime Mobilec. Radionavigation 3)4)	a. Fixed 2) b. Maritime Mobile c. Maritime radionavigation 3) 5)	a. Fixed 2) b. Maritime Mobile c. Radionavigation 3) 4)
90 - 110	a. Fixed 2)b. Maritime Mobilec. Radionavigationl) 6)			
110 - 130	1)	a. Fixedb. Maritime Mobilec. Radionavigation 3)7)	 a. Fixed b. Maritime Mobile c. Maritime radionavigation 3) 5) 	a. Fixed b.Maritime Mobile c. Radionavigation 3) 7)
130 - 150	1) 8) 11)	a. Fixed b. Maritime Mobile 10) 12)	a. Fixed 9) b. Maritime Mobile	a. Fixed 9) b.Maritime Mobile

- 1) The intermittent use of very low power (under 10 watts) hydrographic survey systems is authorized in the band 86 135 kc/s provided any harmful interference frence from other authorized services is accepted and harmful interference is not caused to other services;
- 2) Limited to coastal telegraph stations using Al and Fl emissions only;
- 3) Continuous wave systems only;
- 4) The frequency band 70 72 kc/s and 84 86 kc/s are reserved for the exclusive use of continuous wave systems of radionavigation;
- 5) The establishment and operation of Maritime Radionavigation stations shall be subject to arrangements between Administrations having other services which may be affected. However, the Fixed and Maritime Mobile services shall not cause harmful interference to Maritime radionavigation stations when so established;

- The development and operation of long distance radionavigation systems are authorized in this band, which will become exclusively allocated, wholly or in part, for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services. If a pulse radionavigation system is employed the pulse emissions must nevertheless be confined within the band and must not cause harmful interference outside the band to stations operating in accordance with the Regulations. During the period prior to international adoption of any long distance radionavigation system the operation of specific radionavigation stations shall be subject to arrangements between Administrations having authorized services which may be affected. Once established under such arrangements, radionavigation stations shall be protected from harmful interference;
- 7) The frequency bands 112 117.6 kc/s and 126 129 kc/s are reserved for the exclusive use of continuous wave systems of radionavigation;
- 8) The frequency 143 kc/s is the calling frequency for stations in the Maritime Mobile service using the band 110 160 kc/s. The conditions for its use are prescribed in Article 33;
- 9) The Fixed service is authorized provided no harmful interference is caused to ship telegraphy in the North Atlantic and Mediterranean areas;
- 10) Limited to ship stations (telegraphy exclusively);
- 11) Classes Al, A4, Fl or F4 emissions only shall be authorized for stations of the Fixed and Maritime Mobile services working on frequencies in the band 110 160 kc/s;
- 12) In Poland and the U.S.S.R. the radionavigation service is authorized additionally and the Mobile service is authorized alternatively to the Maritime Mobile service. However, Maritime Mobile operations shall have priority.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 686-FES 3 novembre 1959

SOUS-COMMITTEE 7A SUB-COMMITTEE 7A SUBCOMISION 7A

ORDRE DU JOUR

Séance du mercredi 4 novembre 1959, 9 heures - Salle D

- 1. Approbation du Document N° DT 628 (rapport GT 7A2).
- 2. Approbation du Document N° DT 658 (rapport GT 7A7).
- 3. Continuation de l'étude des propositions concernant l'Article 20, l'Appendice 6 et l'Appendice 7.
- 4. Divers.

AGENDA

Meeting on Wednesday 4 November 1959 at 9 a.m. in Room D

- 1. Approval of Document No. DT 628 (Report WG 7A2).
- 2. Approval of Document No. DT 658 (Report WG 7A7).
- 3. Continuation of the study of proposals to Article 20, Appendices 6 and 7.
- . Any other business.

ORDEN DEL DIA

Miércoles, 4 de noviembre, a las 9 de la mañana - Sala D

- 1. Amobogida del Documento N.º DT 628 (Informe Gt 7A2).
- 2. Aprobación del Documento N.º DT 658 (Informe Gt 7A7)
- 3. Continuación del examen de las proposiciones relativas al Articulo 20 y a los Apéndices 6 y 7.
- 4. Otros asuntos.

Le Président :

The Chairman:

P. Bouchier

El Presidente:

Document No. DT 687-E 3 November, 1959

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

WORKING GROUP 4D

REPORT BY SUB-WORKING GROUP 4D10

The Sub-Working Group's terms of reference were:

To consider allocations in Region 1 in the bands between 585 and 960 Mc/s.

It held three meetings, on 27 October and on 2 and 5 November, 1959. The following countries were represented:

Austria, Belgium, the People's Republic of Bulgaria, Denmark, France, Greece, Italy, Norway, the Netherlands, Portugal, the Federal Republic of Germany, the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics, Sweden, Switzerland, and the Union of South Africa.

The Sub-Working Group recommends that Working-Group 4D adopt the changes to the Frequency Allocation Table and footnotes relating thereto set forth in the Annex hereinafter. These recommendations were unanimously adopted by the Sub-Working Group itself.

The Sub-Working Group wishes to draw attention to a proposal by Italy in favour of including a paragraph in Article 4 of the Radio Regulations shewing that the services using scatter techniques may be run only by virtue of agreements between the Administrations concerned or affected thereby.

The Swedish Delegation has proposed that such agreements be negotiated through the International Frequency Registration Board, which body would be responsible for bringing them to the notice of all I.T.U. Members.

The Sub Working Group reached no decision about Proposals 3370 (United States) and 3262-3265 (Switzerland). These proposals being of world-wide application, the Working Group felt they lay outside its terms of reference.

Chairman :

C. Tervani

 $\underline{\text{Annex}}$: 1.

ANNEX

	Freqency band		Allocation to services			
		World-wide	Regional			
· .			Region 1	Region 2	Region 3	
TABLE MOD	582 - 606		582 - 606 a) Broad- casting b) Aeronaut- ical radio naviga- tion 99 a) 99 b)			
213 SUP	 99)					

- 213 a ADD
- 99a) In the United Kingdom the frequency band 582 606 Mc/s is allocated alternatively to the aeronautical radionavigation and the radiolocation services, the latter being on a secondary basis.
- 213 b ADD
- 99b) In Greece and Italy the frequency band 582 606 Mc/s is also allocated additionally to the fixed service until January, 1965.

	Frequency		Alloc	ocation to services		
	Band Mc/s	World-wide	Regional			
			Region 1	Region 2	Region 3	
TABLE MOD	606 - 790		606-790 Broad- casting 100 a) 100 b) 100 c)			

214 a	ADD	100a)	In Bulgaria and the U.S.S.R. the frequency band 606-960 Mc/s is allocated additionally to the aeronautical radionavigation service.
214 b	ADD	100ъ)	In Greece and Italy the frequency band 606-685 is allocated additionally to the fixed service until January, 1965.
214 c	ADD	100c)	Radionavigation services may continue to operate in the frequency band 606-610 Mc/s until the band is required for the broadcasting services.

,	·					
	Frequency band Mc/s		Allocation to services			
		World-wide	Regional			
			Region 1	Region 2	Region 3	
TABLE MOD	790-960		790-960 a) Fixed b) Broad- casting 100 f) 100 g)			
To the state of th						

214 f ADD 100f) In Region 1 stations using tropospheric scatter may be accommodated in the frequency band 790-960 Mc/s under arrangements to be agreed between the Administrations concerned and affected, and shall operate in the frequency band 790-860 Mc/s on a secondary basis to the broadcasting service.

214 g ADD 100g) In Belgium, France and the Principality of Monaco the frequency band 790-860 Mc/s is allocated alternatively to the broadcasting service.

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 5A

During the discussion of Proposals 1160 and 1205 from the Administration of France, Working Group 5A asked the representatives of the I.F.R.B. to prepare a document on the concept of "slight probability of harmful interference" as at present applied by the Board.

In accordance with this request, and to facilitate the consideration of point 4.3 of Document No. DT 255, the attached document is submitted by the representatives of the I.F.R.B. to Working Group 5A. It is, to some extent, an expansion of paragraphs 7.3.3.4 and 7.6.4 of Section VII of the Report by the I.F.R.B. to the Administrative Radio Conference (Document No. 20).

The concept of "slight probability of harmful interference" as applied by the International Frequency Registration

Board:

1. The following general definition of favourable, qualified favourable and unfavourable Findings reached by the Board with respect to frequency assignment notices in the frequency range from 3,950 kc/s (4,000 kc/s in Region 2) to 27,500 kc/s is given in paragraph 2 of the Preface to Technical Standard A-1 concerning signal/interference protection ratios (Second Edition, 1958):

"In the frequency range from 3,950 kc/s (4,000 kc/s in Region 2) to 27,500 kc/s the desirable protection ratio is that given by the first figure (outside the parentheses) in the last column; and if the calculated protection exceeds this value, a favourable finding (10 or 11 as appropriate) is made. Due to the variability of a number of factors which may influence the calculated protection ratio, if this falls within the range given by the figures in parentheses, the notifying Administration is informed that the calculated protection to other assignments is lower than is considered desirable for certain hours, seasons or phases of solar activity but that the probability of causing harmful interference is not sufficiently apparent to justify an unfavourable finding, and that a qualified favourable finding (10Y or 11Y as appropriate) has been given. If the calculated protection ratio is below the lower of the figures in parentheses, an unfavourable finding (15 or 16 as appropriate) is made and the notice is returned to the notifying Administration, unless the interference pattern is not appreciably affected or unless the operations of the affected assignments would appear to be of a character which may permit time-sharing."

The "desirable" protection ratio is based, according to the C.C.I.R. Recommendations, on the protection ratios required under stable conditions and on the allowance to be made to take account of fading. The two values of the protection ratio given in Technical Standard A-1 and their difference depend on the fading allowances, in other words, on the percentages of time during which the protection of a transmission against interference ensures that it is of satisfactory quality.

- The way in which these principles are applied is specified in detail in Section II of the Rules of Procedure of the I.F.R.B. which were sent to Administrations under cover of Circular-Letter No. 2662/59/R of 10 February, 1959. Working Group 5A may perhaps consider it sufficient to list below some of the most typical cases in which the Board reaches a qualified favourable finding, that is, in which, owing to the variable nature, in each individual case, of certain factors in relation to the average values based on C.C.I.R. Recommendations, the Board considers that the probability of harmful interference is not sufficiently apparent to justify an unfavourable finding and the return of the notice to the Administration concerned:
 - a) When the calculated protection ratio falls between the two values given in Technical Standard A-1 for the type of transmission under consideration, and
 - b) when the Board bases its calculation on the assumption that transmitting and/or receiving directional antennae are used on the basis of C.C.I.R. Recommendations.
 - c) When "skip" occurs on the interference path and contributes to the protection of the receiving point, taking account of the fact that propagation may occur otherwise than by F2 layer.
 - d) When the probability of harmful interference exists only for a small part of the period of normal operation of the assignment susceptible to interference in accordance with the conditions of propagation.

- e) When, for certain periods, the calculated field strength at the point of reception of the assignment subject to interference is slightly below the minimum value required under Technical Standard A-2, and the quality of the service is therefore slightly below that required.
- f) When the probability of harmful interference caused by a new assignment which has been notified is no greater than that by assignments of the same Administration recorded on the same frequency in the Master Radio Frequency Record.
- g) When time-sharing appears possible, for example, when there are consecutive transmissions to several receiving points and the proportion of such points where harmful interference is likely to occur is only a fraction of the number of receiving points notified for the assignment under consideration.
- h) When, in the case of a change such as an increase in power, it is obvious from the calculated protection ratio that time-sharing is already employed between assignments entered in the Master Radio Frequercy Record.
- i) When attenuation due to "auroral absorption" should be taken into account.
- An examination of the weekly I.F.R.B. circulars shows that a large number of the favourable findings reached by the Board in the frequency range between 3,950 kc/s (4,000 kc/s in Region 2) and 27,500 kc/s are qualified favourable findings. It may be added that, as far as the Board knows, complaints of actual harmful interference made against stations for which such findings have been reached have been very rare, which shows that, in the present state of knowledge of the variable factors which must be taken into account in technical examinations, the operators of the various services seem not to be restricted, in practice, by these "slight probabilities of harmful interference", and that this concept might be included in the new Regulations, as proposed by Working Group 5AL.

GENEVA, 1959

Decrment No. DT 689-E 3 November, 1959

WORKING GROUP 5A

MONITORING STATION MAPS

At the request of Working Group 5A, the I.F.R.B. has prepared 3 monitoring station maps which are reproduced as Annexes 1, 2 and 3 to this document.

The information contained in these Annexes has been established on the basis of respectively 1 000 km, 1 500 km and 2 000 km separation between monitoring stations.

The 1C main areas as used in the Board's Summaries of Monitoring Information are apparent on each map and their numbers 0, 1. ... 9 are indicated in heavy print and are surrounded by a small circle.

In the free space of each area, 2 numbers are shown, separated by an oblique stroke: the first of these refers to the number of existing monitoring stations in the area concerned which have been notified to the $I \cdot T \cdot U \cdot ;$ the second refers to the number of additional monitoring stations which would be required in that area.

Example:

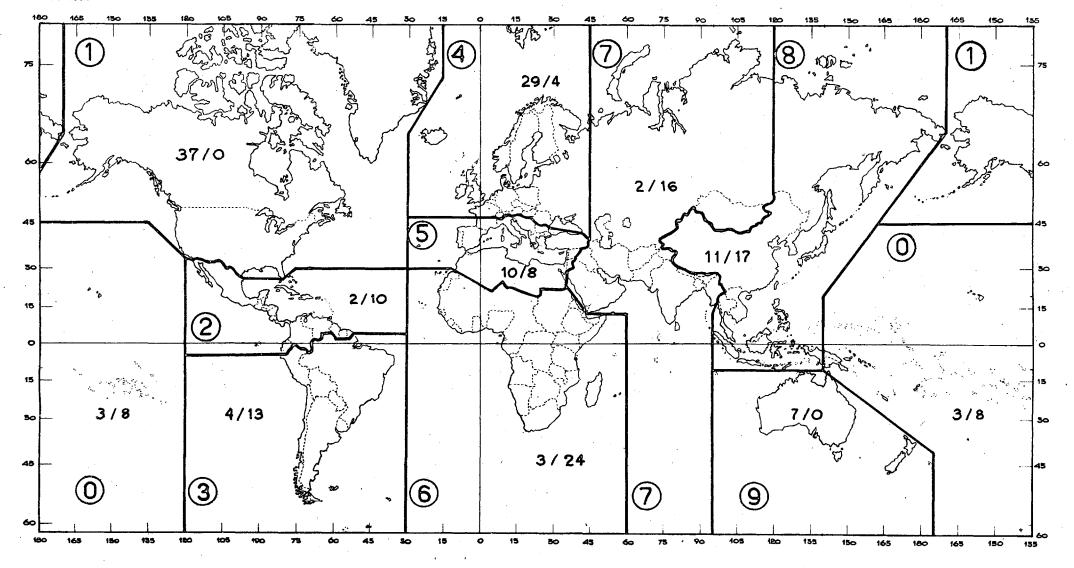
In Annex 1, in the space of area 4, the indication "29/4" means that 29 monitoring stations have been notified to the I.T.U. and that 4 additional stations would be required on a basis of 1 000 km separation between stations.

Annexes: 3

Carte indiquant, pour chaque zone de contrôle, le nombre des stations de contrôle notifiées à l'U.I.T., ainsi que le nombre des stations supplémentaires qui seraient nécessaires dans l'hypothèse d'un espacement de 1000 km entre stations.

Map indicating for each monitoring area the number of monitoring stations notified to the I.T.U., followed by the number of additional monitoring stations which would be required on the basis of 1000 km separation between stations.

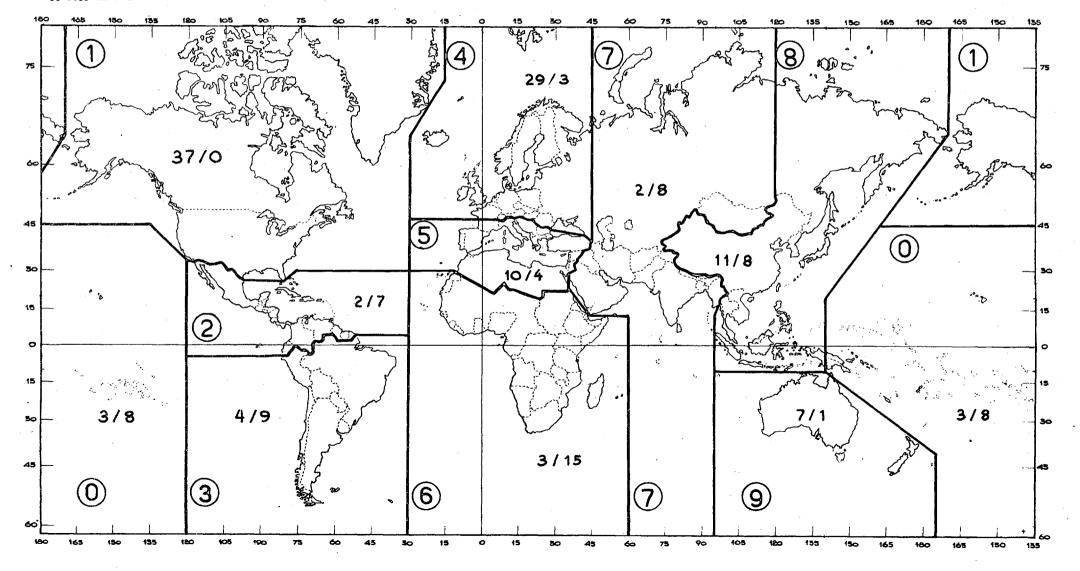
Mapa indicativo, para cada zona de control técnico, del número de estaciones de control técnico notificadas a la U.i.T. y del número de estaciones adicionales de control técnico que serían necesarias, a base de una distancia entre las estaciones de 1000 km.



Carte indiquant, pour chaque zone de contrôle, le nombre des stations de contrôle notifiées à l'U.I.I., ainsi que le nombre des stations supplémentaires qui seraient nécessaires dans l'hypothèse d'un espacement de 1500 km entre stations.

Map indicating for each monitoring area the number of monitoring stations notified to the !.T.U., followed by the number of additional monitoring stations which would be required on the basis of 1500 km separation between stations.

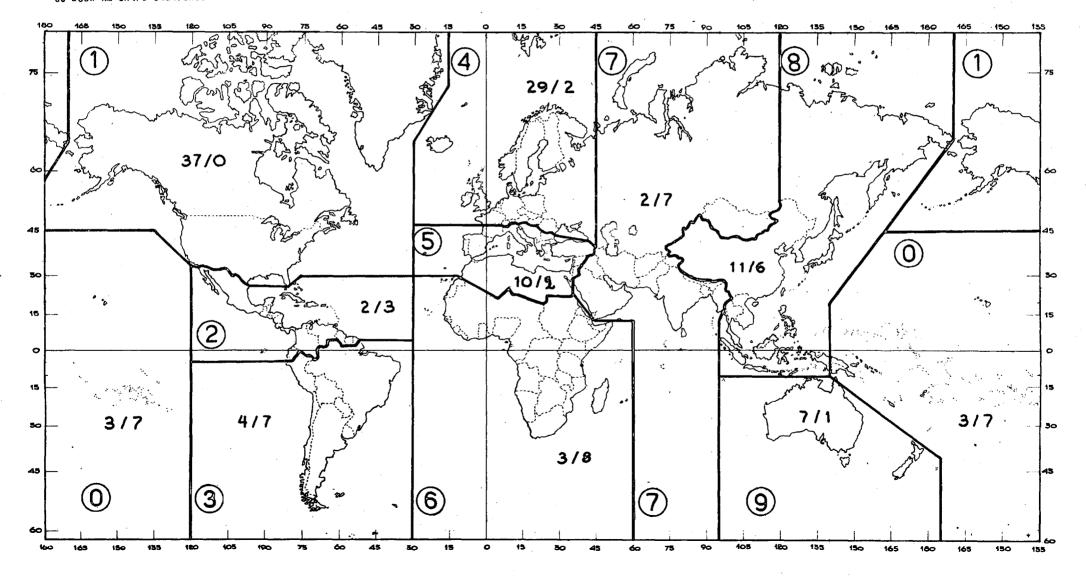
Mapa indicativo, para cada zona de control técnico, del número de estaciones de control técnico notificadas a la U.I.T. y del número de estaciones adicionales de control técnico que serían necesarias, a base de una distancia entre las estaciones de 1500 km.



Carte indiquant, pour chaque zone de contrôle, le nombre des stations de contrôle notifiées à l'U.I.T., ainsi que le nombre des stations supplémentaires qui seraient nécessaires dans l'hypothèse d'un espacement de 2000 km entre stations.

Map indicating for each monitoring area the number of monitoring stations notified to the i.T.U. followed by the number of additional monitoring stations which would be required on the basis of 2000 km separation between stations.

Mapa indicativo, para cada zona de control técnico, del número de estaciones de control técnico notificadas a la U.I.T. y del número de estaciones adicionales de control técnico que serían necesarias, a base de una distancia entre las estaciones de 2000 km.



Document No. DT 690-E 3 November, 1959

GENEVA, 1959

SUB-WORKING GROUP 5B1

REPORT

of Sub-Wcrking Group 5Bl (Region 3)

to

Sub-Working Group 5Bl

- 1. Sub Working Group 5Bl (Region 3) was reconstituted on Monday 26th October 1959 to consider U.K. Proposal 1077 ter contained in Document No. 24.
- 2. It was revealed at the meeting that the inclusion of references in the Radio Regulations to the use in Region 3 of 2 091 kc/s (with a guard band of 2.5 kc/s on either side) as a ship radiotelegraph calling frequency, and 2 638 kc/s (with a guard band of 4 kc/s on either side) as an inter-ship frequency were also the subject of Proposals 1079 and 1080 respectively made by the Japanese Administration and which appear on pages 261.1 and 262 (Rev.1) of the Yellow Book.
- 3. There was unanimous agreement that it be recommended to Sub-Working Group 5Bl that both of the proposals mentioned in the preceding paragraph and which are in substance contained in U.K. Proposal 1077 ter, be adopted, and that Committee 4 be asked to include the necessary information in Article 9 of the Radio Regulations.
- 4. As enquiries revealed that no use was being made of the frequency 3 805 kc/s as an aeronautical distress frequency in Afghanistan, Burma, Ceylon, India or Pakistan, it was unanimously agreed to recommend to Sub-Working Group 5Bl that no reference to this frequency for the purpose in question be carried over into the Radio Regulations from No. 64 of the E.A.R.C. Agreement.

L. Keith Convenor

CONFERENCE INTERNATIONALE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No DT 691 FES 3 novembre 1959

SOUS-GROUPE DE TRAVAIL 4D10 SUB-WORKING GROUP 4D10 SUBGRUPO DE TRABAJO 4D10

ORDRE DU JOUR

Troisième séance du Sous-Groupe de travail 4D10

Jeudi, 5 novembre 1959 à 11 heures -Salle G

- 1. Examen du rapport du Sous-Groupe de travail au Groupe de travail 4D (Document jaune N° DT 687).
- 2. Divers.

AGENDA

Third Meeting - Sub-Working Group 4D10

Thursday, 5 November 1959 at 11 a.m. - Room G

- 1. Study of the report of the Sub-Working Group to the Working Group 4D (Yellow Document No. DT 687).
- 2. Any other business.

ORDEN DEL DÍA

3.ª sesión - Subgrupo de trabajo 4D10

Jueves, 5 de noviembre de 1959, a las 11 de la mañana - Sala G

- 1. Examen del informe del Subgrupo de trabajo al Grupo de trabajo 4D (Documento amarillo Nº DT 687).
- 2. Otros asuntos.

Le Président :

The Chairman : C. Terzani

El Presidente:

GENEVE, 1959

GROUPE DE TRAVAIL 7A4 WORKING GROUP 7A4 GRUPO DE TRABAJO 7A4

ORDRE DU JOUR

Huitième séance du Groupe de travail 7A4 - Indicatifs d'appel

Vendredi 6 novembre 1959, à 9 heures - Salle E

- 1. Formation des indicatifs d'appel des séries internationales (N° 419 § 4) Examen des propositions N° 5513 § 10 (Document N° 219) du Congo Belge et No. 4029 (page 337 Rev. 1) des Etats Unis d'Amérique
- 2. Examen des propositions relatives aux Nos 414 à 418 du RR
- 3. Examen des propositions N° 5491 (Document N° 239) de la République Fédérale d'Allemagne, N° 5509 et 5510 (Document N° 285) de la R.S.S. de Biélorussie, et N° 5513 8 30 et 40 (Document N° 299) du Congo Belge
- 4. Mise à jour de l'ensemble des noms des pays figurant dans le tableau de répartition des indicatifs d'appel. Remarque du Secrétaire Général Nº 1408 (pages 336 et 337 Rev. 1)
- 5. Examen des demandes de nouvelles séries d'indicatifs propositions énumérées à l'annexe l à ce document
- 6. Divers.

AGENDA

Eighth Meeting of Working Group 7A4 - Call Signs

Friday, 6 November 1959, at 9 a.m.-Room E

- 1. Formation of call signs in the international series (419 \$ 4)
 Proposal 5513 \$ 10 (Document No. 299) by the Belgian Congo,
 Proposal 4029 (page 337 Rev. 1) by the United States
- 2. Proposals about Nos. 414 to 418 of the Radio Regulations
- 3. Proposal 5491 (Document No. 239) by the Federal Republic of Germany Proposals 5509 and 5510 (Document No. 285) by the Bielorussian Soviet Socialist Republic, Proposal 5513 § 30 and 40 (Document No. 299) by the Belgian Congo
- 4. Review of the names of countries in the table of allocation of call signs. Assistant Secretary-General's comments (No. 1408, pages 336 and 337 Rev. 1)
- 5. Consideration of applications for new series of call signs proposals listed in Annex l hereinafter
- 6. Any other business.

ORDEN DEL DÍA

8.ª sesión del Grupo de trabajo 7A4 - Distintivos de llamada

Viernes, 6 de noviembre de 1959, a las 9 de la maĥana-Sala E

- 1. Formación de los distintivos de llamada de las series internationales (N.º 419 § 4)

 Examen de las proposiciones N.ºS 5513 (punto 10, documento N.º 299) del Congo Belga, 4029 (página 337 Rev. 1) de los Estados Unidos de América
- 2. Examen de las proposiciones relativas a los N.ºS 414 a 418 del RR
- 3. Examen de las proposiciones N. OS 5491 (Document N. O 239) de la Republica Federal de Alemania, 5509 y 5510 (Documento N. O 285 de la R.S.S. de Bielorrusia, 5513 (puntos 30 y 40, documento N. O 299) del Congo Belga
- 4. Actualización del conjunto de los nombres de países que figuran en el Cuadro de asignación de distintivos de llamada. Observación del Secretario General N.º 1408 (páginas 336 y 337, Rev. 1)
- 5. Examen de las solicitudes de nuevas series de distintivos (proposiciones enumeradas en el Anexo l al presente Orden del día)
- 6. Otros asuntos.

Le Président :

The Chairman: M. Sannier

El Presidente,

Annexe : Annex : 1

Document N° DT 692-FES Page 3

	A N N E X	
	ANEXO	
Règlement Regulation Reglamento	Proposition N ^O Proposal No. Proposición N ^O	Page Page Pågine
419	1414	338 Rev. 1
-	5528	Doc.331
-	1416	338 Rev. 1
-	1418	339 Rev. 2
•	4658	339 Rev. 2
-	4659	339 Rev. 2
-	5199 - 🖁 c)	Doc. 88
- -	5468	Doc. 202
•	5524	Doc.316
-	5529	Doc.333
~	5 551	Doc.433
-	5552	Doc.442
**	5508	Doc.276

A N N E X E

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

GROUPE DE TRAVAIL 4B
WORKING GROUP 4B
GRUPO DE TRABAJO 4B

ORDRE DU JOUR

10ème séance - Groupe de travail 4B (Tableau de répartition de bandes de fréquences - 9 à 4 000 kc/s)

Mercredi, 4 novembre 1959, à 0900 heures - Salle B

- 1. Examen du projet du 4ème rapport du Groupe de travail 4B à la Commission 4, (Document N° DT 594)
- 2. Rapport verbal du Président du Sous-Groupe de travail 4B2
- 3. Divers.

A G E N D A

Tenth Meeting of Working Group 4B (Table of Frequency Allocations - 9 to 4 000 kc/s)

Wednesday, 4 November, 1959, at 9.00 a.m. - Room B

- 1. Consideration of draft Fourth Report of Working Group 4B to Committee 4 (Document No. DT 594)
- 2. Verbal Report by Chairman 4B2
- 3. Any other business.

ORDEN DEL DÍA

10.a sesión del Grupo de trabajo 4B (Cuadro de distribución de frecuencias - 9 a 4 000 kc/s)

Miércoles, 4 de noviembre de 1959, a las 9 de la maĥana - Sala B

- 1. Examen del proyecto del 4.º informe del Grupo de trabajo 4B a la Comisión 4 (Documento N.º DT 594)
- 2. Informe verbal del Presidente del Subgrupo de trabajo 4B2
- 3. Otros asuntos.

Le Président :

The Chairman: H. L. Sastry

El Presidente,

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959 Document No. DT 695-E 4 November, 1959

SUB-WORKING GROUP 5B2

FRANCE, UNITED KINGDOM, UNITED STATES OF AMERICA

Proposal

The above countries join in submitting the attached Proposal for the amendment of Document No. DT 173 together with the associated Resolution.

Annex: 1

$\mathbb{A} \ \mathbb{N} \ \mathbb{N} \ \mathbb{E} \ \mathbb{X}$

APPENDIX 16 bis

PART II

SECTION II

ARTICIE 1

A. Description of the Major World Air Route Areas (MWARA) Boundaries

INSERT UNDER Major World Air Route Area - EUROPE (MWARA - EU)

NEW NOTE as follows: -

As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the East of the Area boundaries.

These frequencies, noted in the Frequency Allotment Table as EU (Ext) shall be available for use in the area bounded by the following line: from the coordinate 72°N-30°E through the coordinate 72°N-40°E thence South along the meridian 40°E to the coast of the Black Sea through Tuapse, Sochi and Sukhumi to Ankara rejoining the present boundary of the MWARA-EU.

NEW NOTE as follows: -

Note 2 Particular attention is drawn to the Notes attaching to the descriptions of the Areas - MWARA-ME, MWARA-NA, MWARA-SA and to Resolution No. affecting the availability of frequency allotments within the MWARA-EU.

UNDER Major World Air Route Area - MIDDLE EAST (MWARA - ME)

DELETE present Note in toto.

INSERT NEW Note as follows: -

Note 1 As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the North of the Area boundaries. These frequencies, noted in the Frequency Allotment Table as ME(Ext) shall be available for use in the area bounded by the following line: from the junction of the existing area boundary with the meridian 80°E along the meridian 80°E Northwards to the coordinate 50°N-80°E then North West to Moscow thence South West to Kiev and through to rejoin the present boundary at Ankara.

INSERT NEW NOTE as follows:-

Note 2 As a further interim measure pending the revision mentioned in Note 1 above the MWARA-ME shall not extend into the European Area beyound the line connecting the following terminals: Sollum, Alexandria, Cyprus, Ankara.

UNDER Major World Air Route Area - NORTH ATLANTIC (MWARA-NA)

DELETE present Note 2 altogether.

REPLACE by NEW NOTE as follows:-

As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-NA shall not extend into the European Area beyond a line connecting the following terminals: Stavangar, Amsterdam, Brussels, Paris, Madrid, Lisbon, Casablanca and drawn to the area boundaries.

UNDER Major World Air Route Area - SOUTH ATLANTIC (MWARA-SA)

DELETE present Note altogether

REPLACE by NEW NOTE as follows:-

Note: As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-SA shall not extend into the European Area beyond a line connecting the following terminals: Algiers, Madrid, Lisbon.

SECTION 11 A FREQUENCY ALLOTMENT TABLE							
INSERT after	r EU						
EU-Ext.	2910	4689	•5	6582	8871	11299.5	17906.5
After FE2 D	ELETE :	all entri	es for M	E and M	E(Ext)		
REPLACE by				•			
ME	3404.5 3446.5		88 6627	45.5 10	0021	13334.5	17926.5
ME(Ext)	3404.	5 5604	6627	10	0021		
After Pacific Met. DELETE all entries for SA and SA(Ext)							
REPLACE by:							
SA	2875	3432.5	6612 6679.5 6597	8879.5 8939	1004	8 13274.5	17946.5

PART II SECTION 11B Frequency Allotment Plan

Make corresponding entries and deletions in Column 2 "Authorised area of use" against appropriate frequencies.

RESOLUTION No. RELATING TO THE PREPARATION OF REVISED ALLOTMENT PLANS FOR THE AERONAUTICAL MOBILE SERVICE

The Administrative Radio Conference, Geneva, 1959,

considering

- that the Frequency Allotment Plans for the Aeronautical Mobile Services produced by the I.A.A.R.C. (Geneva, 1949) and adopted by the E.A.R.C. (Geneva, 1951) have been substantially adopted for inclusion in the Radio Regulations;
- 2. that since the time of the I.A.A.R.C. there have been changes in the route patterns flown by international civil aviation services;
- 3. that the rates of increase of international civil aviation services have differed amongst the various MWARA's;
- 4. that there are now new requirements for frequency allotments to serve the needs of international civil aviation services outside the existing MWARA's; for example in the areas of the North Pole and in the territories of the U.S.S.R. adjacent to the existing MWARA's;
- that because of the higher speeds of aircraft there are now new requirements for frequencies to serve the needs of international civil aviation in particular purposes, for example, in those families of frequencies allotted in the Plan for the purpose of providing meteorological information to aircraft in flight;
- 6. that, on the other hand, certain provisions of the I.A.A.R.C. Plans are no longer required, for example, the extension of the MWARA. NSA-1 and NSA-2 families of frequencies into the whole of the European area;
- 7. that a limited number of new provisions have been incorporated into the Plans at this Conference to meet urgent requirements;
- 8. that the Plans contain a measure of flexibility which will enable some but not all new requirements to be satisfied;
- 9. that there are new aeronautical communication techniques under study and development which have a direct bearing on channel widths and on the number of channels required to meet essential communications needs of national and international aircraft operations. These include:
 - a) extensions of the useful communication range and increased application of VHF,

- b) new HF techniques to increase the speed and quantity of communications,
- c) new methods for more expeditious dissemination of meteorological information,
- d) improved selective calling systems;
- 10. that the new communication techniques above, together with anticipated improvements in aeronautical radionavigation techniques, having a direct influence upon the nature and quantity of communications handled and having an impact on spectrum space required should be adequately reflected in the new frequency allotment plans,
- 11. that whereas the present Plans were produced on the basis of a large amount of material relating to the operational requirements, usages and procedures of aeronautical mobile services, it has been impracticable for this Conference to have available and to study the corresponding material essential at this time to effect a complete review of the Aeronautical Mobile Service Plans;
- 12. that many countries did not have available at this Conference the information necessary to determine the extent to which the Frequency Allotment Plans meet current requirements for national and regional air operations;
- 13. that the International Telecommunication Convention, Buenos Aires, 1952, in Article 10, paragraphs 5 and 7, provides that an Extraordinary Administrative Radio Conference may revise the provisions of the Radio Regulations;

is of the opinion

that the Aeronautical Mobile Service Plans contained in Appendix 16 bis of the Radio Regulations will require to be reviewed and Administrations should urgently study the communications requirements of their national and international air operations in order to establish when, in the best interests of aviation, such a review shall be undertaken;

resolves

that an Extraordinary Administrative Radio Conference is convened under the Provisions of Article 10 of the International Telecommunication Convention to review Appendix 16 bis and the provisions of the Radio Regulations associated therewith and to complete its work before the next ordinary Administrative Radio Conference.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 696-FES 4 novembre 1959

GROUPE DE TRAVAIL AB WORKING GROUP AB GRUPO DE TRABAJO AB

PROJET DE MODIFICATION DU N° 146 DU REGLEMENT DES RADIOCOMMUNICATIONS (complète le Document N° DT 594)

146 MOD 32) L'exploitation des stations de radionavigation Loran est temporairement autorisée sur la fréquence 1 950 kc/s (bande occupée : 1 925 - 1 975 kc/s) à la condition que l'installation et l'exploitation de stations Loran fassent l'objet d'accords particuliers entre les administrations dont certains services pourraient être affectés.

PROPOSED DRAFT MCDIFICATION TO No. 146 OF THE RADIO REGULATIONS

(to complete Document No. DT 594)

146 MOD 32) The operation of Loran Radionavigation Stations is authorized temporarily on 1 950 kc/s (the band occupied being 1 925 - 1 975 kc/s) provided that the establishment and operation of specific Loran Stations shall be the subject of a special arrangement among administrations having operations that would be affected.

PROYECTO DE MODIFICACIÓN DEL N.º 146 DEL REGLAMENTO DE RADIOCOMUNICACIONES (complemento al Documento N.º DT 594)

146 MOD 32) Se autoriza temporalmente el funcionamiento de las estaciones de radionavegación Loran en 1 950 kc/s (banda ocupada, 1 925 - 1 975 kc/s), siempre que la instalación y funcionamiento de las estaciones Loran se efectúe en virtud de arreglo especial entre las administraciones que exploten servicios que puedan verse afectados.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 697-FES 4 novembre 1959

SOUS-GROUPE DE TRAVAIL 5B2 SUB-WORKING GROUP 5B2 SUBGRUPO DE TRABAJO 5B2

ORDRE DU JOUR

Sixième séance - Groupe aéronautique 5B2

Vendredi, 6 novembre 1959 à 15 heures - Salle F

- 1. Document No DT 695 Proposition
- 2. Document No DT 631 Rapport du Sous-Groupe de travail 5B2 au Groupe de travail 5B
- 3. Divers.

AGENDA

Sixth Meeting - Aeronautical Group 5B2

Friday, 6 November 1959, 3 p.m. - Room F

- 1. Document No. DT 695 Proposal
- 2. Document No. DT 631 Report by Sub-Working Group 5B2 to Working Group 5B
- 3. Any other business.

ORDEN DEL DÍA

6. a sesión - Grupo aeronáutico 5B2

Viernes, 6 de noviembre de 1959, a las 3 de la tarde - Sala F

- 1. Documento N.º DT 695 Proposición
- 2. Documento N.º DT 631 Informe del Subgrupo de trabajo 5B2 al Grupo de trabajo 5B
- 3. Otros asuntos.

Le Président:
The Chairmen: A. Lebel
El Presidente:

· ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No.DT 698-E 4 November 1959

WORKING GROUP 4E

THIRD REPORT

of Sub-Working Group 4E3 to Working Group 4E

- 1. The question of frequency allocations for space research was considered in the sixth and seventh meetings of Sub-Working Group 4E3, with Document No. 478 used as a basis for discussion.
- 2. The following Delegations were represented at the sixth meeting: Australia, Austria, Argentina, Brazil, Canada, France, Greece, Italy, Indonesia, Japan, Netherlands, New Zealand, Norway, Portugal, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America, Union of Soviet Socialist Republics plus Mr. Iastrebov of the I.F.R.B. and an Observer from I.C.A.O; while the following delegations were represented at the seventh meeting: Australia, Austria, Belgium, Canada, France, Italy, Japan, New Zealand, Portugal, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland and United States of America with Iastrebov of the I.F.R.B. assisting the Chairman.
- 3. After some discussion on the frequency bands recommended in document No. 478, it was obvious that the opinion of the majority present was against allocation of the bands 1801-1821 lic/s and 2084-2104 Mc/s to space research.
- that the meeting consider allocation of two 10 Mc/s wide bands at 1 700-1 710 Nc/s and 2 290-2 300 Mc/s. The allocation of these bands was discussed at some length and although a fair measure of agreement was reached on the allocation of the bands, particularly with regard to the band 1 700-1 710 Nc/s, to space research, there was a considerable difference of opinion as to the priority to be allocated to each service. The Delegate of Switzerland suggested that it might be possible to allocate portion of the band 2 300-2 450 Nc/s to space research, for example 2 303-2 313 Mc/s.
- Finally in view of the small number of delegations represented at the seventh meeting of Sub-Working Group 4E3, it was decided to report to Working Group 4E the numbers for and against allocation of each band, on the basis that further discussion could be held in Working Group 4E at a later date.
- 6. The numbers for and against each allocation were as follows:-

Document No. DT 698-E Page 2

E.W. Anderson

Band 1 700-1 710 Mc/s 14) with equal priority - 6 (a) For allocation to Space Research:) space N.I.B. = 8 (b) Against Allocation for Space Research: Band 2 290-2 300 Mc/s (a) For allocation to Space Research: 13) with equal priority - 6) Space N.I.B. - 7 (b) Against allocation to Space Research: 3 Band 2 303-2 313 Mc/s (a) For allocation to Space Research: 4) with equal priority - 3) Space N.I.b. to Fixed - 1 (b) Against allocation to Space Research: (c) Reserved: 9 Rapporteur Chairman

J. Mapson

Document No. DT 699-E 4 November, 1959

GENEVA, 1959

WORKING GROUP 7A4

FIRST REPORT

by Working Group 7A4 to Sub-Committee 7A

- 1. Working Group 7A4 was set up at the seventeenth meeting of Sub-Committee 7A, on 16 October, 1959, to consider all the proposals about Article 19 (call signs), as well as Committee 6's proposal for the inclusion of Article 13, Section V (Document No. DT 329) in Article 19.
- 2. In what follows, the Working Group submits its findings in connection with the international call-sign series provisionally assigned by the Secretary-General between two Administrative Radio Conferences.

These allocations were made subject to Administrative Council Resolution 151 (amended) and in Remark No. 1408 (page 335.1 of the Volume of Proposals) the Acting Secretary-General asked for confirmation thereof.

At its third meeting, on 24 October, 1959, the Working Group unanimously confirmed the allocation of call signs shown in Annex 1 hereinafter.

The series allocated were either:

- taken from the series available,
- or yielded by one country to another.

The result will entail certain changes in the Call-Sign Allocation Table shown in the Radio Regulation (419, \$4).

At the same time, the Working Group adopted a variety of proposals made by countries with a view to regularizing the allocations provisionally made to them or the series yielded to other countries. In what follows, these proposals are shown opposite the relevant call-sign series.

Chairman:

M. Sannier

Annex: 1

ANNEX

Call-Sign Series	Countries shown in the Radio Regulations Table	New Allocation	Proposals and the countries making them
AMA - AOZ	Not allocated	Spain	5532 (Document No. 347)
JYA - JYZ	Not allocated	Jordan	·
JZA - JZZ	Not allocated	Dutch New Guinea	
SSA - SSM	Egypt	United Arab Rep- ublic (Egyptian Region)	
SSN - STZ	Egypt	Sudan	
SUA - SUZ	Egypt	United Arab Rep- ublic (Egyptian Region)	
TJA - TRZ	France and Colonies	France and Over- seas France	1411-France and Over- seas France
TSA - TSM TSN - TSZ	11	Tunisia France and Over- seas France	1412 " 1411 "
XTA - XTZ	11	seas france	1411 "
XUA - XUZ	11	Cambodia	1412 "
XVA - XVZ	TT .	Viet-Nam	1412 "
XWA - XWZ	11	Laos	1412 "
YKA - YKZ	Syria	United Arab Rep- ublic (Syrian Region)	
3VA - 3VZ	France and Colonies	Tunisia	1412-France and Over- seas France
3WA - 3WZ	Not allocated	Viet-Nam	
3XA - 3X Z	Not allocated	Not allocated	·
4P4 - 4SZ	Colonies, etc., of the United Kingdom of Great Britain and North ern Ireland	Ceylon	
4XA - 4XZ	Not allocated	Israel	5524 (Document No. 316 Israel)
4YA - 4YZ	Not allocated	I.C.A.O.	413-France and Over- seas France
5AA - 5AZ	Not allocated	United Kingdom of Libya	
5CA - 5CZ	Not allocated	Morocco	1417-Morocco
5LA - 5MZ	Not allocated	Liberia	
5PA - 5QZ	Not allocated	Denma r k	

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Call-Sign Series	Count r ies shown in the Radio Regulatio ns Table	New Allocation	Proposals and the countries making them
7JA - 7JZ	Not allocated	Japan	1416-Japan
8JA - 8JZ	Not allocated	Japan	1416-Japan
9AA - 9AZ	Not allocated	San Marino	
9GA - 9GZ	Not allocated	Ghana	
9KA - 9KZ	Not allocated	Kuwait	
9MA - 9MZ	Not allocated	Malaya	
9NA - 9NZ	Not allocated	Nepal	
98A - 98Z	Not allocated	Federal Republic of Germany	
VOA – VOZ*	Newfoundland	Canada	

^{*} Change approved at the request of the Canadian Delegation.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 700-FES 5 novembre 1959

SUB-COMMISSION 7A SUB-COMMITTEE 7A SUBCOMISION 7A

ORDRE DU JOUR

de la séance de la Sous-Commission 7A

Vendredi 6 novembre 1959, à 15 heures, Salle A

- 1. Rapport du Groupe de travail 7A2 (Document Nº DT 534)
- 2. Etude du Document Nº 133
- 3. Etude des propositions concernant l'Appendice 6 (renvoi au Groupe de travail 7A7)
- 4. Etude des propositions concernant l'Appendice 7
- 5. Etude des propositions concernant l'Article 45, Section II
- 6. Etude des propositions concernant l'Appendice 13 (Livre jaune, pages 805 à 807)
- 7. Divers.

AGENDA

of the Meeting of Sub-Committee 7A

Friday, 6 November 1959, at 3 p.m. Room A

- 1. Report of Working Group 7A2 (Document No. DT 534)
- 2. Consideration of Document No. 133
- 3. Consideration of proposals concerning Appendix 6 (to be send back to Working Group 7A7)
- 4. Consideration of proposals concerning Appendix 7
- 5. Consideration of proposals concerning Article 45, Section II
- 6. Consideration of proposals concerning Appendix 13 (Yellow Book pages 805 to 807)
- 7. Any other business.

ORDEN DEL DÍA

de la sesión de la Subcomisión 7A

Viernes, 6 de noviembre de 1959, a las 3 de la tarde, Sala A

- 1. Informe del Grupo de trabajo 7A2 (Documento N.º DT 534)
- 2. Examen del Documento N.º 133
- 3. Examen de las proposiciones relativas al Apéndice 6 (Remisión al Grupo de trabajo 7A7)
- 4. Examen de las proposiciones relativas al Apéndice 7
- 5. Examen de las proposiciones relativas al Artículo 45, Sección II
- 6. Examen de las proposiciones relativas al Apéndice 13 (Cuaderno amarillo, páginas 805 a 807).
- 7. Otros asuntos.

Le Président:

The Chairman: P. Bouchier

El Presidente: