

# Documents of the International Administrative Radio Conference for Aeronautical Communications (2nd Session) (Geneva, 1949)

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Geneva 1949

Allotments as against Demands for the Eastern Hemisphere. Final result of Sub-Working Group C 1's work as at 3rd September 1949 and adopted by Working Group C.

G.A. Harvey Chairman of Sub-Working Group C 1 E.L. White Chairman of Working Group C

Summary of Demands and Extent to which they have been met.

Power 1.0 kW radiated (Low power control channels not included)

Individual Channel

Shared Channel

Allotment

Demand

4 2

Shared Channel

Individual Channel

KEY

+, x, 0, p, x, 4, x

attached to shared numeral indicates where shared

D - day demand

see area 6

N - night demand



ZONE R.D.A.R.A. AREA	3	3,5	4.7	5.6	6,6	9	10	11	13	18
1	6/10	2/4	2/5	5/8	4/6	2/5	2/1	7/1	1/1	0/0
1A	00	00	00/	00	0/0	0/0	0	0	0/0	00
18	1/0	1/18/2	00/0	1/0/	0/1*/	0/0	00	0	0/0	0/0
10	00/	18/10	000	00	0/1*/	0/0	0	0/0	0/0	00
10	0/10/2	10	00/0	1/0/2	1/1*	0/0	00	0/0	0/0	0/0
1 E	1/10	18	00/0	2/4	1	0/0	0/0	0	0/0	0/0

⊕, x, +, o, ø, \*, △, > FRÉQUENCES COMMUNES - COMMON FREQUENCIES - FRECUENCIAS COMÚNES

ZONE R.D.A.R.A. AREA	3	3,5	4,7	5,6	6,6	9	10	17	13	18
2	2 3	1/2	1	1 /3	1/2	0/2	24+	2/200	1/1	00
24	0 3	0/1	0/1	1¢ / 3	2/1*/2	0/1	0	0	0/0	0/0
28	0 /3	0/2	0/1	1/2	1/2	0/1	0/0	0/0	0/0	0/0
2 <i>C</i>	0/4	0/2	0/1	2/18/	1* 3	0/1	0/0	0/0	0/0	00
3	2 3	0/2	1	3 3	1/2	0/3	0/2	1/2	1/1	0/
3 A	1 4	0/2	0/1	0/3	2/1	0/0	020+	2 <sup>Δø</sup> /0	0/0	100
38	4/10/	1/2	0/1	3 / 3	5 / 2	30	0	0/0	0/0	00
3 C	3/10/	0/2	0/1	0/3	3/2	2/0	0/20+	1/0	0/0	100
283	2/5	2/3	1/1	2/4	4 5	7/4	4/3	2/4	0/2	1/3

ZONE R.D.A.R.A. AREA	3	3,5	4,7	5,6	6,6	9	10	17	13	18
4	0/0	00	0/0	00	0/0	10	0/0	0/0	0/0	14
44	0/1	0/0	0/0	1/1	7/10/	0/10	0/0.	1+/ 1×	0/0	0/1×
48	1	00	00	2/1	5/1°	0/10	0/0	7+/1×	00	0/1×
	0/0	0/0	0/0	0/0	0/0	1º 0	0/0	0/0	00	10
54	0 1	0/0	0/0	1/1	10/10	0/10	0/0	1+ 1×	0/0	0/1×
58	10/10	0/0	0/0	0/10/	1/10	0/10	00	1+/1×	0/0	0/1×
SC	10/10	0/0	0/0	0/10/	70	0/10	0/0	7 +/1×	0/0	0/1×
50	10/10	0/0	0/0	1/10/	0/10/	0/10	0/0	1+/1×	0/0	0/1×

10,x,+,0, Ø, \*, A, > FRÉQUENCES COMMUNES - COMMON FREQUENCIES - FRECUENCIAS COMÚNES

ZONE R.D.A.R.A AREA	3	3,5	4,7	5,6	6,6	9	10	11	13	18
6	0/0	10	0/0	2/0	10	0/0	0/0	1/1	0/0	0/0
64	1/2* AD	7/1 A 7	000	3 <sup>△ø</sup> */2	438A+ 6	1/1 * 2	10/10	0/0	0/0	0/0
6 <b>B</b>	2 3	2 3	0 p	2/1 <sup>Δ</sup> /2	278 3	1 / 3	00	0/0	0/0	0/0
SC.	2 0	7 7	10 0 NO	2/0	2/202 1	1 <sup>Δ</sup> /1*	1/1	0/0	1	0/0
60	OOO	3 5 N2 5	1/1 A 1/2 N 1*	3/2	32°× 1	1 <sup>Δ</sup> /1*	10/1×	0/0	0/1×	0/0
6 E	7/2* A B	44	) <del>^</del> /	1 al-2 A O(X /	13 ØA+ B	0/1	1 △ 1△ 1×1△	0/0	0/0	0/0
6F	7* 0 N O	0 /2	O O	0/0	2 2 2	27*/	1/1 ^ 1×	0/0	1/1×	0/0

⊕,x,+, 0, Ø, \*, △, > FRÉQUENCES COMMUNES - COMMON FREQUENCIES - FRECUENCIAS COMÚNES

ZONE R.D.A.R.A. AREA	3	3,5	4,7	5,6	6,6	9	10	77	13	18
7	2/0	00	00	3/18	110	11 * 0	0/0	0/12/0	0/0	14 0
74	7*	00	0/0	0/1*	0 /18	0/1+	0/0	00	0/0	0/0
78	1 1*	1/0	00	1 7*	32*A	1 /1+	00	0/10	0/0	0/1×
70	0/1*	00	0/0	0/1*	0/14	0/1+	00	0/10	0/0	0/1×
70	3/1*	2/0	10	3 1*	1/200/	2/1	0/0	0/10	0/0	0/1×
7 <i>E</i>	4/1	3/0	7/1	1/0	1/3×AØ/	2/1+	2/0	7/10	0/0	0 1×
8 A	0	0	0	18	7 × 18	1* 1+	0	1 \ O	0	0

⊕,×,+,o, Ø, \*, △,> FRÉQUENCES COMMUNES - COMMON FREQUENCIES - FRECUENCIAS COMÚNES

ZONE RDARA. AREA	3	<b>3</b> ,5	4,7	5,6	6,6	9	10	27	13	18
9	1/1	1/1	1/1	3 0	4/2	2/1*	0/0	$\frac{2}{2}$	0/0	0/0
94	1/10/4	10	0/0	1/0	3×+/	1/0	0/0	0/0	0/0	0/0.
98	2/4	1	0/0	2/18	2/2+4	1/0	18	2 /	0/0	0/0
90	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
90	7/10/	5 4	4/1	0	6/2+4/7	1/0	1/20>	3 0	0/0	0/0
9 E	4/6	1/0	0/0	1/0	1/3×+4/6	0/0	28x/	0/0	0/0	0/0

⊕,x,+,0,Ø,\*, △,> FRÉQUENCES COMMUNES - COMMON FREQUENCIES - FRECUENCIAS COMÚNES

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/2 - Document No. 102-E

**REVISED** 

3rd October 1949

#### INTRODUCTION

#### HISTORICAL

# BACKGROUND OF THE INTERNATIONAL ADMINISTRATIVE AERONAUTICAL RADIO CONFERENCE

1 The International Radio Conference of Atlantic City (1947), in a Resolution Relating to the Preparation of the New International Frequency List (Page 14 of the "Recommendations and Resolutions"), defined the functions of the various bodies entrusted with the coordination and publication of this List.

An Annex to this Resolution gives Directives for the Provisional Frequency Board (P.F.B.) and specifies that an International Administrative Aeronautical Conference under the auspices of the International Telecommunication Union (I.T.U.) might deal with the exclusive Aeronautical Mobile Service bands.

- 2 In a Resolution adopted during its Second Session (Geneva, January-February 1948), the Administrative Council of the I.T.U. decided to convene in Geneva an International Administrative Aeronautical Radio Conference (I.A.A.R.C.), to be preceded by a Preparatory Committee of nine members. This Committee met on 26 April 1948.
- 3 Under its terms of reference, as set forth in the documents of the Atlantic City Conference, the I.A.A.R.C. was to deal with the assignments of frequencies in the exclusive aeronautical mobile "R," and "OR," frequency bands between 2,850 and 18,030 kc/s. These bands are listed numerically on page 28 of the third part of the final document of the Atlantic City Radio Conference.
- 4 The I.A.A.R.C. began its work on 15 May 1948 under the Chairmanship of Mr. Arthur L. Lebel, Head of the United States Delegation, who had been previously elected Chairman of the Preparatory Committee.
- 5 With reference to the operational uses to be made of frequencies from "R" bands and "OR" bands respectively, the Conference has assumed that a strict interpretation would be given numbers 256 and 257 of the 1947 Atlantic City Radio Regulations\*.
- 6 At its first Session, the I.A.A.R.C. was able to carry out its terms of reference for the OR bands. This was not possible, however, for the R bands. The main difficulty was to reconcile the small amount of spectrum space reserved for the R service with the volume of requirements submitted by Administrations for the regional and domestic air route areas while complying with the exigencies of the technical principles adopted by the Conference.



<sup>\*</sup> These provisions are quoted in the "Definitions", Part 1, Section I hereinafter.

7 On 15 September, 1948, after a considerable amount of work, the Conference was compelled to adopt a Resolution to suspend its work temporarily as of 25 September 1948.

The I.A.A.R.C. prepared a Provisional Report which was sent to all administrations.

B Faced with this temporary stalemate, the Conference invited the Administrations to examine the results of the work in its First Session, to study some of its documents which showed certain working methods and numerical standards likely to be taken into consideration by the Second Session of the Conference, and to coordinate the results of their studies with those of other Administrations at regional conferences.

It also invited the *International Civil Aviation Organization* (I.C.A.O.) to study the part of the draft plan which concerned the International routes of its Member States, to try to reduce the requirements of the Major World Air Routes to a minimum, and to establish a draft frequency allotment plan for the international services of its Member States.

Reports on all this work were to reach the Secretary General of the Union by 30 June 1948, at the latest.

- 9 Most of the Administrations supplied the information in the required form. Also, I.C.A.O.

  Member States conducted the studies which they had been requested to undertake and I.C.A.O. was able to prepare a coordinated report on these studies and to submit to the Secretariat of the I.T.U. their "calculated requirements" for the Aeronautical Mobile Service.
- 10 The second session of I.A.A.R.C. met in Geneva on 1 August 1949 (Circular No. 600 of 30 March 1949 of the Radio Division and Notification No. 572 of 1 April 1949, both issued in compliance with Resolution No. 58 of the Administrative Council, 3rd session 1948).
- 11 The Conference then adopted as the basis for its work the material mentioned in paragraph 9 above, as well as the findings of the regional meetings of I.C.A.O. and of the Washington Region II Conference, 1949.

Calculated requirements for the regional and domestic air route areas were submitted by I.C.A.O. and by the Region II Conference. These calculated requirements, although lower than the requirements submitted by Administrations at the first session, were still too high for the amount of spectrum space to be allotted.

- 12 Thus, during the first weeks of the second session, the Conference had to review its basic material and examine the possibility of transferring certain frequencies from some areas to less favoured ones in the Eastern Hemisphere\*. In some cases this could be done only by lowering the technical standards envisaged in the previous year.
- 13 This Final document of the I.A.A.R.C., containing the plans drawn up for the R and OR mobile services, is hereby submitted to the P.F.B. for integration in the New Draft International Frequency List, in accordance with paragraph (e) of Article 6 of the Annex to the Resolution relating to the preparation of the new international frequency list.

<sup>\*</sup> For the meaning of the expression "Eastern Hemisphere" see the definitions in Section I of Part 1 hereinafter.

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/2 - Document No. 102-E

22nd September 1949

#### **PREAMBLE**

## HISTORICAL

# BACKGROUND OF THE INTERNATIONAL ADMINISTRATIVE AERONAUTICAL RADIO CONFERENCE

1 The International Radio Conference of Atlantic City (1947), in a Resolution Relating to the Preparation of the New International Frequency List (Page 14 of the "Recommendations and Resolutions"), defined the functions of the various bodies entrusted with the coordination and publication of this List.

An Annex to this Resolution gives Directives for the Provisional Frequency Board (P.F.B.) and specifies that an International Administrative Aeronautical Conference under the auspices of the International Telecommunication Union (I.T.U.) might deal with the Aeronautical Mobile Service bands.

- 2 In a Resolution adopted during its Second Session (Geneva, January-February 1948), the Administrative Council of the I.T.U. decided to convene in Geneva an International Administrative Aeronautical Radio Conference (I.A.A.R.C.), to be preceded by a Preparatory Committee of nine members. This Committee met on 26 April 1948.
- 3 The I.A.A.R.C. began its work on 15 May 1948 under the Chairmanship of Mr. Arthur L. Lebel, Head of the United States Delegation, who had been previously elected Chairman of the Preparatory Committee.
- 4 Under its terms of reference, as set forth in the documents of the Atlantic City Conference, the I.A.A.R.C. was to deal with the assignments of frequencies in the exclusive aeronautical mobile frequency bands between 2,850 and 18,030 kc/s. These bands are listed numerically on page 28 of the third part of the final document of the Atlantic City Radio Conference.
- 5 With reference to the operational uses to be made of frequencies from "R" bands and "OR" bands respectively, the Conference has assumed that a strict interpretation would be given paragraphs 256 and 257 of the 1947 Atlantic City Radio Regulations \*.
- \* 256 Frequencies in any band allocated to the aeronautical mobile (R) service are reserved for communications between any aircraft and those aeronautical stations primarily concerned with the safety and regularity of flight along national or international civil air routes.
  - 257 Frequencies in any band allocated to the aeronautical mobile (OR) service are reserved for communications between any aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.



- 6 At its first Session, the I.A.A.R.C. was able to carry out its terms of reference for the OR bands. This was not possible, however, for the R bands. The main difficulty was to reconcile the small amount of spectrum space reserved for the R service with the volume of requirements submitted by Administrations, while complying with the exigencies of the technical principles adopted by the Conference.
- 7 On 15 September, 1948, after a considerable amount of work, the Conference was compelled to adopt a Resolution to suspend its work temporarily as of 25 September 1948.

The I.A.A.R.C. prepared a Provisional Report which was sent to all administrations.

8 Faced with this temporary stalemate, the Conference invited the *Administrations* to examine the results of the work in its First Session, to study some of its documents which showed certain working methods and numerical standards likely to be taken into consideration by the Second Session of the Conference, and to coordinate the results of their studies with those of other Administrations at regional conferences.

It also invited the *International Civil Aviation Organization* (I.C.A.O.) to study the part of the draft plan which concerned the International routes of its Member States, to try to reduce the requirements of the Major World Air Routes to a minimum, and to establish a draft frequency allotment plan for the international services of its Member States.

Reports on all this work were to reach the Secretary General of the Union by 30 June 1948, at the latest.

- 9 Most of the Administrations supplied the information in the required form. I.C.A.O Member States conducted the studies which they had been requested to undertake and, the Secretary of I.C.A.O. was able to prepare a coordinated report on these studies and to submit to the Secretariat of the I.T.U. the "Calculated requirements" of the Aeronautical Mobile Service.
- 10 The second session of I.A.A.R.C. met in Geneva on 1 August 1949 (Circular No. 600 of 30 March 1949 of the Radio Division and Notification No. 572 of 1 April 1949, both issued in compliance with Resolution No. 58 of the Administrative Council, 3rd session 1948).
- 11 The Conference adopted as the basis for its work the report mentioned in paragraph 9 above, which took into consideration both the work of the regional meetings of the I.C.A.O. and that of the Washington Region II I.T.U. Conference, 1949.

The "calculated requirements" although lower than those submitted by Administrations at the first session were still too high for the amount of spectrum space to be allotted. This was probably due to mistaken estimates of the extent of reduction possible in the requirements submitted by States which had not taken part in the conferences mentioned in the above paragraph.

12 Thus, during the first weeks of the second session, the Conference had to revise its basic document, discuss each of the proposed allotments and reduce the contemplated allotments, in order to transfer certain frequencies from some areas to a less favoured ones. In some cases this could be done only by lowering the technical principles adopted the previous year.

In this way the Conference was able to carry out its terms of reference and to draw up the allotment plan which is presented in this report.

13 This Final document of the I.A.A.R.C., containing the plans drawn up for the R and OR mobile services, is hereby submitted to the P.F.B. for integration in the New Draft International Frequency List, in accordance with paragraph (e) of Article 6 of the Annex to the Resolution relating to the preparation of the new international frequency list.

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/2 - Document No. 103-E 19th September 1949

#### PART III

# PLAN FOR THE ALLOTMENT OF FREQUENCIES FOR THE AERONAUTICAL MOBILE "OR" SERVICE

#### Section I

#### DETERMINATION OF REQUIREMENTS

#### 1. Compilation of Requirements.

In order to have the necessary information concerning requirements for aeronautical mobile OR band frequencies, the following action was taken:

- (a) All the Forms 2 concerning the aeronautical mobile service (either submitted at Atlantic City or received by the Provisional Frequency Board (P.F.B.) before 10th April 1948 or subsequently up to 15th May 1948, the opening date of the Conference) were assembled.
- (b) All countries members of the I.T.U. were requested by the Preparatory Committee to submit modifications, additions and deletions concerning OR requirements before 15th May 1948 and supplementary information before 30th May 1948.
- (c) The information supplied in compliance with the request shown at (b) was incorporated with the material mentioned in (a).
- (d) Requirements concerning the OR service were segregated as far as possible from those concerning the R service. In cases of doubt the countries concerned were requested to submit supplementary information before 10th June 1948.

#### 2. Minimum Information Necessary.

- (1) Statements of the requirements of the various countries on Form 2, or in a form giving essentially the same information as Form 2, were to be used as a basis for determining the requirements of the various countries in the aeronautical mobile OR service.
- (2) Although desirable to have all the information called for on Form 2, it was found, nevertheless, possible to make frequency allotments in the aeronautical mobile OR



service without some of the details contained therein. There remains, however, a limit below which the amount of information required must not be allowed to fall, if engineering principles are to be applied.

- (3) Consequently, only those requirements were considered for which the following minimum information was available:
  - the approximate location of the transmitter 1) 2)
  - the type of emission,
  - hours of operation (G.M.T.),
  - power delivered to the antenna (kW), and
  - order of frequencies desired.
- (4) The foregoing provisions were not rigidly applied in cases where sufficient information was available to facilitate the application of the agreed technical principles to the formulation of the OR frequency allotment plan.

#### 3. Study and Disposition of Information.

- (1) Requirements received after 30th May 1948 could not be dealt with in the time at the disposal of the Conference; therefore, all available relative information, including the date on which it was received, was passed to the I.F.R.B., to be dealt with in accordance with the terms of paragraphs 16 and 17 of the resolution of the International Administrative Radio Conference, Atlantic City 1947, "Relating to the Preparation of the New International Frequency List", and with the decisions of the present Conference.
- (2) The requirements of countries which had been submitted up to and including 30th May 1948 in accordance with paragraphs 1 and 2, but which did not contain the information mentioned in paragraph 2 (3), were considered on equal terms with those of countries which had provided full information by that date, subject to the receipt of the necessary additional information before 10th June 1948.
- (3) The manner in which the OR requirements of the various countries were dealt with is shown below.
- A. Members of the I.T.U. whose OR requirements have been studied by the Conference.

Albania (People's Republic of)
Saudi Arabia (Kingdom of)
Argentine Republic
Australia (Commonwealth of) (including
Mandated Territory of New Guinea)
The Bielorussian Soviet Socialist Republic
Bolivia
Brazil
Bulgaria (People's Republic of)

Canada (including the stations operated by agreement in Labrador)

Chile

China

Colombia (Republic of)

Portuguese Colonies (Azores, Angola, Cape Verde Islands, Portuguese Guinea, Portuguese Indies, Macau, Mozambique, S. Tomé and Principe, Portuguese Timor)

- 1) (a) For frequencies of 6 Mc/s and below, used in daylight, the location of the transmitter is to be stated to within 50 km in the frontier zone of each country, and to within 300 km outside this zone.
  - (b) For frequencies above 6 Mc/s used both by day and by night, the location of the transmitter is to be stated to within 100 km in the frontier zone of each country, and to within 600 km outside this zone.
  - (c) For frequencies below 6 Mc/s used by night, the location of the transmitter is to be stated as in (b)
- 2) The frontier zone of a country is defined for this purpose as the zone 600 km wide inside the country extending along the frontier.

Colonies, Protectorates, Overseas Territories and territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland (Cyprus, Gibraltar, Hongkong, Kenya, Malta, British Somaliland)

Overseas Territories of the French Republic and Territories administrated as such (French Equatorial Africa, French West Africa, Cameroons (Territory trusteeship of France), French Somaliland, Indo-China, Madagascar and Dependencies, New Caledonia and Dependencies, New Hebrides (Anglo-French Condominium), French Settlements in Oceania, Togo (Territory under Trusteeship of France)

Cuba

Denmark (including Greenland)

Egypt

United States of America (including the following stations operated by the United States of America by agreement in Bermuda, China, Guantanamo (Cuba), Greenland, British Guiana, British West Indies, Labrador, Morocco, Philippines, Newfoundland, Panama Canal Zone)

Finland

France (including Algeria and the overseas departments: Guadeloupe and Dependencies, French Guiana, Martinique, La Réunion)

Honduras (Republic of)

India

Indonesia

Iran

Iraq

Iceland

Italy

Lebanon

Mexico

Nicaragua

Norway

New Zealand (including the stations operated by agreement in Fiji)

Pakistan

Netherlands, Curação and Surinam

Philippines (Republic of)

Poland (Republic of)

Portugal

French Protectorates of Morocco and Tunisia Federal People's Republic of Yugoslavia The Ukrainian Soviet Socialist Republic Southern Rhodesia

People's Republic of Roumania

United Kingdom of Great Britain and Northern Ireland (including the following stations operated by the United Kingdom by agreement in Ceylon, Iraq, Libya, Suez Canal Zone)

Sweden

Swiss (Confederation)

Syria

Czechoslovakia

Territories of the United States of America (Alaska, Johnston Islands, Wake Island, Midway Islands, Puerto Rico, Hawaiian Island)

Union of South Africa and the mandated territories of South-West Africa Union of Soviet Socialist Republics Uruguay (Oriental Republic of)

B. Members of the I.T.U. operating stations in occupied territories, the OR requirements for which have been studied by the Conference.

France, in French zones of Germany and Austria

United Kingdom of Great Britain and Northern Ireland, in British zone of Germany

United States of America, in United States zone of Germany, Caroline Islands, Mariana Islands, Marshall Islands, Ryukyu, Japan Union of Soviet Socialist Republics, in USSR zone of Germany

C. Members of the I.T.U. whose requests arrived after 10th June, and have been sent to the I.F.R.B.

Belgium

Ethiopia

Guatemala

D. Members of the I.T.U. who have submitted Form 2 for the aeronautical service but who have not made it clear whether this form included requirements for the OR service.

Costa Rica

El Salvador (Republic of)

Peru Thailand

Ecuador

Greece

Ireland

E. Country non-member of the I.T.U. which has submitted Form 2 for the aeronautical service but which has not made it clear whether this form included requirements for the OR service.

Spain

#### Section II

#### AVAILABLE FREQUENCY BANDS AND CHANNELS

#### 4. Bands.

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.

#### 5. Assignable Frequencies.

(1) Exclusive Bands.

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

- (2) Shared Bands.
  - (a) In studying the allotment of frequencies in the bands shared by the aeronautical mobile OR service with other services, particular account was taken of the decision taken by the Administrative Council (second meeting) to adopt the recommendations of the P.F.B. (See note 1).
- 1) PROVISIONAL FREQUENCY BOARD (P.F.B.) GENEVA, 1948

Document No. 66-E

9 February 1948

RECOMMENDATION OF PROVISIONAL FREQUENCY BOARD TO ADMINISTRATIVE COUNCIL

#### " It is recommended that:

- A. The Administrative Council draw the attention of all administrations concerned to the necessity of convening suitable regional conferences and propose the following action be taken by the administrations concerned:
  - (1) The Copenhagen Broadcasting Conference to integrate the European aeronautical and maritime mobile requirements [see note 11], page 23 Reg's] with those of broadcasting within the band 255-285 kc/s.
  - (2) The Copenhagen Maritime Conference integrate the European requirements within the band  $405-415~{\rm kc/s}.$
  - (3) The Oslo Conference consider all European services sharing the band 1605-2850 kc/s and include in its deliberations the bands 3155-3400 kc/s and 3500-3900 kc/s.
  - (4) For those parts of Region 1 outside the European Area overall regional conferences be called to consider the requirements in the shared bands lying between 150 and 3900 kc/s.
  - (5) The Administrations of Region 3 convene a regional conference to deal with the several service requirements in the shared bands lying between 150 and 3900 kc/s.
- B. Regional arrangements should be coordinated by the I.F.R.B. in accordance with its statutes.
- C. A list of the frequency requirements between 150 and 4000 kc/s submitted on Forms 1 and 2 in frequency order for the fixed, maritime mobile, aeronautical and other mobile services for the countries of the European area of Region 1 be furnished by P.F.B. to all Region 1 conferences for their use (The costs for the establishment of 100 copies of this list will be approximately 1400.—Swiss francs).
- D. Lists similar to those of C above be furnished on request to other regional conferences."

The Chairman:
Paul D. Miles

(b) 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. (See Section VI.)

#### 6. Selection of Frequencies.

#### (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 (3900 to 3950 kc/s) allocated exclusively to the OR service in that region.

#### (2) Shared Bands.

- (a) The balance of the requirements was accommodated to the maximum extent in the bands shown in paragraph 4 (b) and (c) in that order of preference.
- (b) It was decided that all information (including the technical standards considered desirable for the aeronautical mobile OR service) concerning the proposed allotments in the shared bands, between 3 and 4 Mc/s, should be submitted to the I.F.R.B. for transmission to the various regional conferences. Moreover, similar information concerning the proposed allotments in the shared bands, between 4 and 27.5 Mc/s, should be submitted to the P.F.B.

#### Section III

#### ADAPTATION OF TECHNICAL PRINCIPLES

#### 7. Division of Channels.

In order to utilize most efficiently the available bands, it was found necessary that one A3 channel satisfy either one A3 or two Al requirements. In the latter instance the two half channels were never to be allotted to different administrations.

#### 8. Modification of Class of Emission.

Recognizing the necessity, on the one hand, of avoiding harmful interference, and on the other hand, of using the spectrum space to its full capacity, it was decided a change from one type of emission to another is permissible in those cases where no additional band space is thereby occupied.

#### 9. Allotment of Adjacent "OR" Channels.

- (1) It was decided that, in the frequency allotment plan, similar classes of emission were to be assembled, wherever possible, into contiguous channels. In practice, however, it proved impossible to apply this principle except in a small number of cases.
- (2) Furthermore, where a country so desires, the allotments to that country were to be assembled into contiguous channels where geographical considerations permit and where otherwise practicable.

#### 10. Repetition of Assignments.

(1) The Conference compared a summary of the requirements with a summary of the exclusive OR band channels, using various protection ratios in order to assess the possibilities of repetition of the same assignment. The theoritical possibilities of satisfying the demands for OR allotments, if all stations were equally distributed over the earth's surface, were then known. This comparison is reproduced in the following Table.

Γ	• •			1.	Total	Ī	Total night	- m . 1	Perce	ntage of
	Frequency Band	Channels Available	Protection Ratio	Daytime Repetitions	daytime assign-	Night time Repetitions	time	require-	requiremen	nts satisfied
	kc/s	Available	Kano	possible	ments possible	possible	ments possible	ments (Forms 2)	Daytime	Night time
_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3025-3155	18	20 25 30	172 130 77	3100 2340 1385	7 6 5	125 108 90	1005	306 230 137	12.5 10 9
	4700-4750	7	20 25 30	122 98 66	854 686 462	7 5 2	49 35 14	643	132 106 72	7.6 5.5 2.2
	5680-5730	6	20 25 30	53 40 30	318 240 180	4 3 2	24 18 12	323	99 74 56	7.5 5.6 3.7
	6685-6765	10	20 25 30	40 26 22	400 260 220	4 3 2	. 40 30 20	672	. 60 39 32	6 4.5 3
	8965-9040	8	20 25 30	7 6 4	56 48 32	3 2 2	24 16 16	275	-20 17 12	9 6 6
	11 175-11 275	10	20 25 30	8 4 3	80 40 30	2 2 2	20 20 20	258	31 15 12	8 8 8
	13200-13260	6	20 25 30	6 4 3	36 24 18	2 2 2	12 c 12 12	225	16 11 8	5 5 5
	15010-15100	8	20 25 30	3 3 3	24 24 24	· ·	8 8 8	138	17 17 17	
	17070-18030	5	20 25 30	3 3 3	15 - 15 15		5 5 5	215	7 7 · 7	<u>-</u>

(2) After a study of the information contained in the above Table and other appropriate technical factors, and after taking into account the practical considerations which permit satisfaction of the maximum number of requirements consistent with minimum technical standards, the protection ratios and propagation conditions indicated below were adopted for the repetition of assignments in the various bands:

BAND (Mc/s)	PROTECTION RATIOS (db)				]		GATIO	N CONDITIO	ons ·	
3	. 30	$30^{\circ}$	from	the	day/	night	line	(Summer	sunspot	minimum)
· 4	25	, 99	,,	"	,,	,,	,,	,,	,,	* ,,
5	$\dot{2}0$	. "	<b>,,</b> `	"	"	,,	,,	,,	"	,,
6 .	20	"	,,	,,	"	"	,,	,,	,,	"
9	20	"	,,	"	"	,,	,,	,,,	,,	"
11	20	,,	,,	,,	,,	,,	,,	,,	,,	"
13	20	Sub	-solar	poi	nt			"	"	,,
15	20	"	,,	,,				• •	,,	,,
18	20	,,	,,	,,				"	,,	,,

- (a) It was found that if an assignment is repeated only at distances permitting its simultaneous use during the night the frequency concerned could not be assigned a sufficient number of times to satisfy a reasonable number of requirements. Therefore, as indicated in the above table, only daylight propagation conditions have been considered in all the OR bands. A distinction in propagation conditions was made however, between the aeronautical mobile OR frequencies above and below 13 Mc/s because it is recognized that during most of the sunspot cycle frequencies above 13 Mc/s are only useful for long range communication for a few hours before and after mid-day.
- (b) Although, as indicated above, frequencies were allotted on a basis of daytime use, it was considered that night-time use of these frequencies is possible assuming the probability that a reasonable percentage of stations will close at night and that the others will achieve, by distance separation, a protection ratio which, although considerably below the daytime figure, will permit them to operate with some degree of satisfaction.
- (3) The percentage of requirements for each of the bands which it is considered possible to satisfy, applying the above technical standards, and assuming that all stations are equally distributed over the earth's surface, is shown in the following Tables.

#### TABLE OF STATISTICS

SHOWING ROUGHLY THE POSSIBILITIES OF FREQUENCY ASSIGNMENT AS A FUNCTION OF THE CHANNELS IN EACH BAND AND AS A FUNCTION OF THE NUMBER OF TIMES THESE FREQUENCIES MAY BE REPEATED WITHIN THE LAND MASSES OF DIFFERENT REGIONS

REGION 1

	•		EUROPE	2		AFRICA .					
BANDS	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment	
3025—3155	25*	8	. 200	385	52%	25*	25	625	90	700%	
47004750	7	5	<sup>.</sup> 35	220	16%	7	22	154	71	217%	
5680—5730	\ 6	. 3	18	162	11%	6	11	66	43	153%	
6625—6765	12	3	36	167	21.5%	12	9	108	. 86	125%	
8965—9040	9	2	18	91	20%	9	4	36	52	70%	

<sup>\*</sup> In region 1 the 3900-3950 kc/s band is also exclusively allocated to the aeronautical mobile OR service.  $\cdot$ 

REGION 2

		NOR	TH AME	RICA		SOUTH AND CENTRAL AMERICA					
BANDS	Number of channels	Number of repetitions	Average No of assigned frequencies	No. of requirements	% of possible assignment	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment	
3025—3155	18	15	270	126	214%	18	17	306	190	161%	
4700—4750	7	- 9	63	130	48%	.7	13	91	111	82%	
5680—5730	6	5	30	33	99%	6	8	. 48	81	59%	
6625—6765	12	5	60	171	35%	12	6	72	93	77.5%	
8965—9040	9	3	27	11	245%	9	3	27	92	30%	

REGION 3

•		ASIAT	IC CONT	INENT		-	AU	STRALA	SIA	
BANDS	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment
3025—3155	18	15	270	183	147%	.18	16	288	180	160%
47004750	7	13	91	141	64.5%	7	14	98	93	105%
5680—5730	6 .	7	42	45	93%	6	8	48 .	47	102%
6625—6765	12	5	60	132	45.5%	12	7	84	119	70%
8965—9040	9	3	27	49	55%	9	4	36	49	73%

#### WORLD WIDE

BANDS	Number of channels	Number of repetitions	Average No. of assigned frequencies	No. of requirements	% of possible assignment
11 175—11 275	<sup>"</sup> 11	8	88	260	35.5%
13 200—13 260	. 6	6	- 36	226	16%
15 010—15 100	10	3	30	138	21.7%
17 970—18 030	6	3	18	215	8.4%

#### 11. Lower Standards.

- (1) In areas where it was found necessary to secure a greater repetition of assignments, the Conference agreed that the same frequency shall be allotted to more than one requirement of an administration even though this results in a reduction of protection ratio between the emissions of the stations concerned. This principle was adopted because it was considered more practicable for one administration to control the interference thereby caused than to downgrade the standard protection ratios between the stations of different administrations.
- (2) It was agreed that in certain areas where peaks of requirements occur, e.g., Europe, protection ratios may be lowered by agreement between the countries concerned.

#### (3) Time Sharing.

Certain assignments have been repeated where there will undoubtedly be interference between stations of different administrations. This was done, however, 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) Secondary Assignments.

It was further decided in some cases to assign a number of frequencies 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, and
- where frequencies are allotted on a secondary basis, they should be recorded in the Master International Frequency Register in the notification column and the frequencies may then be used in accordance with the rules laid down in the Radio Regulations.

#### Section IV

#### PREPARATION OF "OR" BANDS ALLOTMENT PLAN

#### 12. Allotment Data.

The Conference therefore had at its disposal:

- an accurate list of all stated requirements,
- a list of the channels available to the aeronautical mobile OR service in the various bands, and
- the necessary technical and other principles required for the establishment of the allotment plan.

#### 13. Allotment Procedure.

(1) To ensure the establishment of the best overall plan and to take into account the peculiarities of Regions, the allotment of frequencies to the countries of the various regions was made by representatives of the countries situated in the region concerned. Each Region was considered independently for allotments in the bands of 6 Mc/s and below, with coordination at the boundaries of the Regions, while allotments in the higher frequency bands were considered by representatives of all regions, working together.

- (2) Requests by 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.
- (3) The problem peculiar to the European Area of Region 1 and the Southern and Central Areas of Region 2 are indicated in paragraphs (4), (5) and (6) respectively.
- (4) European Area of Region 1
  - (a) In the European Area of Region 1 the allotment of frequencies in the bands:

3025 to 3155 kc/s 4700 to 4750 kc/s 5680 to 5730 kc/s

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 a re-allotment of the unacceptable frequencies.

- (b) For the bands 6685 to 6765 kc/s and 8965 to 9040 kc/s, this procedure was inapplicable by reason of the excessive interference ranges which cover practically all of Europe. The allotment plan was therefore established by considering the total requirements stated by the various countries of Region 1 and by seeking to utilize the small number of available channels in each of the bands in a manner which would best satisfy the requirements of the various countries, while restricting the interference possibilities to a minimum.
- (5) Southern Area of Region 2 (South America)
  - (a) The following South American countries and territories submitted requirements containing the necessary data:

Argentina Chile British Guiana
Bolivia Colombia Surinam
Brazil French Guiana Uruguay

(b) Since some of the countries not listed above might have requirements for the OR service, it was decided by the Conference to leave available to the countries concerned the following channels in the 3, 4 and 5 Mc/s bands:

3067	4703.5	5688
3081	4710.5	5695.5
3095	4731.5	
3116	4745.5	•
3130		
3137		

The countries concerned are:

- Ecuador and Peru, which have submitted Form 2 in respect of the aeronautical service but which have not made it clear whether requirements for the OR service were included.
- Paraguay and Venezuela, which have not submitted Form 2.
- (c) The frequency of 3151 kc/s was agreed for use in South America by tourist aircraft for air to ground communication.
- (6) Central Area of Region 2 (Central America and Caribbean Countries)
  - (a) The following countries and territories of this area submitted requirements containing the necessary data:

Cuba

Curação

French Overseas Departments (Guadeloupe and Martinique)

Honduras (Republic of)

Mexico

Nicaragua

Territories of the United States of America (Puerto Rico)

United States of America—for its stations operated by agreement in Bermuda, British West Indies, Canal Zone of Panama, and Guantanamo (Cuba).

(b) Since some of the countries not listed above might have requirements for the OR service, it was agreed to leave available to these countries the following channels in the 3 Mc/s band:

3032

3046

3053

3074

3130

3151

The countries concerned are:

- Guatemala, whose requirements arrived after 10th June 1948 [See Paragraph 3 (3) C]
- Costa Rica and El Salvador, which have submitted Forms 2 for the aeronautical service, but have not made it clear whether these forms included requirements for the OR service [see Paragraph 3 (3) D]
- Haiti, Dominican Republic and Panama, which did not submit Form 2.

#### 14. Frequency Plan.

On the basis of all the foregoing data the OR Bands allotment plan contained in Section VI below was prepared.

#### 15. Channels Common to R and OR Services.

The channels common to the R and OR services, centered at 3023.5 and 5680 kc/s are authorized for use world-wide as laid down in paragraph 3 of the Section II of Part I.

#### Section V

#### CONCLUSIONS AND RECOMMENDATIONS

#### 16. International Frequency List.

In the time available to the Conference, it was not possible to complete all of the details which are required for inclusion in the new International Frequency List. Arrangements were made to complete the compilation of a detailed frequency list from the allotment plan shown at Section VI after the conclusion of the Conference for transmittal to the P.F.B.

#### 17. Future Allocation to the Aeronautical Mobile OR Service.

- (1) Despite the fact that the requirements of all countries were not considered (see Section I), it was possible to satisfy only a limited number of the known requirements of the OR service in the spectrum space available.
  - It is considered that the allocations to this service by the International Administrative Radio Conference, 1947, were made on the basis of inadequate information of the requirements of the service and, therefore, have not taken all of those requirements into account.
  - It is further pointed out that the primary purpose of the communications in the OR service is to ensure the safety of flight.
- (2) It was agreed to recommend that the next International Administration Radio Conference, in deciding what changes shall be made in Article 5 of the Radio Regulations, 1947, should study this Plan carefully, together with all other necessary information.

#### 18. Limitation of Power.

It was agreed further that Administrations should consider the possibility of a reduction in aeronautical station radiated power at night, with the view to a possible agreement on the subject at the next International Administrative Radio Conference (reference International Telecommunications Convention, 1947, Articles 11 and 13, paragraph 2).

#### Section VI

## "OR" BANDS ALLOTMENT PLAN

#### 19. Abbreviations used.

In this plan the following abbreviations have been used.

# (a) Alphabetical List of Country Designations (Arranged in French alphabetical order)

LDD	77 1 77 ( ) 1 46 ( )		C 1 1
AEF	French Equatorial Africa	Grön	Greenland
AfrS	Union of South Africa	Grön/USA	Greenland (USA stations)
Alas	Alaska	*Guad	Guadeloupe and Dependencies
Alba	Albania	GuBr/USA	British Guiana (USA stations)
Algé	Algeria	GuFr	French Guinea
Ango	Angola	GuiP	Portuguese Guinea
AOF	French West Africa	Hawa	Hawaiian Islands
AraS	Saudi Arabia (Kingdom of)	Holl	Holland (Netherlands)
AraS/G	Saudi Arabia (Kingdom of)	Hond	Honduras (Republic of)
	(British stations)	I	Italy
Arge	Argentine	Inde	India
Aust	Australia	IndN	Indonesia
Autr/F	Austria (French stations)	Indo	Indo-China
Azor	Azores	IndP	Portuguese India
В	Brazil	IOBr/USA	British West Indies (USA
Berm/USA	Bermuda (USA stations)		(stations)
Boli	Bolivia	Iran	Iran
Bulg	Bulgaria	Iraq	Iraq
Came	Cameroons (Territories under	Iraq/G	Iraq (British stations)
	Trusteeship of France)	Isla	Iceland
Cana .	Canada	J/USA	Japan (USA stations)
CapV	Cape Verde Islands	JCaro/USA	Caroline Islands (USA stations)
Ceyl	Ceylon	JMari/USA	Marianas Islands (USA stations)
Chil	Chile	JMars/USA	Marshall Islands (USA stations)
Chin	China	John	Johnston Island
Chin/USA	China (USA stations)	Keny	Kenya
Chyp	Cyprus	Kong	Hong Kong
Colo	Colombia	Labr/USA	Labrador (USA stations)
Cuba	Cuba	Liba	Lebanon
Cuba/USA	Cuba (USA stations)	Liby/G	Libya (British stations)
Cura	Curação	Maca	Macao
D/F	Germany (French stations)	Mada	Madagascar and Dependencies
D/G	Germany (British stations)	Mala .	Malaya
D/USA	Germany (USA stations)	Malt	Malta
Dnk	Denmark	MarF	Morocco (French Zone)
Egyp	Egypt	MarF/USA	Morocco (French Zone) (USA
F	France	,	stations)
Fiji/NZel	Fiji (New Zealand stations)	Mart	Martinique
Finl	Finland	Mexi	Mexico
G	Great Britain	·Midw	Midway Island
Gibr ·	Gibraltar	Moza	Mozambique
OIDI	Gibraitai	111024	Mozaminique

, , , , , , , , , , , , , , , , , , ,	NT Call Is to	C	Corre Correl Zone
NCal	New Caledonia	Suez	Suez Canal Zone
NHeb	New Hebrides (French-English	Suez/G	Suez Canal Zone (British
	Condominium)	~ .	Stations)
Nica	Nicaragua	Suis .	Swiss (Confederation)
$\mathbf{Nor}$	Norway	Suri	Surinam (Netherlands Guiana)
NZel	New Zealand	Syri	Syria •
Ocea	French Settlements in Oceania	Tche	Czechoslovakia
Pak	Pakistan	TerN/USA	Newfoundland (USA stations)
PanZ	Panama Canal Zone	$\operatorname{TimP}'$	Portuguese Timor
Papu	Papua (Territory of)	Togo	Togoland (Territory under
Phil	Philippines	Togo	Trusteeship of France)
Phil/USA	Philippines	Tuni	Tunisia
•	(USA stations)		
Polo	Poland	URSS	Union of Soviet Socialist
$\operatorname{Port}$	Portugal	******	Republics
Reun	Reunion	URSS-AM	Union of Soviet Socialist
RhoS	South Rhodesia	_	Republics—Middle Asia
Rico	Puerto Rico	URSS-C	Union of Soviet Socialist
Roum	Rumania		Republics—Caucasus
RSSB	Bielorussian Soviet Socialist	URSS-E	Union of Soviet Socialist
	Republic		Republics—Europe
RSSU	Ukrainian Soviet Socialist	URSS-SEO	Union of Soviet Socialist
11000	Republic		Republics—Siberia and Far
S.	Sweden		East
SomB	British Somaliland	Urug	Uruguay
SomF	French Somaliland	USA	United States of America
STPr	San Tomé and Principe	Wake	Wake Island
Sudan			
Sudan	Anglo-Egyptian Sudan	Youg	Yugoslavia

#### (b) Other abbreviations

N = NorthS = SouthO = WestE = East

"N-46° N" means "North of 46° north". "55° O-64° O and N-7° S" means "Between 55° west and 64° west and north

of  $7^{\circ}$  south".

kW = kilowattsW = watts

,, Cuba (500 W)" means "Cuba power limited to 500 watts delivered to the antenna". Example:

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REGION 1

BANDE — BAND — BANDA 3025-3155 kc/s

3032	3039	. 3046	3053	3060	3067
SomF (350 W) URSS-E F Algé Tuni MarF Polo Nor AEF AOF Mada Egyp Iraq URSS-SEO(1 kW)	URSS-AM (500 W) URSS-C F Algé MarF Tuni Youg Nor AEF AOF Mada SomF Egyp AraS RSSB	URSS-E F Port Tche Algé Isla AEF AOF Came Mada SomF URSS-SEO(1 kW)	F Port Azor Alba RSSU AEF AOF Came Mada Togo Dnk URSS-SEO(1 kW)	URSS-E URSS-AM Port Azor AEF AOF Mada Syri D/USA URSS-SEO (1 kW)	URSS-E Roum S Port Syri D/USA URSS-AM (1 kW)
3074	3081	3088	3095	3102	3109
URSS-E URSS-AM (1 kW) G Port Bulg S Gibr Tuni F Azor Ango CapV GuiP Moza STPr Suez/G	URSS-E G Port Finl Roum Azor Malt Suez/G AraS/G Iraq/G Liby/G Chyp SomB Keny Sudan D/G URSS-SEO(1 kW)	URSS-E URSS-AM (1 kW) RSSU Port AfrS Egyp G D/G	URSS-AM (1 kW) URSS-C G Suis Gibr Polo, F Malt Suez/G AraS/G (2.5 kW) Iraq/G Liby/G Chyp SomB Keny Sudan RhoS URSS-SEO (1 kW)	*URSS-C G Gibr Malt AfrS Egyp RSSB	*URSS-E S I G MarF/USA AfrS Egyp
3116	3123	3130	3137	3144	3151
*URSS-E URSS-AM (1 kW) URSS-C G Tche Algé Tuni Suez/G AfrS URSS-SEO (1 kW)	RSSU   Holl   G (N)		URSS-E URSS-C URSS-AM (1 kW) Holl Bulg Egyp URSS-SEO (1 kW)	URSS-E URSS-C RSSU Youg Egyp MarF Algé Tuni AOF AEF Mada Came URSS-SEO(1kW) D/USA	URSS-E Bulg Eyp MarF Algé Tuni AOF AEF Mada Came URSS-SEO (1 kW) D/F

<sup>\*</sup> Cette fréquence sera aussi utilisée dans la zone d'occupation de l'U.R.S.S. en Allemagne. — This frequency will also be used in the U.S.S.R. occupation zone of Germany. — Esta frecuencia será usada también en la zona ocupada en Alemania por la U.R.S.S.

3032	3039	3046	3053	3060	3067
Arge Colo B (42° O-51° O & N-9° S) USA Alas Grön/USA Labr/USA TernN/USA Hawa Grön	B Nica Mart Guad Arge (S-43° S) USA Alas Grön/USA Labr/USA TerN/USA Berm/USA Hawa	S) Hawa USA (O-98° O) Mexi Cana (E-98° O) Cana Alas Hawa Chil (N-41		B Guad Mart Chil (S-41° S) Mexi Cana	Arge (S-34° S) B (12°-21° S & 46°-53° O) GuBr/USA PanZ Rico IOBr/USA USA Alas Grön/USA Labr/USA TerN/USA Berm/USA Hawa Guantanamo (Cuba)/USA
3074	3081	3088	3095	3102	3109
N-10° S   Arge (S-43° S )   USA     USA		B 1) Chil (S-31° S) USA PanZ Rico Grön/USA Labr/USA TerN/USA Berm/USA Hawa Chil (N-31° S) (300 W) Guantanamo (Cuba)/USA Alas	Arge (S-28° S) B (42° O-57° O & N-9° S) Mexi Cana Hawa	B Mart Guad Hond Chit (S-36° S) USA Alas Grön/USA Labr/USA TerN/USA Berm/USA Chil (N-36° S) (300 W)	Chil B (40°-50° O & 9°-17° S) USA Alas GuBr/USA PanZ/USA Rico IOBr/USA Grön/USA Labr/USA TerN/USA Berm/USA Hawa B (S-17° S) (350 W) Guantanamo (Cuba)/USA
3116	3123	3130	3137	3144	3151
Chil B (E-46° O & GuBr/USA 18°-24° S) (S-24° S, 350 W) Mexi Cana  GuBr/USA Arge (S-35° S) B (E-43° O & Cura Cuba Chil (S-41° S) USA Alas Grön/USA Labr/USA Tern/USA Berm/USA Hawa  Lawa  L		Suri Cura Cuba Chil (S-41° S) (N 41° S, 300 W) Cana	Chili B (E-46° O & 18°-24° S) USA Alas Grön/USA Labr/USA TerN/USA Berm/USA Hawa B (S-24° S 350 W)	Arge GuBr/USA PanZ/USA Rico/USA IOBr/USA B (E-42° O & N-10° S) USA Alas Grön/USA Labr/USA TerN/USA Berm/USA Hawa	Arge Chil Urug B Boli Colo Cana Mexi

<sup>🖺</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

 $<sup>^{1)}</sup>$  Usage nocturne limité entre 7° et 16° sud et à l'ouest de 56° ouest. — With night use limited to 7° to 16° S and W of 56° W. — Uso nocturno limitado entre 7° S y 16° S y al W de 56° W.

<sup>&</sup>lt;sup>2)</sup> Stations d'aéronefs seulement. — Aircraft only. — Sólo aeronaves.

### BANDE — BAND — BANDA 3025-3155 kc/s

					7
3032	3039	3046	3053	3060	3067
Aust (500 W) NZel (1 kW) NHeb (1 kW) NCal (1 kW) Ocea (1 kW) Indo (350 W) Inde (350 W) Phil-Porto Princessa (300 W) Chin Region 5 (3 kW) JMars/USA Wake JMari/USA JCaro/USA Midw John	Aust S (500 W) NZel (1 kW) IndN (500 W) Inde (350 W) Phil-Aparri (200 W) Chin Region 8 (3 kW) Indo (250 W) NCal (250 W) NHeb (250 W) Ocea (250 W)	Aust S (500 W) NZel (1 kW) Fiji/NZel (1 kW) IndN (500 W) Pak (250 W) Phil-Mindoro (200 W) Chin Region 5 (500 W) Iran (250 W) US Pacific except.: Philippines & Japon (1 kW) Indo (250 W) NCal (250 W) NHeb (250 W) Ocea (250 W)	Aust (500 W) NZel (1 kW) Fiji/NZel (1 kW) IndN (500 W) Saigon (250 W) Inde (350 W) Phil-Zamboanga (300 W) Chin Region 6 (3 kW) Iran (250 W) JMars/USA Wake JMari/USA JCaro/USA Midw John	Aust (500 W) IndN (500 W) Hanoi (500 W) Phil-Baler (200 W) Midw John	Aust (500 W) IndN (500 W) IndN (550 W) Iran (350 W) Manila/USA (1 kW) Ryukyu/USA (1 kW) JMars/USA (1 kW) Wake JMari/USA JCaro/USA Midw John J/USA (1 kW)
3074	3081	3088	3095	3102	3109
Aust (5 kW) Mala (2,5 kW) Kong (2,5 kW) Ceyl (2,5 kW) Pak E (500 W) Karachi (500 W) Chin Region 7 (3 kW) Manila/USA JMars/USA Wake JMari/USA JCaro/USA Midw John	Aust (5 kW.) NZel (1 kW) Fiji/NZel (1 kW) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Phil-Labo (200 W) Chin Region 2 (3 kW)	Aust (1 kW) JMars/USA Wake JMari/USA JCaro/USA Midw John J/USA Phil/USA	Aust (5 kW) NZel (1 kW) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Pak E (250 W) Phil-Cebu (200 W) Chin Region 2 (3 kW) Fiji/NZel (1 kW)	Aust (500 W) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Pak (250 W) Chin Region 7 (3 kW) J/USA (1 kW) JCaro/USA (1 kW) JMari/USA (1 kW) JMars/USA (1 kW) John (1 kW) Midw (1 kW) Phil/USA (1 kW) Wake (1 kW)	AustS (500 W) IndN (1 kW) Pak 0 (250 W) Chin Region 3 (3 kW) Chin/USA (1 kW) J/USA (1 kW) J/USA (1 kW) JMari/USA (1 kW) JMari/USA (1 kW) John (1 kW) Midw (1 kW) Phil/USA (1 kW) Wake (1 kW)
3116	<sup>'</sup> 3123	3130	3137	3144	3151
Aust (500 W) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Phil-Cagayan (400 W) Misamis (400 W)	Aust S (500 W) NZel (1 kW) IndN (500 W) Pak (350 W) Chin Region 1 (3 kW) Fiji/NZel (1 kW) Chin/USA (1 kW) J/USA (1 kW) J/USA (1 kW) JMari/USA (1 kW) JMars/USA (1 kW) John (1 kW) Phil/USA (1 kW) Midw (1 kW) Wake (1 kW)	Aust S (500 W) NZel (1 kW) IndN (500 W) Pak-Karachi (1,5 W) Phil-Cebu (300 W) Chin Region 4 (3 kW) NCal (1 kW) NHeb (1 kW) Ocea (1 kW)	Aust S (5 kW) Phil-Cebu (400 W) Chin Region 6 (3 kW) Phil/USA (1 kW) JMars/USA Wake JCaro/USA Midw John IndP (100 W) TimP (100 W) JMari/USA	Aust (500 W) Chin/USA (1 kW) J/USA (1 kW) JCaro/USA (1 kW) JMari/USA (1 kW) JMars/USA (1 kW) John (1 kW) Midw (1 kW) Phil/USA (1 kW) Wake (1 kW)	Aust (500 W) IndN (500 W) Phil-Cagayan (400 W) Misamis (400 W) Chin Region 4 (3 kW)

REGION 1

BANDE — BAND — BANDA 4700-4750 kc/s

4703,5	47	10,5	47	17,5	47	24,5	. 478	31,5
G Suez/G Malt Polo URSS-C Gibr Liby/G Chyp Iraq/G Aras/G Arfs Keny SomB Sudan URSS-SEO	G Malt Suez/G Youg URSS-E URSS-AM MarF/USA Liby/G Chyp Iraq/G AraS/G AfrS Keny SomB Sudan D/G		Holl Port URSS-E URSS-AM URSS-SEC Tuni Azor RSSU Alba Ango CapV GuiP Moza STPr SomF AEF-Ft. I Came-Dou  I F-S (300 V Algé (300 Mada (300	amy (1 kW) ala (750 W)  W)	Came-Dou	Lamy (1kW) uala 750 W)  cc.) (100 W) W)	F URSS-E URSS-C MarF Algé Tuni Liba S Bulg Tche AfrS AOF AEF Mada SomF	
		4738	8,5	474	15,5			
		F Port Nor Bulg URSS-AM URSS-C RSSB Egyp AOF AEF AfrS Mada Azor D/F Autr/F		Polo Algé Egyp Suis AEF AOF Came Mada MarF Reun SomF Togo Tuni *URSS-SE				
		RSSB Egyp AOF AEF AfrS Mada Azor D/F	•	Came Mada MarF Reun SomF Togo Tuni			•	

 $<sup>\</sup>blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

<sup>\*</sup> Cette fréquence sera aussi utilisée dans la zone d'occupation de l'U.R.S.S. en Allemagne. — This frequency will also be used in U.S.S.R. occupation zone of Germany. — Esta frecuencia será usada también en la zona ocupada en Alemania por la U.R.S.S.

#### REGION 2

#### ${\tt BANDE - BAND - BANDA~4700-4750~kc/s}$

4703,5	4710,5		4717,5	4724,5	4731,5
Cana Mexi Chil (S-33° S) B (E-57° O) Hawa Chil (N-33° S 300 W)	USA Guantanamo (Cuba)/USA IOBr/USA GuBr/USA PanZ Rico Chil (S-41° S) Grön/USA TerN/USA Alas Labr/USA Berm/USA B (E-46° O & 3° S-13° S, 3	Colo Grön/Us TerN/U Labr/Us Berm/U Hawa	SA SA	USA Guantanamo (Cuba)/USA IOBr/USA GuBr/USA PanZ Rico Arge Alas (1 kW) Grön/USA TerN/USA Berm/USA	GuFr Grön/USA Guad Mart TerN/USA Cuba (750 W) Labr/USA Berm/USA Urug Hawa USA except. E-98° O & S-36° N Alas Nica (300 W)
	M G M B A	4738,5 Cana Mexi Guad (300 W) Mart (300 W)  B Arge (S-45° S) Hawa	USA exce Florida Florida Chil Hond (300 Grön/USA TerN/USA Berm/USA Hawa Urug (100	(300 W) () W)	

 $<sup>\</sup>blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### REGION 3

### ${\tt BANDE - BAND - BANDA~4700-4750~kc/s}$

:	1			.		<del></del>	
4703,5	4710,	5	471	7,5	47	24,5	4731,5
Ceyl (2,5 kW) Mala (2,5 kW) Kong (2,5 kW) Aust S (500 W) Phil S (400 W) Pak (E & N.O) (400 W) NZel (1 kW) Fiji/NZel (1 kW) IndP (100 W) TimP (100 W) Maca (100 W) Chin Region 2 (1 kW) John JCaro/USA JMari/USA JMars/USA Midw Wake	Aust (500 W) NZel (1 kW) Fiji/NZel (1 l Inde (350 W) IndN (500 W) Indo'(1 kW) Chin/USA (5 J/USA (5 kW) JCaro/USA (6 JMari/USA (6 JMars/USA (6 JMars/USA (1 John (5 kW) Phil/USA (5 Wake (5 kW)	KorkW) Aus Phi Pal Representation Note: The content of the content	yl (2,5 k ari/USA ars/USA hn ake	kW) 7) (300 W) (W) (1,5 kW) W)	Aust S ex Brisha Pak (400 Java O (1 IndP (100 TimP (100 Indo (1 k NCal (1 k NHeb (1 Ocea (1 k Chin/USA J/USA (3 J/Caro/US JMari/US JMars/US John (3 k Midw (3 l Phil/USA Wake (3 l	ne (500 W) W) kW) 0 W) W) W) W) kW) W) (3 kW) A (3 kW) A (3 kW) A (3 kW) C (3 kW) (3 kW) (4 kW) (5 kW)	Aust S (500 W) Chin (3 kW) Inde except. Sadhiya (350 W) IndN (1 kW) JMari/USA JMars/USA John Wake Midw NCal (500 W) NHeb (500 W) Ocea (500 W)
		Aust NZel Fiji/NZel JMari/USA (1 k JCaro/USA (1 k Chin Regions 4, 5 & 6 (3 kW) Inde (S-30° N & O-90° E) (350 Mala (2,5 kW) JMari/USA John Wake Midw J/USA (1 kW)	(W)	Aust (5 kW Phil N (400 NZel (1 kV Fiji/NZel ( Inde (350 V Iran (500 V Indo (500 V JMari/USA JMars/USA John Wake Midw	V) O W) V) 1 kW) W) W) W)		

5688	5695,5	5703	5710,5	5718	5725,5
G RSSB Alba URSS-C (500 W) URSS-AM (500W) Port Egyp Azor Ango CapV GuiP Moza STPr URSS-SEO (500 W) URSS-E (500 W) D/G	G Gibr Malt Liby/G Chyp Tche URSS-E Iraq Suez/G SomB AfrS AraS/G (0-55° E) (500 W) Keny Sudan AOF (0-0°) (750 W) AEF (S-5° N) (750 W) Came-Douala (750 W) Mada (N-20° S) (750 W) URSS-SEO (1kW)	Höll Port Youg RSSB URSS-E Egyp Azor AOF AEF Togo Came Mada SomF URSS-SEO (1kW)  Algé-Oran (300W) MarF (300 W)	F MarF Algé Tuni Polo Nor Syri URSS-AM (50 W) lraq AfrS AEF AOF Came Mada Reun SomF Togo	F MarF Algé Tuni Egyp Bulg URSS-E URSS-AM URSS-C URSS-SEO (50 W) AfrS AEF AOF Came Mada Reun SomF Togo D/F Autr/F	I *URSS-E URSS-C (1 kW) Egyp Isla AfrS RSSU AOF (750 W) AEF (8-12° N) (750 W) Came (750 W) Mada (N 20° S) (750 W) S  Port (400 W) MarF (300 W) Algé (300 W)

■ Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### REGION 2

#### BANDE — BAND — BANDA 5680-5730 kc/s

5688	5695,5	5703	5710,5	5718	5725,5
Cana Mexi Cura (500 W) Suri (500 W) Arge (S-36° S)	USA Boli Arge (S-41° S) Alas (1 kW) Berm/USA Grön/USA Labr/USA TerN/USA	Cana Mexi Colo Arge	USA Alas Guad (300 W) Mart (300 W) B (E-55° O) Chil Colo Grön/USA TerN/USA Labr/USA	Cana Cuba (400 W) B Chil (S-41° S) Chil (N-41° S) (300 W)	USA Alas GuBr/USA PanZ Chil Berm/USA Grön/USA TerN/USA Labr/USA B except. N-8° S & O-47° O (350W) Urug (100 W) Guantanamo (Cuba)/USA Rico

#### REGION 3

#### $\rm BANDE - BAND - BANDA 5680\text{-}5730 \ kc/s$

5688	5695,5	5703	5710,5	5718	5725,5
Chin (Regions 4,5 & 6) (1 kW) Phil S (400 W) NCal (500 W) NHeb (500 W) Ocea (500 W) Aust (500 W) IndN (Java & Sumatra) (1 kW) Inde (S-30° N) (350 W) JMari/USA (1 kW) Wake (1 kW)	Aust (5 kW) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Pak (500 W) NZel (1 kW) Fiji/NZel (1 kW)	Aust S (500 W) Phil N (400 W) Phil (Cebu) (400 W) IndN (500 W) Inde (350 W) NZel (1 kW) Fiji/NZel (1 kW) Iran (500 W) Maca (100 W)	Chin (3 kW) Phil S (400 W) Aust S (500 W) Mala (2,5 kW) IndP (100 W) TimP (100 W)	Indo (500 W) Aust (5 kW) Chin/USA (1 kW) J/USA (1 kW) JCaro/USA (1 kW) JMars/USA (1 kW) JMars/USA (1 kW) John (1 kW) Midw (1 kW) Phil/USA (1 kW) NZel (1 kW) Fiji/NZel (1 kW) Pak (Karachi)	Indo (500 W) NCal (500 W) NCal (500 W) NHeb (500 W) Ocea (500 W) Aust (1 kW) Inde (350 W) Chin/USA (1 kW) J/USA (1 kW) J/USA (1 kW) J/WARI/USA (1 kW) J/WARI/USA (1 kW) J/WARI/USA (1 kW) J/WARI/USA (1 kW) Midw (1 kW) Phil/USA (1 kW) Wake (1 kW)

<sup>\*</sup> Cette fréquence sera aussi utilisée dans la zone d'occupation de l'U.R.S.S. en Allemagne. — This frequency will also be used in the U.S.S.R. occupation zone of Germany. — Esta frecuencia sera usada también en la zona ocupada en Alemania por la U.R.S.S.

#### REGION 1

#### BANDE — BAND — BANDA 6685-6765 kc/s ·

6685 (A1)	6687,5 (A1)	6693	6700,5	6708	6715,5
Port Nor Suis *URSS-AM URSS-SEO URSS-C AraS/G (S-20° N) Ango CapV GuiP Moza STPr	G Alba Finl Egyp Azor AfrS Youg	G Bulg Gibr Malt Chyp Liby/G Suez/G Iraq/G SomB AraS/G Keny Sudan/G URSS-SEO	G D/G Gibr Malt Chyp Liby/G Suez/G Iraq/G SomB Keny Sudan/G AraS/G (2,5 kW) URSS-SEO (1 kW)	G Youg URSS-E URSS-SEO (1kW) Malt Chyp Liby/G Suez/G Iraq/G SomB Keny Sudan AfrS	F D/F Autr/F Algé Tuni MarF URSS AEF AOF Came Mada Reun SomF
6723	6730,5	6738	6745,5	6753	6760,5
Holl MarF/USA Egyp (1 kW) URSS-E URSS-C (1 kW) AfrS	Port D/USA Roum Isla URSS-AM (500 W) Syri (300 W) Azor Dnk (300 W) Ango CapV GuiP Moza STPr	G Tche MarF URSS-C (1 kW) Egyp (1 kW)	F Algé Tuni MarF Finl Polo Egyp URSS-E URSS-SEO AEF AOF Came Mada Reun SomF	F Algé Tuni MarF Egyp (500 W) URSS-E AEF AOF Came Mada Reun SomF	Isla F Algé Tuni MarF RSSB RSSU AOF AEF Came Togo Mada URSS-C URSS-AM (1 kW) AraS/G (S-20° N)

 $<sup>\</sup>blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

<sup>\*</sup> Cette fréquence sera aussi utilisée dans la zone d'occupation de l'U.R.S.S. en Allemagne. — This frequency will also be used in the U.S.S.R. occupation zone of Germany. — Esta frecuencia será usada también en la zona ocupada en Alemania por la U.R.S.S.

REGION 2

# BANDE — BAND — BANDA 6685-6765 kc/s

6685 (A1)	6687,5 (A1)	6693	6700,5	6708	6715,5
Cana Mexi B	USA B Alas Nica (300 W)	Cana Mexi GuFr Guad Mart Arge	USA Guantanamo (Cuba)/USA Arge PanZ Rico GuBr/USA IOBr/USA Hawa Berm/USA Grön/USA Labr/USA TerN/USA	Cana B Cuba	Cana Mexi- B
	f ·		Grőn '		
6723	6730,5	6738	6745,5	6753	6760,5
USA Alas Arge GuBr/USA PanZ Grön/USA Labr/USA TerN/USA Berm/USA Guantanamo (Cuba)/USA Rico	USA Alas Arge PanZ GuBr/USA Grön/USA Labr/USA TerN/USA Berm/USA Guantanamo (Cuba)/USA IOBr /USA	USA Alas Hond Chil Hawa Berm/USA Colo (100 W) Urug (100 W)	Cana Cuba Boli Chil (S-33° S) (100 W) Guad (100 W) GuFr (100 W) Mart (100 W)	Cana Mexi B Chil (S-41° S) (300 W)	Alas USA Cura Arge Hawa Berm/USA

<sup>■</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

REGION 3

#### BANDE — BAND — BANDA 6685-6765 kc/s

		•			
6685 (A1)	6687,5 (A1)	6693	6700,5	6708	6715,5
Kong Mala Ceyl Indo (500 W) Aust (500 W)	Fiji/NZel (1 kW) Aust S (500 W) Inde (350 W) NCal (500 W) NCal (500 W) Ocea (500 W) Chin/USA (3 kW) J/USA (3 kW) J/USA (3 kW) J/USA (3 kW) JMari/USA (3 kW) JMari/USA (3 kW) JMari/USA (3 kW) John (3 kW) Midw (3 kW) Phil/USA (3 kW) Wake (3 kW)	NZel (1 kW) Fiji/NZel (1 kW) Aust (5 kW) Mala Ceyl Kong Inde (N-25° N & E-75° E)	Phil S (400 W) Aust (5 kW) Mala (2,5 kW) Ceyl (2,5 kW) Kong (2,5 kW) Pak (400 W)	NZel (1 kW) Fiji/NZel (1 kW) Aust S (500 W) IndN (1 kW) Ceyl (250 W) Pak (1 kW) Maca (100 W)	Phil S (400 W) NZel (1 kW) Fiji/NZel (1 kW) Aust (500 W) except. Darwin IndN-Java IndP (100 W) TimP (100 W) Chin Regions 4, 5 & 6 (1 kW)
6723	6730,5	6738	6745,5	6753	6760,5
NZel (1 kW) Fiji/NZel (1 kW) Aust except. Pt. Moresby (1 kW) Mala (2,5 kW) Inde (500 W) Chin/USA (3 kW) J/USA (3 kW) J/USA (3 kW) JMari/USA (3 kW) JMari/USA (3 kW) JMari/USA (3 kW) John (3 kW) Midw (3 kW) Phil/USA (3 kW) Wake (3 kW)	Inde (S-30° N) Mala (2,5 kW) Aust (5 kW) except. Pt. Moresby Papu Pt. Moresby (500 W) Chin/USA (3 kW) J/USA (3 kW) J/USA (3 kW) JMari/USA (3 kW) JMars/USA (3 kW) John (3 kW) Midw (3 kW) Phil/USA (3 kW) Wake (3 kW)	Aust (1 kW) Mala (2,5 kW) Pak-Karachi (400 W) Chin (3 kW) Cevl (2,5 kW) NCal (1 kW) NHeb (1 kW) Ocea (1 kW)	Indo (500 W) Iran (500 W) Phil (400 W) NZel (1 kW) Fiji/NZel (1 kW) Aust (5 kW) except. Darwin Inde (500 W)	Indo (1 kW) Phil-Cebu (400 W) Chin/USA (1 kW) J/USA (1 kW) JCaro/USA (1 kW) JMari/USA (1 kW) JMars/USA (1 kW) John (1 kW) Midw (1 kW) Wake (1 kW) NZel (500 W) Aust (500 W) except. Brisbane & Pt. Moresby Java (500 W) Inde (500 W) Inde (500 W) except. Sadhiya NCal (1 kW) NHeb (1 kW)	J/Mari/USA JCaro/USA JMars/USA Wake Aust (500 W) except. Darwin Mala (1 kW) IndP (100 W) TimP (100 W) Chin Regions 4, 5 & 6 (1 kW) Midw John J/USA

#### BANDE — BAND — BANDA 8965-9040 kc/s

8	967	8975	,5	89	984	899	92,5	9	001
G AfrS AraS/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G		URSS Azor AfrS MarF/USA	A (1 kW)	F Algé Liba URSS-AM AEF AOF Came Mada MarF Reun SomF Togo Tuni	•	Port Azor URSS-E		Holl Nor Egyp RSSB AEF Came Mada Reun MarF (300 AOF (300 Algé-Oran Tuni (100	(W) (100 W)
,	900	09,5	. 90	018	902	26,5	90	035	
	AEF (500 Came (500 Mada (500 Reun (500	W) W) W) W)	F RSSU AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni		Reun (400 URSS-AM URSS-C AOF-Daka AEF-Brazz (400 W) D/USA	W) or (400 W) aville	I Dnk Polo MarF/USA		
	G AfrS AraS/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan	AfrS AraS/G Chyp D/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G  G Bulg Youg URSS-SEG AEF (500 Came (500 Reun (500	GAfrS AraS/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G  GBulg Youg URSS-SEO AEF (500 W) Came (500 W) Mada (500 W) Reun (500 W)	GAraS/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G  G Bulg Youg URSS-SEO AFF RSSU Youg URSS-SEO AOF Came (500 W) Algé Mada (500 W) Reun (500 W)  Reun (500 W)  Reun (500 W)  Reun (500 W)  Reun SomF Togo	URSS   F   Algé   Liba   URSS   Azor   AfrS   Liba   URSS-AM   AEF   AOF   Came   Mada   MarF   Togo   Tuni	G AfrS Azor AfrS Azor AfrS D/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Suez/G P Bulg Youg URSS-SEO AEF (500 W) Came (500 W) Mada (500 W) Reun (500 W) AOF AOF AOF AOF AOF AOF AOF AOF ACF-Brazz AOF AOF AOF AOF ACF-Brazz AOF AOF AOF AOF AOF AOF AOF AOF ACF-Brazz AOF	Som B   Suez/G   G   G   G   G   G   G   G   G   G	Safe	Color

<sup>■</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### ${\tt BANDE - BAND - BANDA~8965-9040~kc/s}$

8	967	89	75,5	88	084	89	92,5	9001	
Cana Mexi B Hawa		USA (1 kV Arge Cura Suri	W)	USA Hawa Berm/USA Alas Arge Grön Guantana (Cuba)// GuBr/USA 10Br/USA PanZ Rico	mo USA	Cana Mexi Chil Guad GuFr Mart		USA Cuba (300 W) B Alas	
	900	9,5	90.	18	902	6,5	908	35	
	Cana Mexi B		Alas Hawa Cuba Boli Chil (S-41° (300 W)	S)	USA Guantanar (Cuba)/I IOBr/USA GuBr/USA PanZ Rico Berm/USA Grön/USA Labr/USA TerN/USA Alas Arge	JSA (750 W) (1 kW)	Alas USA Colo (300 V Chil TerN/USA Labr/USA Urug (100		

<sup>■</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### BANDE — BAND — BANDA 8965-9040 kc/s

89	67	897	5,5	89	84	899	2,5	900	)1
Aust NZel Fiji/NZel Midw Ceyl Kong Mala		Aust Ceyl Indo		Indo JMars/USA Wake Aust (500		Inde Phil NZel Fiji/NZel		Inde Phil Chin/USA J/USA J/USA JMari/USA JMari/USA JMans/USA John Midw Wake	
	900	9,5	90	18	902	6,5	908	35	
•	Iran IndN NZel Fiji/NZel		Chin Pak O Mala John (1 kV Aust-Darw (500 W) NCal NHeb Ocea	V)	IndP Kong Mala Aust (500 Chin/USA J/USA JCåro/USA JMars/USA John Midw Phil/USA Wake		Pak TimP ChinN Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	. [	

# BANDE — BAND — BANDA 11 175-11 275 kc/s

11. 1	180,5	11	190	11 1	99,5	. 11.	209	11 2	218,5	11 228
Nor Port (250 Pol Azor Ango CapV GuiP Moza STPr Egyp	0 W)	URSS MarF Algé AOF AEF Came Mada Reun SomF		G AraS/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G		F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni URSS-S	ЕО	F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni Autr/F D/F		D/USA Marf/USA  Egyp (300 W)
•	. 11	237,5	11	247	11 2	256,5	11	266	11 27	3 (A1)
	URSS AfrS MarF (5 Algé (50 Tuni (50 AOF (50	0 W) 00 W)	G Dnk URSS-A URSS-S Gibr Malt Chyp (5 Liby/G Suez/G	EO	Holl URSS-E URSS-S URSS-A URSS-C RSSU	EO M	Port MarF/US URSS-E Azor D/USA	SA (500 W)	Roum Bulg URSS-A URSS-E URSS-C  MarF (50 Algé (500 AEF (50 AEF (50 Mada (50 Reun (50	00 W) 0 W) 0 W) 0 W) 0 W) 0 W)

<sup>■</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

REGION 2

#### BANDE — BAND — BANDA 11 175-11 275 kc/s

11	180,5	11	190	11 :	199,5	1	L 209	11 5	218,5	11	228
Alas USA Arge Cura Colo		Mexi Chili TerN/U Labr/US	SA (1 kW) SA (1 kW)	USA Hawa Berm/U B		Cana Cuba Arge		Guad GuFr Mart Hawa USA Alas Labr/U TerN/U Grön/U Berm/U Arge	SA SA	USA Guanta (Cuba GuBr/U PanZ Alas Berm/U Grön/U Hawa Rico TerN/U Chil Labr/U	SA SA SA SA SA SA
	11 28	37,5	112	247	11 25	66,5	112	166	11.273	3 (A1)	
	Mexi Arge TerN/US Labr/USA Berm/US	A (1 kW)	Cana (35) Mexi (40) B		USA B		Arge Alas USA Labr/USA TerN/US. Grön/US. Guantana (Cuba), GuBr/US. Rico GuBr/US. PanZ Berm/US.	A A amo /USA A A	Cana Mexi (40 B	0 W)	

 $<sup>\</sup>blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### REGION 3

# BANDE — BAND — BANDA 11 175-11 275 kc/s

11 180,5	11 190	11:	199,5	11	. 209	. 11:	218,5	11 22
Inde Chin/USA J/USA JCaro/USA JMari/USA John Midw Phil/USA Wake	IndN	Aust Midw Ceyl Mala Kong		Aust Indo		Indo NCal NHeb Ocea Midw		Pak Chin/USA J/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake
11 23	37,5	11 247	11 2	56,5	11:	266	11 27	3 (A1)
Phil Aust (500	Au Ma Ko Cey	la ong	IndN		Inde Chin/USA J/USA JCaro/US JMari/US JMars/US John Midw Phil/USA Wake	SA SA SA	Phil	

REGION 1

#### BANDE — BAND — BANDA 13 200-13 260 kc/s

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
G Aras/G Chyp D/G Gibr Iraq/G Keny Liby/G Malt SomB Sudan Suez/G	D/USA . MarF/USA Egyp  AOF-Dakar (1 kW) Came-Douala (1 kW) AEF- Brazzaville & Bangui (1 kW) Mada (1 kW) Reun (1 kW)	URSS  AOF AEF Came Algé Mada Mart Reun SomF Togo Tuni  (300 W)	F AEF AOF Came Mada Mart Reun SomF Togo Tuni Autr/F D/F URSS-AM (100 W) Algé	URSS Polo AOF-Dakar (750 W) Came-Douala (750 W) AEF-Brazzaville (750 W) AEF-Bangui (750 W) Mada (750 W) Reun (750 W)	Nor Port Ango CapV GuiP Moza STPr Roum Holl Azor

 $<sup>\</sup>blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### REGION 2

#### BANDE — BAND — BANDA 13 200-13 260 kc/s

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
Arge Mexi Cura (300 W) Hawa (1 kW) Alas	USA GuBr/USA IOBr/USA PanZ Alas Berm/USA Grön/USA Hawa Rico TerN/USA Arge (300 W) Labr/USA Guantanamo (Guba)/USA	Cana (350 W) Cuba (350 W) B	Berm/USA (300 W) Grön/USA (300 W) TerN/USA (400 W) Labr/USA (400 W) Alas USA GuBr/USA IOBr/USA PanZ Rico Arge (300 W) Guad GuFr Mart Guantanamo (Cuba)/USA	USA B Labr/USA (1 kW) TerN/USA (1 kW) Berm/USA (1 kW)	Cana Mexi Arge Hawa

#### REGION 3

#### BANDE — BAND — BANDA 13 200-13 260 kc/s

13 205,5	13 215,5	13 225,5	13 235,5	13 245,5	13 255,5
Ceyl Kong Mala Aust Midw (1 kW) John (1 kW)	Pak Chin/USA J/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Chil/USA Wake	Aust (500 W) Indo (100 W)	Indo NCal NHeb Ocea Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	Chin/USA J/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Wake Phil	IndN Inde Midw John

REGION 1

BANDE — BAND — BANDA 15 010-15 100 kc/s ·

15 016	15 026	15 036	15 046	15 056
D/USA MarF/USA	URSS Ango CapV GuiP Moza STPr Azor	URSS AOF AEF Came Mada Reun	G	Nor AfrS MarF/USA
•		Algé (200 W) MarF (200 W)		
15 066	15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni URSS-AM (50 W) URSS-SEO	F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni Autr/F D/F	URSS Polo (500 W) Dnk	URSS-SEO	Holl

<sup>■</sup> Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

#### · REGION 2

#### BANDE — BAND — BANDA 15 010-15 100 kc/s

1.7.0.0	17.000	15.000	15.040	47.070
15 016	15 026	15 036	15 046	15 056
Guantanamo (Cuba)/USA GuBr/USA IOBr/USA PanZ Rico USA Alas Arge (S-30° S) (300 W) Berm/USA Grön/USA Hawa	Chil Mexi (N-19° N) (400 W)	B Mexi (N-19° N) (300 W) Labr/USA TerN/USA Grön/USA	Arge Cuba (300 W) Alas (1 kW)	USA Arge (300 W) Alas Berm/USA
TerN/USA Labr/USA		,		
15 066	15 076	15 086	15 092,5 (Al)	15 096,5 (Al)
USA Guantanamo (Cuba)/USA GuBr/USA IOBr/USA PanZ Rico Chil (300 W) Berm/USA	USA Ajas Arge (300 W)	Mexi B (S-5° S & E-55° O) (300 W) Hawa (1 kW)	B Mexi (N-19° N) (300 W)	USA Cura Alas Arge (300 W)

#### BANDE — BAND — BANDA 15 010-15 100 kc/s

15 016	15 026	15 036	15 046	15 056
Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John- Midw Phil/USA Wake	IndP Maca TimP	<del>_</del>	Pak Aust	Inde Chin-USA J/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake
15 066	. 15 076	15 086	15 092,5 (A1)	15 096,5 (A1)
Aust Indo <sup>1)</sup> (50 W)	Inde NCal NHeb Ocea Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	Aust (50 W)	Phil (300 W)	IndN

 $<sup>^{\</sup>mbox{\scriptsize 1})}$  Stations d'aérone fs seulement. — Aircraft only. — Sólo aeronaves.

# BANDE — BAND — BANDA 17 970-18 030 kc/s

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
I Ango CapV GuiP Moza STPr Azor URSS (50 W) D/ŪSA MarF/USA	G AraS/G Chyp D/G Gibr Ira <sub>4</sub> /G Keny Liby/G Malt SomB Sudan Suez/G	F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni D/F Autr/F Holl	URSS Polo	F AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni D/USA MarF/USA	URSS

#### REGION 2

#### BANDE — BAND — BANDA 17 970-18 030 kc/s

17 975 (AÌ)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
USA Arge (300 W) Alas Hawa (1 kW) Grön/USA TerN/USA Labr/USA Berm/USA	B Alas	Arge Guad GuFr Mart Alas	Arge Mexi	USA GuBr/USA IOBr/USA PanZ Rico Alas Berm/USA Grön/USA Hawa TerN/USA Chil (300 W) Labr/USA Guantanamo (Cuba)/USA	USA (1 kW) B Grön/USA (1 kW) TerN/USA (1 kW) Labr/USA (1 kW) Berm/USA (1 kW)

#### REGION 3

#### BANDE — BAND — BANDA 17 970-18 030 kc/s

17 975 (A1)	17 983,5	17 993,5	18 003,5	18 013,5	18 023,5
IndP Maca TimP	Ceyl Kong Mala Aust Pak	Indo NCal NHeb Ocea Chin/USA J/USA JCaro/USA JMari/USA John Midw Phil/USA Wake	Aust (400 W)	Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	IndN

REGION 1

#### BANDE — BAND — BANDA 3900-3950 kc/s

3904	391	1	39	18	3925	3932
URSS-E URSS-SEO (1 kW) URSS-AM Youg D/G Isla AfrS Egyp MarF Algé Tuni AOF AEF Mada Came	G MarF URSS-E URSS-SEO Youg F AEF AOF Mada Egyp RSSB (500		URSS-E URSS-SEG URSS-AM Alba G F Algé MarF AfrS Egyp RSSU (500		G`F Port D/G Malt Egyp URSS-SEO URSS-E Azor	G *URSS-E URSS-SEO Autr/F AfrS MarF Algé Tuni AOF AEF Mada Came SomF
		Polo G URSS-SEC *URSS-C	•	Algé MarF URSS-E URSS-SEC Polo Nor F AfrS	)	

<sup>\*</sup> Cette fréquence sera aussi utilisée dans la zone d'occupation de l'U.R.S.S. en Allemagne. — This frequency will also be used in the U.S.S.R. occupation zone of Germany. — Esta frecuencia será usada también en la zona ocupada en Alemania por la U.R.S.S.

REGION 1

BANDE — BAND — BANDA 3155-3200, 3200-3230 & 3800-3900 kc/s

A	В	C	D	Е	F	G
Ĝ Malt	G Malt	Holl	F Nor Port Ango CapV GuiP Moza STPr	F Holl AEF AOF Came Algé Mada MarF Reun SomF Togo Tuni	D/F F Alge MarF Tuni AEF AOF Mada SomF	D/USA F Algé MarF Tuni AEF AOF Mada SomF

BANDE — BAND — BANDA 2505-2850, 3155-3200 & 3200-3230 ks/c

•	
Pour des accords régionaux.	
For regional agreements.	
Por acuerdos regionales.	

#### REGION 3

 ${
m BANDE} - {
m BAND} - {
m BANDA}$  3155-3200, 3200-3230 & 3900-3930 kc/s

				3155	-3200		٥		•
	A	-	B JE		С .	. 1	)		E
Indo (1 k) NCal (1 k) NHeb (1 k) Ocea (1 k) Phil N (30 Aust (5 k)	W) cW) W) 00 W)	Ceyl (2,5 1 Mala (2,5 Kong (2,5 Phil S (300 Aust (500	kW) kW) 0 W) .	IndP (100 TimP 100 Maca (100 Phil S (30 Aust S (50	W)) (W) 0 W)	Indo (1 k) NCal (1 k) NHeb (1 k) Ocea (1 k) Phil N (30 Aust (500	W) (W) W) O W)	Ceyl (2,5 1 Mala (2,5 Kong (2,5 Phil S (30) Aust (500	kW) kW) 0 W)
	. 3200	-3230	,		3900-39	950			
		A.	•	• A B		В	С		
-	Phil N (30 Aust (500		Phil S (300 Aust	9 W)	Phil S (30) Aust	0 W)	Phil N (30 Aust	00 W)	

REGION 1

#### ${\tt BANDE - BAND - BANDA~4750\text{-}4850~kc/s}$

A	В	C	D	E .
G Malt Suez/G Roum-Bucarest (500 W)	G MarF I	G Suez/G Algé Youg	F MarF Egyp	F MarF Algé Tuni S

#### REGION 2

#### BANDE — BAND — BANDA 4438-4650 kc/s

A	В	C	D	Е
Cana Mexi B Arge (S-45° S)	USA Grön/USA TerN/USA Alas Hawa Berm/USA Arge Guantanamo (Cuba)/USA GuBr/USA IOBr/USA PanZ Rico	Arge Colo USA Alas B (N-10° S & E-50° O)	Mexi Cana Chil B except. S Rio Grande Cuba (E-Santa Clara) (500 W)	B Mexi Cana Chil (S-35° S)
	Arge USA Alas Hawa TerN/USA Berm/USA Guantana (Cuba)/ GuBr/USA IOBr/USA PanZ Rico	Arge B (N-15° S Guad Mart Nica A USA A USA Hawa	G S)	

REGION-1 BANDE — BAND — BANDA 5430-5480 kc/s

A	В	C
Holl Port Youg Azor Egyp  F (S & O) (100W) MarF (100W) Algé (100 W) Tuni (100 W)	F MarF Tuni Algé AEF AOF Came Mada Reun SomF Togo Roum (100 W)	Suis G I (S-40° N) (100 W)

 $\blacksquare$  Sur une base secondaire. — On a secondary basis. — Sobre una base secundaria.

REGION 3

BANDE — BAND — BANDA 5430-5480 kc/s

A.	В	C
Ceyl Mala Kong Pak Phil S Aust NZel Fiji/NZel	Indo (500 W) NCal (500 W) NHeb (500 W) Ocea (500 W) Inde (500 W) IndN (500 W) Maca (100 W) TimP (100 W) Phil (200 W)	Chin (1 kW) IndP (100 W) Aust (500 W) J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake

REGION 1

#### BANDE — BAND — BANDA 23 200-23 350 kc/s

A	В	C	D	E
F MarF Alg6 Tuni AOF AEF Mada SomF	Holl	D/USA MarF/USA	F Algé	D/USA MarF/USA

#### REGION 2

#### BANDE — BAND — BANDA 23 200-23 350 kc/s

, A	В	. C.	р.	E	F
Arge	Alas Hawa Suri Cura	USA Guantanamo (Cuba)/USA GuBr/USA IOBr/USA PanZ Alas Berm/USA Grön/USA Hawa Rico TerN/USA Labr/USA	Alas Hawa	USA GuBr/USA IOBr/USA PanIZ Alas Berm/USA Grön/USA Hawa Rico TerN/USA Labr/USA Guantanamo (Cuba)/USA	Hawa

#### REGION 3

#### BANDE — BAND — BANDA 23 200-23 350 kc/s

A	В	С.	D	E	F
Indo	IndN Midw John	Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	Chin/USA J/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake	Chin/USA J/USA JCaro/USA JMari/USA JMars/USA John Midw Phil/USA Wake

#### International Administrative Aeronautical Radio Conference 2nd Session

Corrigendum to Document 104-E

30 September 1949

Geneva 1949

# CORRIGENDUM SUBMITTED TO WORKING GROUP C-4 on 29th September 1949

(b

- Delete in toto columns 4 shown against: 3, 3.5, 4.7, 5.6, 6.6, 9, 10, 11.3
  13.3 and 18 Mc/s band.
- 2. In Table 4/1 frequency 5611.5 kc/s, designator D2, in column 3, delete "NA" and insert "NA (Ext)" and, under frequency 5626.5 kc/s designator D4, in column 3, delete "NA (Ext)" and insert "NA".

The effect of the alteration is to give increased flexibility in the use of the NA frequencies, in this order. No adjacent channel conflicts are introduced as a consequence of the alteration.

A corresponding clerical amendment is also required under frequencies D2 and D4, in Table 4/2, and in Table No. 4 of the World Aeronautical Mobile "R" Band Sharing Plan.

- 3. In the original sharing chart for the 9 Mc/s band passed to the Working Group, there was no channel F18. The frequency 8961.5 kc/s has been inserted as F18 and formal authority for this insertion is requested.
- 4. It is proposed that the new channel F18 have a note attached as Table 6/1 and on the sharing chart as follows: Channel F18 allotted to all RDARAs as a common frequency for high stability Al emission only.
- 5. Replace the notes % shared channel or % shared use by % common with adjacent areas at the bottom of the following tables:

Table	1/2	Table	3/2		Table	6/1	Table	8/2
1)	2/1	19	4/2	**	11	6/2		9/2
11	2/2	<b>11</b> -	5/2	•	11	7/2	11	9/2 10/2

6. Insert the note "% common with adjacent areas" at the bottom of Table 3/1.



# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### CORRIGENDUM

Table 4/1 and 4/2 (5.6 Mc/s).

- 1. Table 4/1, Page 2 -
  - (a) Opposite 5619 kc/s, under Col 3, delete 11E and 12F and insert 12 J and 13 H.
  - (b) Opposite 56.11.5 and 5619 kc/s, under Col. 4, insert 12 J and NA (Ext).
  - (c) Opposite 5619 and 5626 kc/s under Col. 4, insert 12 J and NA
- 2. Table 4/2, Page 1 -
  - (a) Delete all references to 11E. (See note 1)
  - (b) Opposite 12F delete Channel 17 and Associated Frequency 5619 kc/s (See note 1)
  - (c) Under 12H, insert the following:

12 J D 17 5619 kc/s

- (d) Opposite 13H insert D 17 5619 kc/s.
- Note 1: Sub-RDARAs 11E and 12F have been allotted a 6.6 Mc/s Band Frequency to replace the 5.6 Mc/s Frequency deleted in Paras 2 (a) and 2 (b) above.



#### Corrigendum

#### Page 2 - para. 47, add:

(For details of "Restricted Use" which applies to certain frequencies in the allotment lists, refer to the marginal meter on the Frequency Sharing Plan Table for the appropriate frequency order.)

Table 1/1 - Frequency 2861, column 3, replace 10 C by 10 C+ 2966) column 4, replace CWD by CWP 2973)

Column 4, 7th box, NA & 1 should apply to frequencies 2945 and 2952. Therefore add a line below NA & 1

Frequency 2987, col. 3, add FE1 2987) col. 4, add NA & 110

#### Table 1/2, add:

8A All 2973 %

Area 13 H, replace 2900 by 2980

Table 2/1 - Delete the table bearing the title "Numerical order by designator," except the note %.

Put a line between frequencies 3481,5 and 3488,5

Table 2/2 - Area SA ext, replace 3437.5 by 3432.5

Table 4/1 - Frequency 5450, col. 3, replace "Reg 2" by "Reg 2 only".

Frequency 5454, col. 2, delete EH both WH

Frequency 5461.5 col. 2, replace D 13 by D 28 (1)

Frequency 5469 col. 2, replace D 23 by D 27 (1)

Frequency 5476.5, col. 2, replace D 20 by D 29 (1)

Frequency 5465 ) col. 4, read "No conflict"

" 5480, col. 3, replace "Reg 1 + 3" by "Reg 1 + 3 only"

5484 ) col. 4, read 7E-7D, 12G-13J



# - 2 - (Cor. Aer/2104-E)

```
Frequency 5491.5) 5499 )
                           col, 4, read 7E-7, 12D-12G
                   5499 col. 3, replace 1* by 1
                   5536.5 col. 2, delete D29
                   5544 col. 3, replace 1* by 1*
                   5551.5) col. 4, replace ALT by ATL
                   5589 col. 3, replace 1* by 1+
                   5649 col. 2, delete D28
                           col. 4, read 1-1E, 13I-13L
                   5664 col. 2, delete D 27
                  At the end of the table, add:
                  * Day Sharing
                  + Restricted Use
                  (1) Plan subject to interchange of following
                       allotments in Western Hemisphere:
                   (a) D 23 and D 27
                   (b) D 13 and D 28
                   (c) D 20 and D 29
Area 10 B, replace D 13 by D 28 (1)
10 D, replace D 27 by D 23 (1)
                    D 28 1 D 13
                         # D 20
                    D 29
Area 11 F, replace D 20 by D 29 (1)
     11 H, replace D 23 by D 27 (1)
     12 C, replace D 28 by D 13
                                  (1)
                          11 D 20
                    D 29
                          * D 23
                    D 27
                                  (1)
```

D 13 by D 28

D 20 by D 29 D 23 by D 27

D 27 by D 23

13 I replace D-20 by D 13

13 J replace D 29 by D 20 (1) 13 L replace D 13 by D 28 (1)

(1)

(1)

(2)

12 D replace

12 F replace

13 D replace

13 E replace

Table 4/2

#### - 3 -(Cor Aer/2 104-E)

At the end of the table, add:

- \* Day Sharing
- (1) Plan subject to interchange of following allotments in Western Hemisphere:
  - (a) D 23 and D 27
  - (b) D 13 and D 28
  - (c) D 20 and D 29

#### Table 5/1

At the beginning of the table, delete the note \* Restricted Use

Frequencies 6552/6559.5, col. 4, read  $\overline{6A-5}$ 

10D - 11 F

12C - 12 C 6567/6574, col 4, read 10D - 11 D

" 6597, col. 3, replace OlB by 10 B

" 6642/6649.5, col. 4, replace 10 by 10 D

6657/6664.5, col. 4, read ME (Ex) - 1 9 - 9 B 10 C - 11 B

6672/6679.5, col. 4, replace 5A by SA

At the end of the table, add:

+ Pestricted use .

#### Table 5/2

```
In the titles, add 6.6 Mc/s

Area 6 B, replace 6574 % by 6574,5%

" 6 F, " 6553* by 6552 +

" 8 should read 8A

" 11 F, replace 6537* by 6537 +

" 12 C, " 6559,5 * by 6559.5 +
```

#### - 4 -(Cor Aer/2 104-E)

At the end of the table, Before the first note, replace the sign asterick (\*) by cross (+)

#### Table 6/1

Frequencies 8871/8879.5, col. 4, add NSAM2 - 10 E

Frequency 8956, col. 3, replace 6B \* by 6 B +

At the end of the table, before the 2nd note, replace the sign asterisk (\*) by cross (+)

#### Table 6/2

In the title, add 9.0 Mc/s

Area NSAM2, col. 2 and 3, add F1 8871

After Area SA, col. 1.2 and 3, insertS P F 3 8845.5

At the end of the table, add (1) High Stability A 1 Channel

### Table 7/1

Frequencies 10 048/10057, col. 4, read CER-10C

#### Table 8/1

Frequency 11318.5, col. 3, replace 7 \* by 7 +

Frequencies 11328/11337.5, col. 4, add NSAM2-11C 11337.5/11347, col. 4, read NSAM2-11C Frequency 11356.5, col. 3, replace 1\* by 1.

At the end of the table, before the note, replace the sign asterisk (\*) by cross (+)

# Table 8/2

Area 1, replace 11356.5 \* by 11356.5 +
At the end of the table, before the note, replace the sign asterisk (\*) by cross (+)

#### Table 9/1

Frequencies 13294.5/133045, col. 4, read CEP-10B/C 13324.5/13334.5, col. 4, add NA-ME (Ex)

# : 9/2

To be replaced by the following table.

TABLEAU 9/2

TABLE 9/2

CUADRO 9/2

# ALLOCATION DE FREQUENCES AUX ZONES

#### FREQUENCY ALLOTMENT TO AREAS

# DISTRIBUTION DE FR CUENCIAS A LAS AREAS

13.3 Mc/s

AREA	Channel D <sub>o</sub> signa tor	FREQUENCY	AREA	Channel Designa tor	FREQUENCY
NA	J 1	13264.5	10	<b>J</b> 10	13294.5 %
•	J. 3 J 6	13284.5	11	J 10	13294.5 %
NA (Ext)	J 5	13354.5	12	J 10	13294.5 %
nsam 1	J 7	13314.5	12	J 10	13294.5 %
nsam 2	J 2	13344.5	CDEFG HJ		
SP	J 2	13344.5	13	J 10	13294.5 %
FE 1	J 3	13324.5			
FE 2	J 6	13284.5			•
ME (Ext)	J 4	13334•5		•	
NSAl (Ext)	J 8	13304.5			
NSA2 (Ext)	J 4	1303445			
CEP	J 4 J 8	13334•5 13304•5			
CWP	J 5	13354+5			•
SA (Ext)	J 9	13274•5			
NP	J 9	13274•5			
1	J 9	13274+5			
2	J 2	13344.5			,
3	J I	13264.5			
6 G	18	13304.5 +			of Chames II
6 F	<b>J 1</b> 0	13294.5		,	% Shared Use + Restricted

-6-(Cor Aer/2 104-E)

# Table 10/1

Frequencies 17926.5/17936.5, col. 4, add CEP-10B/c

17956.5/17966.5, col. 4, read NA - 10 E/D

# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### CORRIGENDUM TO TABLES OF

#### WORLD AERONAUTICAL MOBILE "R" BAND SHARING

(Appendix to Aer/2 doc.No.104)

#### TABLE No.1

Square	A11-10B	read	X	^
tt	A11-12D	11	X	2
#1	A13-10C	Ħ	X	4
11	A13-12J	**	X	4
**	A16-6A	11	X	9
Iŧ	A17-10C	**	X	1
11	A17-12D	**	X	2
lt.	A18-30	11	V	1
11	A18-12D	<b>#</b>	X	¥
11	A21-11B	**	X	8
**	A21-12D	u.	X	2
11	A22-3	11 .	X	Ĭ

The note beginning with "For use in sub-area 3A..." should be preceded by the sign " $X_1$ ".

The note beginning with "Protection..." should be preceded by the sign "X2".

The note beginning with "For use in area 12J..." should be preceded by the sign " $X_3$ ".

Add the following note:

 $X_4$  For use in sub-area 12D, east of  $70^{\circ}$  W.

#### TABLE No.2

#### TABLE No.3

Square	C1-9A C1-9B	read	rv v	Square		6C 6D	read	V
H ·	C1-9D	1ť	V.		•	0,0		•
tt .	C1-9E	**	v <b>i</b>	•				

Add the following notes:

In the Western Hemisphere the protection ratio drops to 12db in certain cases.

Area 1 frequencies limited to use east of 110W.

#### TABLE No.4

Square	D22-5B	read	٧	•
11 -	D22-5C	Ħ	Ÿ	7
11	D22-5D	11	v	
Ħ .	D22-13L	#1	X	1

The note beginning with "Channel D22..." should be preceded by the sign "X,".

#### TABLE No.5

The note beginning with "Channel Ell..." should be preceded by the sign "X1".

The note beginning with "Channel El5..." should be preceded by the sign "X2".

The note beginning with "Channel El7..." should be preceded by the sign "X3".

#### TABLE No.6

Add the following note:

F18 is a high stability Al Channel.

#### TABLE No.7

The note beginning with "West of ... " should be preceded by the sign "X1".

#### TABLE No.8

Add the following note:

H 13 - for 15db protection use limited to sub-areas

#### TABLE No.9

Delete the sign "1" before the note beginning with "Frequencies..."

Add the following note:

X, - To be used West of 140°E.

(89-16-96)

GENEVA 1949

#### Report by Sub-Working Group C. 4.

#### FREQUENCY ALLOTMENT

- The results of the work of Sub-Group C. ..., which has been completed in accordance with Section 1 of the terms of reference contained in the report of Working Group "C", Doc. Aer/2-96, paragraph 5.1.1, have been assembled in the following order, and are attached hereto:
  - 1.1 Numerical lists of frequencies for each order, including authorized area of use and any limitations, together with details of conflicts.
  - 1.2 A list of areas and sub-areas with the frequencies allotted to each by frequency orders.
  - 1.3 A description of M.W.A.R.A., R.D.A.R.A., and sub-R.D.A.R.A. boundaries.
- 2. This work meets the requirements of the first section of the terms of reference. The data required under the second section will be available as an annexure to the final report of Working Group "C".
- Under the provisions of Notice to Delegates No 7, of 20th September 1949, delegates may study the working papers from which the above-mentioned frequency lists were derived. The working papers will be available in the following rooms:

Room 8: 3.0 Mc/s and 10.0 Mc/s
Room 9: 3.5 Mc/s and 6.6 Mc/s
Room 10: 5.6 Mc/s and 11.3 Mc/s
Room 11: 4.7 Mc/s, 9.0 Mc/s, 13.3 Mc/s and 18.0 Mc/s.

Any additional information which delegates may require, relating to the preparation of individual frequency lists, may be obtained from the delegates who were engaged in the special working groups. A list of the names of these delegates is published in Aer/2-Doc. No 94, paragraph 4.

- The methods used in the allotment of frequencies embodied the application of the frequency allotment tables prepared by sub-Working Group C.3 to operations in the following sequence:
  - 4.1 Comparisons of the frequency allotments made to each channel with the allotments made to every other channel.
  - 4.2 The recording of conflicts as a result of the comparisons,
  - 4.2.1 The term "conflict" indicates that: A given station lies within two or more aeronautical mobile "R" frequency allotment areas and may be expected to utilize all of the frequencies of the order under consideration allotted to the areas concerned.
  - 4.3 The establishment, by trial and error, of the most satisfactory specific frequency allotments to each channel designator in order to eliminate as far as possible adjacent channel conflicts.



#### - 2 -(Aer/2-104-E)

- 4.4 The checking of these allotments against available P.F.B., Broadcasting, and "OR" frequency allotment lists to determine whether adjacent channel interference will occur.
- `4.5 The rearrangement, where necessary, of the allotments due to adjacent channel interference as the result of para. 4.4 above.
  - 4.6 The preparation of a "Summary of Conflicts."
  - 4.7 The preparation of two frequency allotment lists, one by frequencies in numerical order and one by areas, after the best possible arrangement has been achieved.

F.R.W. ANDREWS

Chairman.

# TADLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX INDICATIFS TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO 3.0 Mc/s

Fréquence Frequency Frecuencia	Indicatif de la voie Channel	Allouée à	Incompatibilité
		i i	4
Frecuencia		Allotted to	Conflict
1	designator Distintivo del canal	Distribuida a	Incompatibilidad
(1)	(2)	(3)	(4)
Unknown		(a) Fixed )Regions (b) Mobile)2 & 3 (a) Fixed ,Reg. (b) Mobile except) 1 AerM(R)	Unknown
Inconnu		(a) Fixe )Régions (b) Mobile)2 & 3 (a) Fixe )Rég. (b) Mobile excepté) 1	Inconnu
Desconocido		Aér M (R) (a) Fijo )Regiones (b) Mòvil) 2 y 3 (a) Fijo )Reg. (b) Mòvil excepto) 1 Aer M (R)	Desconocido
2854	23	1,2B*,3B,7D,9, 11F,13J	1 & 1E
2861	17	1E,3A,6E,9B,10C4 12D+,13F	9 & 9B 1E & NA 9B & FE2
2868	4	FE2,NA,2B*,7,13G	13F & 13G 6E & FE2 NA & SA
2875	8	SA,3,9D,12C	13G & SA SA & 13L
2882	15	2,6C,7E, 1OE,12E,13L	12C & 12E 12E & NSAM
2889	5	EU, NSAML 6B, 9E	EU & I
2896	20	1,3C,7E 9E,11G,13K	9E & 9E 1 & 1B
2903	18	1B,3B%,3C%+ 5D%,5C%,5D% 9D,11B,12D+ 13C	3C & 3C

(1)	(2)	(3)	(4)
2910	6	EU,NSAM2 6B, 9D	1B & EU 9D & 9D EU & 1
2917	19	1,3C,7E 9D,10B,13C	9D & 9D No conflict
2924	14	2, 4B,6C 11G,13E	.No conflict
2931	7	NA(E),6A%,6E% 9D,10A,13L	NA(E) & 1
2938	21	1,2B*,3B 7D,9D,11B+	NA(E) & 12D 9D & 9D
2945	3	12D+,13F%,13H%	9D & SP 1 & NA
20±0	13	SP,NA,2C* 6A%,6E%,6F%,13K	NA & 1
2952		1,3B%,3C% 7E,9E,1OC+ 12J+,13G	1 & 1 3B & 3B
2959	16	1,3B,6A+ 9A,11H,13J	12J & 11H 1 & NSA2(E)
2966	2	CWP,NSA2(E) NSAM2,9E	CTR & CWD, CTR & NSA2(E)
2973	11.	CTR,10B+ 12D+,13L	CTR & 9E  NSAM2 & 12D  NSAM2 & 13L  CTR & Pac.Met.
2980	9	Pac.Met. 2B*,12G,13H	CTR & 2B 12D & 12G 10B & Pac.Met. Pac.Met. & NA
2987	1	NP, FE, NA 2C*, 7B, 13I	" " & FEL " " & NP
2994	12	2/3,7D,9D 11C,13D	13I & 13D FE1 & 9D 2C & 2/3
3001	10	Atl.Met. 12E	No conflict  We conflict
<b>3</b> 008	24	2/3,7,9A% 9D%,1OD,13C% 13H%	2/3 & 3 10D & 11D
3015	22	1D%,1E%,3+ 9B,11D,13E	13G & 13E  No conflict
3023,5		and OR channel	

Canal comun R y OR \* Partage de jour

Voie commune R et OR

\* Day sharing

+ Usage restreint + Restricted use + Uso restringido

<sup>\*</sup> Compartición diurna

<sup>%</sup> Voie partagée % Shared channel % Canal compartido

# ALLOCATION DES FREQUENCES AUX ZONES

# FREQUENCY ALLOTMENTS TO AREAS

DISTRIBUCION DE FRECUENCIAS A LAS AREAS

٠Z	$\sim$	70 11 - 1	
٠.٦	_11	Mc/	Q

	7		OU MC/S	~~ <del>~~~~</del>	
Zone	Voie	Fréquence	Zone	Voie	Fréquence
Area	Channel	Frequency	Area	Channel	Frequency
Area	Canal	Frecuencia	Area	Canal	Frecuencia
NP	Al	2987	<b>3</b> A	A17	2861
NA	Al	2987	<b>3</b> B	A13	2952%
· ·	A3	2945		A16	2959
	A4	2868		A18	2903%
NA(E)	N 77	0027		A21	2938
	A7	2931		A23	2854
FE1	Al	2987	3C	A13	2952%
CWP	A2	2966		A18 A19	290 <b>3%</b> + 2917
NSA2(E)	A2	2966		A20	2896
NSAM2	A2	2966	2/3	A12	2994
1		1 7		A24	3008
NSAM2 SP	A6 A3	2910	3	A8	2875
) SF	AO	2945		All	2973%
FE2	A4	2868		A22	3015+
EU	A5	2889	4B	Al4	2924
	A6	2910	4	All	2973%
NSAML	A5	2889			
			<b>5</b> B	A18	2903%
SA	A8	2875	5C	A18	2903%
PAC MET	A9	2980	<b>5</b> D	A18	2903%
			5	All	2973%
ATL MET	Alo	3001	6A	A3	2945%
1D	· Al8	2903		A7	2931%
1D	A22	3015%	anaverse constraint	Al6	2959+
			<b>6</b> D	A5	2889
IE	A17	2861		A6	2910
	A22	3015%	6C	Al4	2924
1	All	2973	-	Al5	2882
	Al3	2952	6E	A3	2945%
	Al6	2959	1	A7	2931%
	A19	2917		A17	2861
	A20	2896	<del></del>		
	A21	2938	6F	А3	2945%
	A23	2854	6	All	2973%
2B	A4	2868*	7B	Al	2907
	A9	2980*			
	A21.	2938*	<b>7</b> D	A12	2994
2C	A23	2854*		A21	2938
20	A1.	2987*		A23	2854
2	A3	2945*	7E	A13	2952
4	All	2973%		A15	2882
	A14	2924		A19	2917
	A <b>1</b> 5	2882	terrories and the standing of the second	A20	2896

TABLE 1/2 3.0 Mc/s

Zone	Voie	T Wasanaa T		
Area	Channel	Fréquence Frequency		
Area	Canal	Frequency		
	Gallas	Freductiona		
7	A4	2868		
	All	2973%		
	A24	3008		
9A	.Al6	2959		
	A24	3008%		
9B	A17	2861		
Ų.	A22	3015		
9D	A6	2910		
1	A7	2931		
-	A8	2875		
ŀ	Al2	2994		
ĺ	Al8	2903		
ĺ	A <b>1</b> 9	2917		
	A21	2938		
	A24	3008%		
9E	A2	2966		
1	A5	2889		
	A13	2952		
	A20	2896		
9	All	2973%		
	A23	2854		
10A	A7	2931		
10B	All	2973+		
	A19	2917		
100	A13	2952+		
	A17	2861+		
<b>1</b> 0D	A24	3008		
loe	A15	2882		
11B	A18	2903		
	A21	2938÷		
11C	A12	2994		
11D	A22	3015		
11F	A23	2854		
11G	A14	2924		
	A20	2896		
11H	A16	2959		
		2000		
12C	A8	2875		
<b>1</b> 2D	All	2973+		
	A17	2861+		
	A18	2903+		
		1		
	1 A21	2938+		

		3 15 July 1 40		
Zone	Voie	Fréquence		
Area	Channel	Frequency		
Area	Canal	Frecuencia		
1.2E	Alo	3001		
	A15	2882		
12G	A9	2980		
12J	A13	2952+		
13C	Al9	2917		
<b>1</b> 3D	Al2	2994		
13E	A14	2924		
	A22	3015		
13F	A17	2861		
	A21	2938%		
13G	A4	2868		
	A13	2952		
	A24	3008%		
13H	A9	2900		
	A21	2938%		
	A24	3008%		
131	Al	2987		
13J	Al6	2959		
	A23	2854		
15K	A3	2945		
	A20	2896		
13L	A7	29 <b>31</b>		
	A15	2882		

- Partage de jour Day sharing Compartición diurna

- % Voie partagéee% Shared channel% Canal compartido
- Usage restreint
- + Restricted use
- + Uso restringido

# TABLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX INDICATIFS TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

3.5 Mc/s

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO INDICATIFS PAR ORDRE NUMERIQUE NUMERICAL ORDER BY DESIGNATOR DISTINTIVOS POR ORIEN NUMERICO

THECORNOTA	S POR ORDEN	NUMERICO	DISTINTIVOS POR ORIEN NOMERICO			
Frequence	Indicatif de la voie	Allouée à	Incompatibilité	Indicatif de la voie	Fréquence	Allouée à
Frequency	Channel	Allotted to	Conflict	Channel	Frequency	Allotted
Frecuencia	designator Distintivo	Distribuida	Incompatibilidad	designator Distintivo		3
(1)	del canal (2)	a (3)	(4)	del canal (5)	(6)	da a (7)
BAND	EDGE BR	OADCASTING Fixed		B <b>1</b>	3432.5	CEP,SA(Ex)
3400 Kc/s			Aeronautical)			3*,6A%, 6E%,7E,9D
3404,5	B 5	NSAM2,ME, 2A*,3B,9				
			NSAM2 & 13I ME & 6	В 2	3446.5	CEP,ME(Ex), 3*,9D,12F
3411.5	B <b>6</b>	NSA1(Ex),6, 10A,12C,13I				13F CEP,EU
			NSA1(Ex) & 1B,C, D,E% 6 & 6B	B 5	3481,5	3A*,6D,
3418.5	B <b>1</b> 3	1B,C,D,E%	13L & 13I			9D+,12H,13H
		6B, 9D, 11E,13L	1B,C,D,E,% & 1	B <b>4</b>	3467,5	CEP,EU,6B 9E,12F
3425.5	В 9	1,3C*,6D 7E,12J+,		B 5	3404.5	NSAM2,ME, 2A*,3B,9
	·	13G+	13G & SA(Ex)	В 6	3411.5	NSA1(Ex),6,
			1 & SA (Ex) 3C* & 3*, 7E & 7E			10A,12C, 13I
3432.5	. в 1	CEP,SA (Ex) 3*,6A%		В7	3495,5	Control Eastern
	·	6E%,7E,9D				Hemisphere
3439.5	B <b>1</b> 0	2.6C,7D	Nil	D C	3/53 5	11H,13D 1,3C*,6D
01000	<i></i>	10D,13E	Nil	В 8	3453.5	7E,11F, 12A,13C,
3446.5	В 2	CEP,ME(Ex) 3*,9D		в 9	3425.5	1,3C*,6D
		12F,13F	3* & 3C*			7E,12J÷ 13G÷
3453,5	В 8	1,30*,6D	ME(Ex) & 1 CEP & 12A	<b>B1</b> 0	3439.5	2,6C,7D 10D,13E
		7E,11F, 12A,13C		B <b>11</b>	3488.5	2/3,7B
			3G* & 2/3 11F & 10E			9A,10D 13J

(1)	(2)	<b>(</b> 3)	(4)	(5)	(6)	(7)
3460.5	B12	2/3,7D 9B,10E+ 12C+,13K				
3467.5	В 4	CEP,EU 6B,9E,12F	Nil CEP & lOC			
3474.5	B <b>1</b> 4	1B,6A,9D, 100,13I	LOC & CEP  1B & EU,	B12	3460,5	2/3,7D 9B,10E+, 12C,+,13K
3481.5	В <b>3</b>	CEP,EU, 3A*,6D	9D & 9D	B13	3418,5	1B,C,D,E,% 6B,9D 11E,13L
3488.5	B <b>11</b>	9D+,12H 13H 2 & 3,7B 9A,10D,13J	3A* & 2/3  2/3 & 2 Control	B <b>1</b> 4	3474.5	1B,6A,9D 10C,13I
3495 <sub>•</sub> 5	В 7	Control - Eastern Hemisphere, 11H,13D	2/3 & 3 Control 7B & 7 Control 9A & 9 Control			
3500 Band	Edge Amateur Fixed Mobile	, (Except Aerona	Unkcown Incomnu Desconocido utical)		<del>-</del>	
Légende Legend Clave * *	Partage d Day shari Compartic		<ul> <li>Usage restreint</li> <li>Restricted use</li> <li>Uso restringido</li> </ul>	% % % %	Voie partag Shared chan Canal compa	nel

TABLEAU 2/2

3.5 Mc/s

Zone	Voie Channel	Fréquence	Zone Area	Voie Channel	Fréquence Frequency
Area Area	Canal	Frequen <b>cy</b> Frecuencia	Area	Canal	Frecuencia
			T		
CEP	B <b>-1</b>	3432.5	5	B-7	3495.5%
1	B <b>-2</b>	3446.5	6A	B <b>-1</b>	3432.5%
	B <b>-3</b>	3481.5		B-7	3495 .5%
	B-4	3467.5		B-14	3474.5
SA ext.	B <b>-1</b>	3437.5	<b>6</b> B	B-4	3467.5
ME ext	B-2	3446.5		B-7	3495.5%
EU	B <b>-3</b>	3481.5		B-13	3418.5
	B-4	3467.5	6C	B-7	3495.5%
nsam2	D <b>-</b> 5	3404.5		B-10	3439.5
ME	B <b>-5</b>	3404.5	<b>6</b> D	B-3	3481.5
NSA1(ext)	B-6	3411.5		B-7	3495.5%
lA	B-7	3495.5%		B-8	3453.5
<b>1</b> B	B <b>-7</b>	3495.5%		B-9	3425.5
	B-13	3418.5%	6E	B-1	3432.5%
	B <b>-1</b> 4	347.4.5		B-7	3495.5%
lC	B-7	3495.5%	6F	B-7	3495.5%
	B <b>-1</b> 3	3418.5%	6	B-6	3411,5
				B-7	3495.5%
1D	B-7	3495.5%	7A	B-7	3495.5%
	B <b>-13</b>	3418.5%	7B	B-7	3495.5%
1E	B <b>-7</b>	3495 •5%	1 12	B-11	3488.5
	B <b>-1</b> 3	3418.5%	7C	B-7	3495.5%
1	B <b>-7</b>	3495.5%	7D	B-7	3495.5%
	B <b>-8</b>	3453.5	\ \nu_{\text{D}}	B-10	3439.5
	B <b>-</b> 9	3425.5		1	1
2A	B <b>-</b> 5	3404.5*		B-12	3460.5 3437.5
	B-7	3495.5%	7E	B <b>-1</b>	
<b>2</b> B	B-7	3495.5%	1	B-7	3495.5%
2C	D <b>-</b> 7	3495.5%		B-8	3453.5
2	B <b>-7</b>	3495.5%	<u> </u>	B-9	3425.5
	B <b>-1</b> 0	3439.5	7	B-7	3495.5%
3A	B-3	3481.5*	8A	B-7	3495.5%
	B <b>-7</b>	3495.5%	9A	B-7	3495.5%
<b>3</b> B	B <b>-5</b>	3405.5	1	B-11	3488.5
	B <b>-</b> 7	3495.5%	9B	B-7	3495.5%
3C	B-7	3495.5%	1 02	B-12	3460.5
	B-8	3453.5*	9C	B-7	3495.5%
	B-9	3425.5*	9D	B-1	3432.5
2/3	B <b>-7</b>	3495.5%		B-2	3446.5
	B <b>-11</b>	3488.5		B-3	3481.5+
	B-12	3460.5		B-7	3495.5%
3	B-1	3437.5*		B-13	3418.5
Ŭ	B <b>-2</b>	3446.5*		B-14	3474.5
	B-7		9E	B-4	3467.5
4A	B-7	3495.5% 3495.5%	) SE	1	3495.5%
4B			9	B-7	3495.5%
	B-7	3495 •5%	9	B-7	1
4	B-7	3495.5%	100	B-5	3405.5
5A	B-7	3495.5%	10A	B-6	3411.5
5D	D=7	3495.5%	100	B-14	3474.5
5C	B-7	3495.5%	10D	B-10	3439.5
5D	B-7	3495.5%		B-11	3488.5
			10E	B-12	3460.5+
•			MIE	B-13	3418.5

Zone Area Area	V <b>oie</b> Channel Canal	Fréquence Frequency Frecuencia
11F	B <b>-8</b>	345 <b>3.5</b>
11H	B <b>-7</b>	3495.5
12A	B-8	3453.5
12C	B <b>-</b> 6 B <b>-</b> 12	3411.5 3460.5÷
12F	B-2 B-4	3446.5 346 <b>7.</b> 5
12H	B-3	3481.5
<b>12</b> J	B-9	3425.5
13C	B-8	3453.5
13D	B-7	3495 •5
13E	B-10	3439.5
13F	B-2	3446.5
13G	B <b>-</b> 9	3425.5+
13H	B-3	3481.5
131	B=64	3474.5
13J	B <b>-11</b>	3488.5
13K	B-12	3460.5
13L	B <b>-1</b> 3	3418.5

Partage de jour % Voie partagée
Day sharing % Shared channel
Compartición diurna % Canal compartido

<sup>+</sup> Usage restreint

<sup>+</sup> Restricted use

<sup>+</sup> Uso restringido

## 4.7 Mc/s

	FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO					
Fréquence Frequency	Indicatif de la voie	Allouée à Allotted to	Incompatibilité Conflict			
Frecuencia	Channel Designator Distintivo del canal	Distribuida a	Incompatibilidad			
(1)	(2)	(3)	(4)			
		Service Fixe Fixed Service Servicio Fijo	Inconnu Unknown Desconocido			
4654.5	C <b>1</b>	EU,2B*,9A,9B,9D, 9E, 11C et 13E	,			
	1		10D/11C,12C/11C, 2 & 3/2B & 9D/9D			
4661.5	C7	2 & 3,9D,10D & 12C, 13K				
			10D/11D & 2 & 3/3C			
4668.5	C5	1 <sup>+</sup> ,3C*,6C,6D,1OA, 11D & 13G				
			1/1			
<b>467</b> 5,5	C4	1 <sup>+</sup> ,3A*,9D,12C &13F				
			11B/12C, 1/1D & 9D/9D			
4682.5	C6	1D*,3,7E,9D,10E, 11B,12G, & 13H				
			10C/11B,12D/12G & 1D/EU			
4689,5	C2	EU,3B*,6D,10C, 12D & 13F				

TABLEAU 3/1

TABLE 3/1

CUADRO 3/1

2

2

2

(1)	(2)	(3)	(4)
			NSAM1/12D
4696.5	C3	NSAM-1,2,7D & 9D	
			NSAM1/Mexico
			NSAM1/Brazil (West)
			NSAM1/Chile (North of 33°5 300 W)
	•		2/USSR-C
			9D/South Australia (500 W)
			9D/N.Zealand
4703.5	# 11 <b>- 2</b> 11 11 <b>12 12 12 13 13 13 13</b> 13 13 13 13 13 13 13 13 13 13 13 13 13	Service OR OR Service Servicio OR	

<sup>\*</sup> Partage de jour - Day sharing - Compartición diurna

<sup>+</sup> Usage restreint - Restricted use - Uso restringido

# ALLOCATION DE REQUENCES AUX ZONES FREQUENCY ALLOTMENT TO AREAS DISTRIBUCION DE FRECUENCIAS A LAS AREAS

4.7 Mc/s

	Zone	Indicatif	Fréquence	Zone	Indicatif	Fréquence
	Area	de la voie	Frequency	Area	de la voie	Frequency
		Channel	1 7 1		Channel	
1	Area	Designator Distintivo	Frecuencia	Area	Designator Distintivo	Frecuencia
	•	del canal			del canal	4
1	EU	C1	4654.5	10A	C5	4668.5
		C2	468945	10C	C2	4689.5
	NSAM-1	C3	4696.5	10D	C7	4661.5
	1	C4 C5	4675.5 <sup>+</sup> 4668.5 <sup>+</sup>	10E	C6	4682.5
			•	11B	C6	4682.5
	1D	C6	4682.5*	110	Cl	4654.5
	. 2	C3	4696.5	11D	C5	4668.5
	2B	Cl	4654.5	12C	C4	4675.5
	3	C6	4682,5		C7	4661.5
	2/3	C7	4661.5	12D	, C2	4689.5
	3A .	C4	4675.5*	12G	C6	4682.5
-	3B	C2	<b>4689.5*</b>	13E	Cl	4654.5
	3C	C5	4668.5*	13F	C2	4689.5
N.	) 6C	′ C5	4668.5%		C4	4675.5
	N 6D	C2	4689.5	13G	C5	4668.5
T		, C5	4668.5%	13H	C6	4682.5
	7D	C3	4696.5	13K	C7	4661.5
	7E	<b>06</b>	4682.5	***		
	9A	C1	4654.5%	*Partage de jour - Day sharing - Compartición diurna		haring -
	9B	C1	4654.5%	Woie partagée - Shared channel - Canal compartido  *Usage restreint - Restricted use - Uso restringido		
	, 2D	01	4654.5%			
		C3 C4	4696.5 4675.5			
		<b>C</b> 6	4682.5			
		C7	4661.5	USO <b>TOB</b>	rrigido	
	9E	Cl	4654.5%			
1				<u> </u>		

5.6 Mc/s

Fréquence Frequency Frecuencia	Indicatif de la voie Channel Designator Distintive del canal (2)	Allouée  à Allotted  to Distribuida  a  (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
5450		a) fixe fixed fijo b) mobile terrestre iand mobile movil terrestre	pas d'incompatibilité no conflict
5454	EH both WH D.30	10E, 12C, 13E	ninguna incompatibilidad
5461,5 5469	D 13 D 23	10B, 12D, 13L	pas d'incompatibilité no conflict ninguna incompatibilidad
5476,5	D 20	11F, 12F	pas d'incompatibilité
5480		a) zone (OR) aer (OR) aer (OR) b) fixe fixed Reg fijo 1+3 c) mobile terrestre land mobile movil terrestre	
5484	D 24	1E, 2B, 3B, 4B, 7D, 9,11H, 13J	
5491,5	D 19	2C, 6,7E, 11F, 12G, 13G	7E, 7D,12G, 13J
<b>5</b> 499	D 25	1, 7,8A, 9B, 9D, 10C, 12D	7E, 7,12D, 12G  NSA2 (ext)-1, NSA2 (ext)-7,11D,12D

(1)	(2)	(3)	(4)
5506,5	D 7	CWP, NSA2 (ext), 11D, 13K	
5514	D 26	2A, 2C, 6A, 6B, 6E, 9,10C, 12D	CWP-6B, 11D-12D NP-6B, NP-10C,
5521,5	D 6	NP, NSAl (ext),12E	12D-12E
5529	D 16	1B, 3B, 5A, 6D, 9D, 11D, 12H	NSA (ext)-1B 5A-5D, 6C-6D,
5536,5	D 20 D 29	2,5D, 6C, 10D, 12C, 13J	10D-11D, 12H-13J
5544	D 15	1*, 6B, 7, 9B, 10A, 11D, 12G, 13G	6B-6C, 7-5D, 10D-11D
5551,5	D 5	CEP, EU, 9E, 13H	EU-1, 13G.13H EU-ATL MET,
5559	D 12	ATL MET, ME MET*	13H-ALT MET
5566,5	D 8	NSAM2, 3, 6A, 6E	6A.MEMET, 6E.ME MET, NSAM2-ATIMET
5574	D 11	PAC MET, 7 EU MET	pas d'incompatibilité no Conflict ninguna incompatibili
5581,5	D 9	NSAM2, 3, 6A, 6E	no conflict
5589	D 14	1*, 6B, 7, 9A, 11C, 12F	NSAM2-11C NSAM2-12F 6A-6B
5596.5	D 21	2/3, 4B, 6D, 9D, 11G, 13C, 13K	7-4B, 11C-11G, 12F-13C
5604	D 10	CEP, ME, 15H	no Conflict
5611,5	D 2	NA, FE2	no Conflict
5619	D 17	1D, 3B, 6D, 9D, 11E, 12F	FE2 - 6D
5626,5	D 4	NA ext, 9B	NA ext - 1D 9B - 9D
<b>5</b> 634	D 18	2C, 6, 7B, 11B, 12F	no Conflict
5641,5	D 3	NA, SP	no Conflict
<b>5</b> 649	D 13 D 28	1*, 3, 6E, 7D, 10D, 12C, 13I	NA-1, NA-10D
5656,5	D 22	1E, 5B, 5C, 5D, 6C, 9D, 11G, 13C,	1-1E, 13T, 13L
		13L*	1E-4A, 9D-9, 13C-13E

(1)	(2)	(3)	(4)
5664	D 23 D 27	2/3, 4A, 7D, 9, 10D, 12C, 13E	FE1 - 9.
5671,5	D 1	NA, FEl	NA - 10 D
5680		R & OR	no conflict

### ALLOCATION DE FREQUENCES AUX ZONES FREQUENCY ALLOTMENTS BY AREAS

## DISTRIBUCION DE FRECUENCIAS A LAS AREAS 5.6 Mc/s

MWARA					
or RDARA	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia	MWARA or RDARA	Indicatif  de la voie  Channel  Designator  Distintivo  del canal	Fréquence Frequency Frecuencia
CWP EU FE1 FE2 NA  NA (ext) NSA1(ext) NSA2(ext) NSAM2  ME ATL MET ME MET PAC MET EU MET SP 1  1 B 1 D 1 E 2 2 A 2 B 2 C 3	D 6 D 5 D 10 D 5 D 10 D 5 D 1 2 D 1 2 D 1 2 D 1 3 D 1 3 D 1 4 D 1 5 D 1 6 D 1 7 D 2 5 D 1 6 D 1 7 D 2 5 D 1 6 D 1 7 D 2 6 D 1 7 D 2 7 D 2 8 D 1 8 D 1 9 D 1 8 D 1 9 D 1 8 D 1 9 D 1 8 D 1 9 D 1 8 D 1 9 D 1 8 D 1 9 D 1 9 D 1	5521,5 5551,5 5604 5506,5 5551,5 5611,5 5611,5 5611,5 5626,5 5521,5 5506,5 5506,5 5564,5 5581,5 5649,4 5589,4 5544,5 5649,5 5514%,5 5484 5536,5 5514%,5 5484 5536,5 5514%,5 5581,5	3 B 2/3 AB ABCD 6 A B C D E 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	D 16 D 17 D 24 D 23 D 23 D 21 D 26 D 12 D 20 D 18 D 26 D 14 D 20 D 17 D 21 D 21 D 22 D 22 D 22 D 24 D 25 D 26 D 17 D 21 D 21 D 21 D 22 D 22 D 22 D 24 D 25 D 26 D 21 D 21 D 21 D 21 D 21 D 21 D 21 D 21	5529 5619 5484 5596,5 5664 5596,5 5484 5529 5656,5% 5656,5% 5634,5 5536,5 5581,5% 5514% 5536,5 5514% 5536,5 5656,5 5656,5 5514% 5536,5 5656,5 5514% 5536,5 5514% 5536,5 5514% 5536,5 5656,5% 5514% 5536,5 5656,5% 5514% 5536,5 5514% 5536,5 5656,5% 5514% 5536,5 5656,5% 5514% 5536,5 5656,5% 5544 5536,5 5649 5514% 5534 5544 5534 5549 5544 5534 5549 5544 5574 5589 5544 5549 5544 5549 5544 5549 5544 5549 5544 5574 5589 5544 5549 5544 5549 5544 5549 5544 5549 5649

## ALLOCATION DE FREQUENCES AUX ZONES FREQUENCY ALLOTMENTS BY AREAS

## DISTRIBUCION DE FRECUENCIAS A LAS AREAS

5.6 Mc/s

MWARA or RDARA	Indicatif  de la voie Channel  Designator Distintivo del canal	Fréquence Frequency Frecuencia	MWARA or RDARA	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia
8 A	D 25	5499%	iı f	D 19 D 20	5491,5 5476,5
9	D 23 D 24 D 26	5664 5484 5514	11 G	D 21 D 22	5596,5 5656,5
9 A	D 14	5589	11 H	D 24	5484
9 В.	D 4 D 15 D 25	5626,5 5544 5499%	12 C	D 23  D 28  D 29	5469 5649 5536,5
9 D	D 16 D 17 D 21 D 22 D 25	5529 5619 5596,5 5656,5 5499%	12 D	D 27 D 30 D 25 D 26 D 13	5664 5454 5499 5514 5461,5
9 E	D 5	5551,5	12 E	p 6	5521,5
10 A	D 15	5544	12 F	D 14	5589
10 B	D 13	5461,5		D 17 D 18 D 20	5619 5634 5476,5
10 C	D 25 D 26	5499 5514	12 G	D 15	5544
lo D	D 27 D 28	5664 <b>5</b> 649	12 H	D 19	5491,5 5529
	D 29	5536,5	13 C	D 21	5596,5
10 E	D 30	5454	· · · ·	D 22	5656,5
11 B	D 18	5634	13 D	D 23	5469
11 C	D 14	5589	13 E	D 27 D 30	<b>5</b> 664 5454
11 D	D 7 D 15 D 16	5506,5 5544 5529	13 G	D 15 D 19	5544 5491,5
1 <b>1</b> B	D 17	5619	13 H	D 5 D 10	55 <b>51,5</b> 5604

CUADRO (2)

(1)	(2)	(3)	(1)	(2)	(3)
13 I	D 28	5649	·		
13 J	D 24 D 29	5484 5536 5			
13 K	D 7 D 21	5506,5 5596,5	: -		
13 L	D 22 D 13	5656,5 <sup>†</sup> 5461,5	•		

Fréquence partagée Shared use Frouencia compartida

Usage restreint Restricted use Uso restringido

# TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

6.6 Mc/s

Fréquence Frequency Frecuencia  (1)	Indicatif de la voie Channel Designator Distintive del canal (2)	Allouée  à Allotted  to Distribuida  a (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
*Usage restreint Restricted use Uso restringido			
Limite de la bande Band edge Borde de la banda 6519,5		Maritime (W.T.)	9B - Port - Moresby Madang Kavieng
			1C - Norway Finland
			lD - Yugoslavia
			6E - Ceylon

6.6 Mc/s

Fréquence Frequencia  (1)	Indicatif de la voie Channel Designator Distintive del canal (2)	Allouée  à Allotted to Distribuida  a (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
6529,5	16	1B 1C 1D 3B 6A 6E 9B 11C 12F 13L	5B + 6A 11F +11C
6537	Ħ	1E 3C 5B 6C 7B 11F* 12C 13C	13K +13L
	12	1 3B 6A 7 8A 9A 9E 11G	7B + 7 1]F +11G 13K +13J 5B + 6A
6544 ,5 6552	17	12A 13J 4 5 6r* 9D 11B 12D	GA + 5 EU + 1D 3 + 3A
6559,5	15	1D 3A 6A 7B 9E 11F J2C* 13J	7 + 7B 10D +11F 12C +12C
6567	7	EU 3 6C 7 1OD 12C 13G	10D +11D
	21		

6.6 Mc/s

Fréquence Frequence Frecuencia	Indicatif de la voie Channel Designator Distintive del canal (2)	Allouée  à Allotted  to Distribuida  a (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
6574,5	21	2A 4B 6A 6B 6E 9 11D 13F	NSAM2 + 11D NSAM2 + 13F
6582	5	NSAM2 1 3A 6A 7D 7E 9D 10A	6A + 6A 9D + 9 NSAM2 + 11D
6589,5	18	2A 4A 6B 9 11D 12H	NSAM2 + 12H 9D + 9 SAex + 4A
6597	3	SAex 2B 6F 7B 7C 7D 7E 01B 12D	SAex + 4B SAex + 13K 2B + 2/3 6F + 6D
6604,5	19 '	2/3 4B 6D 9D 11E 12F 13K	10B + 11E 12D + 12F 6 + 6D
6612	8	EU 6 7E 10C 12C 13I	10C + 11E 6 + 6C 6 + 6D
	14	<u>L. i </u>	10C + 11B

6.6 Mc/s

Fréquence Frequence Frecuencia	Indicatif  ae la voie Channel  Designator Distintive del canal (2)	Allouée  à Allotted to Distribuida a (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
6619,5	14	2 6C 6D 11B 12D 13D	CEP + 11B 6A + 6D
6627	2	SA CEP 3B 6A 6E 7B 7E 9 10E	SA + 4B 3B + 2/3
6634,5	9	2/3 4B 6C 6D 9D 12J 13H	6A + 6D 9 + 9D SA +13H NSAM1 + 12J
6642	6	NSAM-1 1 6B 9A 9B 9D 9E <b>1</b> 0D	NSAM1 + 13H 9D + 9D NSAM1 + 12G
6 <b>6</b> 49 <b>,</b> 5	10	2/3 4B 6D 9D 11F 12G 13G	NSAM1 + 13H 9D + 9D 10 + 11F 3C + 2/3
6657	4	MEe 3C 7B 9 1OC 11G 12F 13E 13J	9 + 9D 11F + 11G
6664,5	13	1 3B 5 6A 9B 11B 12D 13K	MEe + 1 9 + 9B 3B + 2/3 11B +11H 6A + 6D

				3B 11B 6A	+ 2/3 + 11H + 6D
6672	20	2/3 6D 11H	4B 9D 12G	9D 3B 5A	+ 9D + 2/3 + 4B
•	1	SA 2A 3B	CEP 2C 6E	CEP 2A 2C	+ 11H + 2/3 + 2/3
6679,5		9A 9D 10E	9B - 9E 12E		

### 6.6 Mc/s

Fréquence Frequency Frecuencia	Indicatif de la voie Channel Designator Distintive del canal	Allouée  Allotted  to  Distribuida  a  (3)	Incompatibi- lité Conflict Incompatibi- lidad (4)
	Band	e de la bande edge de la banda	
6685		OR	SA - Portugal Cape Verde Brazil 2C - USSR- C 3B - USSR-S & FE 6E - Ceylon 9A - Australia 9D - Australia 9E - Australia 10 - Canada
66875		OR	SA - Brazil CEP - USA 6E - India 9B - Fiji/N.Z. New Caledonia New Hebrides Ocea 9D - South Australia 9E - South Australia
6693		OR	SA - Gibraltare Argentina 3B - USSR, S& FE 6E - Ceylon India

BLEAU 5/1 (2)	TABLE 5/1 (2)	CUADRO 5/1 (2)
6693	OR	9A - Australia
•		9B - Fiji/N.Z. Australia
,		9D - New Zealand Australia
	•	9E - Australia
		IOE - Canada

## ALIOCATION DES FREQUENCES FREQUENCI ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

Zone Area Area	Indicatif de la voie Channel Designator Distintive del canal	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel Designator Distintive del canal	Fréquence Frequency Frecuencia
SA  SA (Ex) CEP  ME (Ex) NSAM - 1 NSAM - 2 EU  1  1 B 1 C 1 D 1 E 2 A 2 B 2 C 3 + 3 3 A 3 B 3 C 4 A 4 B	E. E	6679,5 6627 6597 6679,5 6627 6657 6642 6542 6542 6542 6544,5 6529,5% 6529,5% 6529,5% 6537 6619,5 6574,5 6597 6679,5 6567 6634,5 6604,5 6672 6582 6544,5 6672 6582 6559,5 6529,5 6537 65529,5 65529,5	4 B 5 5 B 6 C 6 D 6 E 6 F 7 B 77 D 7 E 89	EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	6672 6574,5 6552 % 6537 6612 6627 % 6582 6544,5 6664,5 6559,5 6574,5% 6567 6634,5% 6537 6619,5% 6649,5 6619,5% 6679,5 6619,5% 6529,5% 6529,5% 6597 6553* 6567 6553* 6567 6553* 6567 6559,5 6597%

## ALLOCATION DES FREQUENCES FREQUENCY ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

Zone Area Area	Indicatif de la voie Channel Designator Distintive del canal	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel Designator Distintive del canal	Fréquence Frequency Frecuencia
9 A	E 1 E 6	6679 <b>,</b> 5% 6642 %	12 A 12C	E 12 ,	6544,5 6567
9 B	E 12 E 1 E 6	6544,5% 6679,5% 6642 %	107	E 8 E 11 E 15	6612 6537 6559,5*
9 D	E 13 E 16 E 1 E 5	6664,5 6529,5 6679,5% 6582	12D	E 3 E 13 E 14 E 1.7	6597 6664,5 6619,5 6552
	E 6 E 9 E 10	6642 % 6634,5 6649,5	12 E 12 F	E 1 E 4 E 16	6679,5 6657 6529,5
	E 17 E 19 E 20	6552 6604,5 6672	12 G	E 19 E 10 E 20	6604,5 6649,5 6672
9 E	E 1 E 6 E 12 E 15	6679,5% 6642 % 6544,5% 6559,5	12 H 12 J 13 C 13 D	E 18 E 9 E 11 E 14	6589,5 6634,5 6537 6619,5
10 A 10 B 10 C	E 5 E 3 E 4	6582 6597 6657	13 E 13 F 13 G	E 4 E 21 E 7	6657 6574,5 6567
10 D	E 8 E 6 E 7	6612 6642 6567	13 H 13 I	E 10 E 9 E 8	6649,5 6634,5 6 <b>6</b> 12
10 E	E 1 E 2	6679,5 6627	13 J	E 4 E 12	6657 6544,5
11 B	E 13 E 14 E 17	6664,5 6619,5 6552	13 K	E 15 E 11 E 13	6559,5 6537 6664,5
11 C 11 D	E 16 E 18 E 21	6529,5 6589,5 6574,5	13 L	E 19 E 16	6604,5 6529,5
11 E 11 F	E 19 E 10 E 11	6604,5 6649,5		*	Usage restreint Restricted use Uso restringido
11 G	E 11 E 15 E 4 E 12	6537 * 6559,5 6657 6544,5		% -	Fréquence partagée Shared use Frecuencia compartid
11 H	E 20	6672			

9.0 Mc/s

	NUMERI	CES PAR ORDRE NUMER CAL ORDER BY FREQUE CIAS POR ORDEN NUME	NCY
Fréquence Frequency	Indicatif de la voie	Allouée à Allotted to	Incompatibilité Conflict
Frecuencia	Channel Designator Distintivo	Distribuida a	Incompatibilidad
(1)	del canal (2)	(3)	(4)
8804,5 8811,5	·	Maritime	NSAMI/Nicaragua NSAMI/Argentine NSAMI/Bahamas (Nassau) NSAI(E)/Rugby (15 Kw) NSAI(E) Durban
8820	F 4	nsami, nsai (E) & 6C/D%	AT MET/NSAM1
			AT MET/NSAMI AT MET/NSAMI
8828.5	F 13	Atlantic Met	
			AT MET/1 AT MET/6F _T MET/12D
8837	F 15	1,6F,12D & 13F	·
			ME/1,NSAM2/12D,NSAM2/13F
8845.5	F 3	nsam2,sp,me & 3B	·
			ME/1,NSAM2/11D,NSAM2/13K
8854	F 17	1,6F,11D & 13K	
0060 5	73. 61	*** * ***	lid/NA, l/NA
8862.5	F7	NA,CWP, 7 & 13G	NA/EU, NA/NSAM2,CWP/FE2, 13G/NSAM2, 7/7D
8871	F 1	FE2, EU, NSAM2 & 7D	
			FE1/FE2, SA(E)/EU,SA(E)/ NSAM2

TABLEAU 6/1	TABLE 6/1	- 2 -	CUADRO 6/1
(1)	(2)	(3)	(4)
8879,5	F 5	FE1,CEP, SA(E),7E & 10E	
			NA/SA(E),NA/10E, FE1/6A,FE1/6F FE1/9D,SA(E)/13L
8888	F 10	NA,6A/F%,9D & 13L	1217 02 302 (2) 302
			NA/4,9/9D
8896.5	F 14	4/5%9,10B & 13C	
			P.MET/5, P MET/9 P.MET/10B, P.MET/13C
8905	F 12	PACIFIC MET	
			P.MET/9B
8913.5	F 9	NA,3C,7B, 9B & 13E	ì
·		017 W 12911	2 & 3/3C,9/9B
8922	F 16	2 & 3,70,9,12C, & 13L	ar ya wa mai " a na na na a na a na a na a na a na
			FE 1/9
8930.5	F 2	FE1,EU,CEP 7E,12H	
			SA/EU,NP/CEP 6A/FE1,9A/FE1
8939	F 6	SA,NP,6A,9A, & 12F	
		2 mg/2 mg/2 mg/2 mg/2 mg/2 mg/2 mg/2 mg/	NA(E)/SA, SA/13H,9/9A
8947.5	F 8	NA(E),3B/C%,7% 8A%,9% & 13H	,
			NSA2(E)/NA(E) NSA2(E)/7
8956	F 11	NSA2(E),6B* 11B & 13J/K%	
			Common/NSA2(E) Common/6B Common/11B
8961.5	F 18	Common	Common/13 J/K
8967		OD Dong	Gt.Britain/NSA2(E)
0001	<b>-</b>	OR Band	S.Africa/NSA2(E) Saudi Arabia/NSA2(E)
			Cyprus/NSA2(E) Germany (Britis: Zone) NSA2 (E)
			Kenya/NSA2(E) Libya (British/NSA2(E) Malta/NSA2 (E)
			Somaliland(British)/
			Sudan/NŚA2(E) Suez (British)NSA2(E)

TABLEAU 6/1 (1)	TABLE 6/1 (2)	- 3 - (3)	CUADRO 6/1 (4)	
Conflict between F11 & 8967 (OR), continued			Hong Kong/6B Brazil/13J Brazil/13K	And the second s
Conflicts between F18 and 8967 (OR continued	1		Common/ALL OR ALLOTMENTS ON CHANNEL 8967 Kc/s	e angelein og tilbrigggette der et en en også etter

Voie partagée Shared channel Canal compartido

Usage restreint Restricted use Uso restringido

# TABLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX ZONES TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO AREAS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LAS AREAS

·	*				
Zone	Indicatif de la voie	Fréquence	Zone	Indicatif de la voie	Fréquence
Area	Channel Designator	Frequency	Area	Channel Designator	Frequency
Area	Distintivo del canal	Frecuencia	Area	Distintivo del canal	Frecuencia
CEP	F 2 F 5	8930.5 8879,5	. 1	F 15 F 17	8 <b>837</b> 8854
CWP	F 7	8862.5	2/3	F 16	8922
EU	F 1 F 2	8871 8930 <sub>°</sub> 5	3 B	F 3 F 8	8845 <b>.5</b> 8947 <b>.</b> 5%
FE1	F 2 F 5	8930.5 8879.5	3 C	F 8 F 9	8947 <b>.</b> 5% 89 <b>1</b> 3 <b>.</b> 5
FE2	F 1	8871	4	F 14	8896.5%
ME	F 3	<b>8845 .</b> 5	5	F 14	8896,5%
NA	F 7	8862,5	6 A	F 6 F10	8939 8888%
	F 9 FlO	8913 <b>.</b> 5 8888	6 B 6 C	F11 F 4	8956* 8820%
NA(E)	F 8	8947.5	6 D	F 4	8820%
NP	F 6	8939	6 F	F 10 F 15	8888% 8837
NSA1(E)	F 4	8820		F <b>1</b> 7	8854
NSA2(E)	Fll	8956	7	F 7	8862,5
NSAM1	F 4	8820		F 8	8947.5%
NSAM2	F 3	8845 ,5	7 B	F 9	8913.5
SA(E)	F 5	8979,5	7 U	Fl	8871
SA	F 6	8939		Fl6	8922
MET(A)	F13	8828,5	7 E	F 2 F 5	8930.5
MET (P)	Fl2	8905	8 A		8879,5 8947 <b>,</b> 5%
Common	F18	8961.5(1)	O A	F 8	O341 00%
				·	
					L. Control of the Con

	·			•		
Zone	Indicatif de la voie	Fréquence	Zone	Indicatif de la voie	Fréquence	
Area	Channel Designator	Frequency	Area	Channel Designator	Frequency	
Area	Distintivo del canal	Frecuencia	Area	Distintivo del canal	Frecuencia	
9	F 8 F14 F16	89 <b>47 .</b> 5% 8896 .5 8922				
9A	F 6	89 <b>39</b>				
9B	<b>F</b> 9	8913.5				
9D	FlO	8888		,		
10B	F14	8896.5				
10E	F 5	8879.5				
<b>11</b> B	Fll.	8956				
110	F17	8854				
12C	F16	8922				
12D	F 15	8837		·		
12F	F 6	8939				
12H	F 2	8930。5		.N		
13C	F14	8896.5				
13E	F 9	8913.5			·	
13F	F <b>1</b> 5	8837				
13G	F 7	8862.5			-	
13H	F 8	8947.5				
133	Fll	8956%			•	
13K	F11 F17	895 <i>6</i> % 8854				
13L	Flo Fl6	8888 <b>8922</b>			• •	
				% Voie par % Shared o % Canal co		
				* Usage re * Restrict * Uso rest	ed use	
1			!			

10 Mc/s

	FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO				
Fréquence Frequency	Indicatif de la voie Channel	Allouée à . Allotted to	Incompatibilité Conflict		
Frecuencia	Designator Distintivo del canal	Distribuida a	Incompatibilidad		
(1)	(2)	(3)	(4)		

(Pas de renseignements disponibles en ce qui concerne les allocations à la limite de la bande)

(No data available on band edge allotments)

(No se dispone de datos sobre las distribuciones al limite de la banda)

10,012	G6	2,3,11C,13L	NONE
10,021	<b>Ģ</b> 3	ME (ext),9D,12J	11HX12J
10,030	<b>G7</b>	2/3, 11H, 13I	2/3 X 2/3
10,039	. G8	2/3,7E,10D,13E	
10,048	G1	SA (ext), CEP, 6A, 6D, 6E, 6F	SA (ext)X15E
10,057	G4	2, 3A, 3C, 9D, 9E 10C, 12G	NONE
10,066	G10	1,6F,11E,13D	10CX11E
10,075	<b>G</b> 9	2/3,7E,11G,13H	11GX11E
10,084	G2 ·	CEP,1 <sup>+</sup> ,6C <sup>+</sup> ,13J	NONE
10,093	G5	2,3A,3C,9B,9D,9E, 11F, 13K	13JX13K

(Pas de renseignements disponibles en ce qui concerne les allocations à la limite de la bande)

(No data available on band edge allotments)

(No se dispone de datos sobre las distribuciones al limite de la banda)

Usage restreint - Restricted use - Uso restringido

# ALLOCATION DE FREQUENCES AUX ZONES FREQUENCY ALLOTMENT TO AREAS DISTRIBUCION DE FRECUENCIAS A LAS AREAS

10 Mc/s

Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia
OEP	G1 G2	10048 10084	9E	G4 G5	10057 % 10093 %
SA (ext	) G1	10048	10C	G4	10057
ME (ext	) G3	10021	10D	G8	10039
1	G2	10084 +	110	<b>G</b> 6	10012
	G10	10066 +	11E	G10	10066
2	G4 G5	10057 % 10093 %	11F	<b>G</b> 5	10093
2/3	G6	10012	11G	G9	10075
	G7	10030	11H	<b>G7</b>	10030
	G8 G9	10039 10075	12G	G4	10057
3A	G <del>4</del>	10057 %	12J	G3	10021
	G5	10093 %	13D	G10	10066
, 3C .	G4 G5	10057 % 10093 %	13E	G8	10039
6A	G1	10048 %	13H	<del>G9</del>	10075
6C	G2	10084 +	131	<b>G7</b>	10030
6D	Gl	10048 %	13J	G2	10084
. 6E	G1	10048 %	13K	<b>G</b> 5	10093
6F	G10	10048 % 10066	13L	G6 =========	10012 ==================================
7E	G8 G9	10039 10075		artagée - Shared compartido	channel -
9B	<b>Ģ</b> 5	10093 %	+ Usage restreint - Restricted use - Uso restringido		
9 <b>D</b>	<b>G3</b> G4 G5	10021 10057 % 10093 %			

	FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO					
Fréquence Frequency Frecuencia (1)	Indicatif de la voie Channel Designator Distintivo del canal (2)	Allouée à Allotted to Distribuida a (3)	Incompatibilité Conflict Incompatibilidad (4)			
11266 11280.5	OR H6	West Coast U.S.A. 3C, 9D, 11B, 13L	West Coast U.S.A 11B NSAM2-13L; 3A-3C;			
11290	H4 H2	NSAM2, 2, 3A, 9D CEP, EU, 13J	9D-9D NSAM2-13J			
11309	Н5	2, 9B, 10D, 13G				
11318.5	н	CEP, 7*,8A,13J,13K	CEP-10B,10C; 11B-11E 11H,12C;13J-13K,13L, 13K-13L;13J-13J;			
11328	H13	Areas 10,11,12,13 3, 7E, 9D NSAM2, 6	15%-13K NSAM2-10D,10E,11D, 11F,11G,12D,12E,12F, 12G,12H,12J,13E,13I,			
11347	H7	2/3, 11C	135,13K,13L 10C - 11C			
11356.5	H10	1*,9,10C, 13E  2/3, 12D	0/2			
11375.5 11385	H <b>11</b> H9	2, 9, 10B, 13K 4, 5, 12C	2/3 - 2			
11394.5	H12	2,3A,9B,11E,13H				
`		Service fixe Fixed Service Serv. fijo	Inconnu Unknown Desconocido			

<sup>\*</sup> Usage restreint - Restricted Use - Uso restringido

# ALLOCATION DE FREQUENCES AUX ZONES FREQUENCY ALLOTMENT TO AREAS ASIGNACION DE FRECUENCIAS A LAS AREAS

11.3 Mc/s

Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia	
CEP	H1. H2	11318.5 11299.5	10	H13	11328 %	
EU	H2	11299.5	10B	H11	11375.5	
NSAM-2	н3	11337.5	10C	H8	11356.5	
MOAW-2	H4	11290	10D	Н5	11309	
1	Н8	11356.5*	11	H13	11328 %	
2	H4	11290 %	11B	H6	11280.5	
	H5	11309	11C	Н7	11347	
	H11 H12	11375.5 11394.5 %	11E	H12	11394.5	
3	H13	11328	12	H13	11328 %	
2 & 3	Н7	11347	120	Н9	11385	
	H10	11366	12D	ню	11366	
3A	H <b>4</b>	11290 %	13	H13	11328%	
	H12	11394.5 %	13E	Н8	11356.5	
3C	H6	11280.5	13G	Н5	11309	
4	H9	11385 %	13H	Hl2	11394.5	
5	Н9	11385 %	13J	Hl	11318.5 %	
.6	Н3	11337.5		H2	11299.5	
7	H1.	11318.5 %	13K	HI.	11318.5 %	
7E	H13	11328		H11	11375.5	
8	ні	11318.5 %	13L	Н6	11280.5	
9	н8 н <b>11</b>	113 <b>56.</b> 5 113 <b>7</b> 5.5	%	Fréquence pa	artagée	
9B	H5 H <b>1</b> 2	11309 11394.5	Shared Use Frecuencia compartida			

Usage restreint
Restricted Use
Uso restringido

(89-

9D

11290

11328

11280.5

H4

H6 H13

	NUMERICAL	PAR ORDRE NUMERIQ ORDER BY FREQUENC POR ORDEN NUMERIC	Y
Fréquence Frequency Frecuencia	Indicatif de la voie Channel Designator Distintivo del canal	Allouée à Allotted to Distr <b>ibuida</b> a	Incompatibilité Conflict Incompatibilidad
13155.5		OR	NA - Portugal Norway Holland Azores Canada
13264.5	J 1	NA, 3	na & sa(e)
13274.5	Ј9	SA(E), NP, 1	NA & 1 NA & S A(E)
13284.5	J 6	NA-FE2	NA 1
13294.5	J 10	10,11,13,6F, 12C/D/E/F/G/H/J	NA & 10 D/E NA&11D/F,FE2 X 6F No conflict
13304.5	J 8	NSA1(E)CEF-6C <sup>+</sup>	NSAM 1 & CEP
13314.5	J 7	nsam 1	
13324.5	Ј3	NA - FEI	No conflict
13334.5	J 4	ME(E)-CEP-NSA2(E)	NA-&-NSA2(E) FE2 & ME(E)
13344.5	Ј2	NSAM2, SP 2	SP- &-CEP NSAM2-&-NA(E)
13354.5	J 5	NA(E) CWP	SP-&-CWP
Inconnue Unknown Desconocida		Service fixe Fixed service Serv. fijo	Inconnue Unknown Desconocida

Usage restreint Restricted use Uso restringido

## ALLOCATION DE FREQUENCES AUX ZONES FREQUENCY ALLOTMENT TO AREAS

## DISTRIBUCION DE FRECUENCIAS A LAS AREAS

13.3 Mc/s

e1						
	Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel Designator Distintivo del canal	Fréquence Frequency Frecuencia
	NA (ext) NSAM-2 SP	J 1 J 3 J 6 J 5 J 2 J 2	13354.5 13294.5 13334.5 13264.5 13274.5	11 12(C,D,E, F,G,H,J) 13	J 10 J 10 J 10	13324.5 % 13324.5 % 13324.5 %
	FE-1 ME(ext) NSA2 (ext) CEP CWP FE-2	J 3 J 4 J 4 J 5 J 6	13294.5 13284.5 13284.5 13284.5 13264.5	# Restrice # Uso res # Fréquer # Shared	restreint cted use stringido nce partagée use ncia compartida	
	NSAM-1 NSAl(ext) CEP SA (ext) NP	J7 J8 J8 J9 J9	13304.5 13314.5 13314.5 13344.5 13344.5			
3	2 3 6C 6F 10	J 2 J 1 J 8 J 10 J 10	13274.5 13354.5 13314.5 <sup>+</sup> 13324.5 13324.5 %			

	FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY FREQUENCY FRECUENCIAS POR ORDEN NUMERICO					
Fréquence Frequency Frecuencia	Indicatif de la voie Channel Designator Distintivo del canal (2)	Allouée à Allotted to Distribuida a (3)	Incompatibilité Conflict Incompatibilidad (4)			
17895		HF Broadcast	EU-Portugal W.Africa India NSAM1/2 - Uruguay Venezuela U.S.A.			
1790615	к з	CWP, NP, EU	ME - India Pakistan Australia China			
17916.5	K 5	NSAMI, NSAM2, 3A,3C	No Conflict			
17926.5	K 2	CEP, ME, NSA2	CEP X   NSAVI			
17936.5	К 7	4,5,7,10,11, 12C/D/E/F/G/H/J,13	SA X 4			
17946.5	K4	SA, NSAl, SP	SA X 13E/F/G/H/I/J/K/L SA X 13E/F/G/H/I/J/K/L			
17956.5	K 6	2,3,10,11,13 12C/D/E/F/G/H/J	No Conflict			
17966.5	• кі	NA, FE1, FE2	NA - Azores Fr. Morocco USA			
17975		OR	Newfoundland Labrador Greenland FE1- Portuguese India Timon FE2- Macao Portuguese Timor			
17983.5		OR	NA - Great Britain Gibraltai FEl- Ceylon Malaya Australia Pakistan FE2- HongKong Malaya Australia Pakistan			

## ALLOCATION DES FREQUENCES FREQUENCY ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

-				<del></del>	<del></del>	
	Zone	Indi <b>c</b> at <b>i</b> f de la voie	_	Zone	Indicatif de la voie	Fréquence
	Area	Channel	Frequency	Area	Channel	Frequence
	Area	Designator	Frecuenc <b>i</b> a	Area	Designator	Frecuencia
	,	Distintivo del canal			Distintivo del canal	
1.	NA	к 1	<b>179</b> 66.5	7	к 7	% <b>17</b> 936 <b>.</b> 5
$\mathcal{T}^r$	FE-1	к 1	17966.5	10	K 6	% 17956.5 % 17936.5
	FE-2	Kl	17966.5			
	CEP	K 2	17926.5	11	К 6 К 7	% 17956.5 % 17936.5
	ME	K 2	17926.5	12(C,D,	K 6	% 17956.5
	NSA-2	К 2	17926.5	E,F,G,H,J)	К 7	<b>17936.5</b>
	CWP	к 3	17906.5	13	K 6 K 7	% 17956.5 % 17936.5
	NP	к з	17906.5			
	EU	кз.	17906.5			·
	SA	K 4	17946.5	% Share	partagé d use	
	NSA-1	K 4	17946.5	/ % USO C	compa <b>rtid</b> o	
7	SP	K 4	17946.5			
	NSAM-1	K 5	17916.5			
	NSAM-2	K 5	17916.5			
•	2 & 3	К 6	17956.5			
q	3 A	К 5	% 17916 <b>.5</b>			
	3 C	K 5	% 17916.5		•	
	4	K 7	% <b>1</b> 7936,5		a .	
	5	K 7	% 17936 <b>.</b> 5			
Ł				<u> </u>		

## International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

### CORRIGENDA TO APPENDIX TO DOCUMENT AER/2 No.104

(Description of MWARA's boundaries)

- 1. Page 1, fifth line change "written described" to "written description."
- 2. Page 2 change "along the 1948 borders between" to read "along the borders between".
- 3. Page 6 Delete entire note beginning "only one family".
- 4. Page 7 Delete entire note beginning "only one family".
- 5. Page 8 Add "N" after "600" in two places. In the note change "Cyrus" to "Cyprus".
- 6. Page 13 Add "MWARA" before "CEP".
- 7. Page 14 Interchange "MWARA" and "CWP".
- 8. Insert the following MWARA description between pages 5 and 6.

## - 5 bis - (Appendix to Aer/2-104)

### MWARA NSAM-2.

From	34°S	74°W
to	36 <sup>0</sup> S	52 <sup>0</sup> W
	05°S	30°W
	10°N	60°W
•	$34^{\circ}N$	60°W
	48°N	75°W
	$40^{\circ}$ N	77°W
	23°N	86°W
	02°N	79°W
	20 <sup>0</sup> S	50°W
	34 <sup>0</sup> S	74 <sup>0</sup> W



## Description of MWARA, RDARA and sub-RDARA Boundaries

The boundary descriptions which follow cover the areas to which frequencies are allotted under the IAARC frequency allotment Plan. These areas are also shown graphically on maps. If there is any apparent difference between the area as shown on the maps and as described, the written described is to be considered correct.

In the descriptions, where national boundaries are used, the boundaries are those of September 1949. In the descriptions of the MWARA's lines between points not otherwise described are great circles. In the descriptions of RDARA's and sub-RDARA's lines not otherwise described are straight lines on a Mercator Projection Map.



#### 2 -(Appendix Aer/2 104)

### MWARA EU

from 34°N 12°W to 32°N 13°E to 29°N 35-1/2°E to 40°8 34°E to 42°N 30°E

along borders between following countries -

Bulgaria and Turkey Greece and Bulgaria Greece and Yugoslavia Greece and Albania to 40°N 19°E

to 45°N 13°E

along the 1948 borders between

Yugoslavia and Italy Yugoslavia and Austria Hungary and Austria Hungary and Czechoslovakia U.S.S.R. and Czechoslovakia Poland and Czechoslovakia Poland and Germany to 55°N 14°E

to 60°N 20°E 60°N 27°E excluding all USSR and Republic of Poland territories.

thence along border between USSR and Finland

to 72°N 30°E 70°N 0° 54°N 12°W 34°N 12°W

### - 3 -(Appendix Aer/2 104)

### Description:

#### MWARA NA:

From 39°N 78°W to 47°N 75°W 68°N 20°W 60°N 20°E

South along the border of the EU MWARA and the Northern border of Czechoslovakia

to 50.5°N 12.5°E 45°N 10°E 32°N 07°W 35°N 25°W 30°N 62°W 16°N 78°W 21°N 86°W 39°N 78°W

- Note 1: Only one family of frequencies allotted to this area is available for use S. and W. of a line extending from 39°N 78°W to 30°N 62°W.
- Note 2: Only one family of frequencies is extended into the European Area beyond a line connecting the following terminals: Stavanger, Amsterdam, Brussels, Paris, Madrid, Lisbon, Casabanca.

## - 4 - (Appendix Aer/2 104)

#### MWARA SA -

From 34°S 74°W to 36°S 52°W 13°N 14°W 40°N 13°E 48°N 13°E 51°N 16°E

Thence along the border of the EU MWARA to

60°N 20°E 61°N 05°E 47°N 17°W 25°N 25°W 03°S 40°W 34°S 74°W

Note: Only one family of frequencies extended into the Firmpean Area beyond a line connecting the following terminals -

Algiers Madrid Lisbon

## MWARA NSAM-1

From	36°S	73°W
to .	36°S	52°W
	26°S	63°W
	05°S	63°W
	05°N	75°W
	27°N	75°W
	35°N	107°W
	40°N	128°W
	20°N	114°W
	000	93 <b>°</b> W
	36°S	73°W

#### -6-(Appendix Aer/2 104)

#### MWARA NSA-1

From 32°S 35°E to 31°S 24°E 16°N 26°W 40°N 12°W 52°N 06°W 60°N 10°E 60°N 20°E

along the border of the EU MWARA to

37°N 14°E 00° 28°E 11°S 28°E 20°S 35°E 31°S 35°E

Only one family of frequencies extended into the European area beyond a line connecting the following terminals:

Lisbon Algiers Tunis Tripoli

## - 7 - (Appendix Aer/2 104)

#### NSA-2

From 30°S 34°E to 22°S 60°E 10°N 52°E 30°N 35°E 40°N 19°E

along the border EU MWARA to the 60°N 20°E

Thence 60°N 10°W to 48°N 05°W 37°N 07°E 00° 24°E 30°S 24°E 30°S 34°E

Only one frequency family extended into European Area beyond a line connecting the following terminals:

Tunis Tripoli Bengazi Mersa Metruh Alexandria Cairo

#### -8-(Appendix Aer/2 104)

#### MWARA ME

From 05°N 80°E to 17°N 70°E 28°N 30°E 37°N 10°W 60° 10°W 60° 20°E

along the border of the EU MWARA to a point 45°N 13°E

thence to 40°N 14°E to 37°N 51°E 24°N 93°E o5°N 80°E

Only one family of frequencies to enter the EUROPEAN Area beyond a line connecting the following terminals -

Sollum Alexandria Cyrus Ankara

### - 9 -(Appendix Aer/2 104)

## MWARA FE-1

From:	40°S	145°E
	10°S	106°E
	05°N	77°E
	15°N	77°E
	24°N	92°E
	lloN	107°E
	18°S	147°E
	23°S	154°E
	40°S	154°E
	40°S	145°E

MWARA	FE-2	
From	12°N	124°E
to	33°N	133°E
	35°N	132°E
	24°N	88°E
	08°S	105°E
	15°S	130°E
	15°S	158°E
	000	168°E
	00°	135°E
	12°N	124°E

# - 11 - (Appendix Aer/2 104)

## MWARA NP

From	46°N	122°W
	50°N	170°W
	33°N	138°E
	38 o N	138°E
	50°N	166°E
	62°N	150°W
	550N	110°W
	46 ON	122°W

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MWARA	SP	;
From	22°N	158°W
to	22°N	156°W
	20°S	145°W
	50°S	170°W
	50°S	145°E
	38°S	145°E
	28°S	152°E
	000	167°E
	00°	175°W
	22°N	158°W

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٦.		D
3.	Cs.	•

From 32°N 117°W
16°N 159°W
22°N 159°W
50°N 122°W
38°N 120°W
32°N 117°W

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## CWP - MWARA

From 17°N 155°W

10°N 160°E

10°N 117°E

23°N 114°E

40°N 117°E

25°N 155°W

17°N 155°W

# Conférence internationale administrative des Radiocommunications aéronautiques <u>2e session</u>

GENEVE, 1949

## Appendice au Document Aér/2 No. 104-F

30 septembre 1949

Les pages suivantes contenant la délimitation des ZLARN et de leurs subdivisions sont à ajouter à l'appendice au document & r/2 No. 104.

International Administrative
Aeronautical Radio Conference
2nd Session

GENEVA, 1949

## Appendix to Aer/2 Document No. 104-E 30 September 1949

The following pages containing the description of RDARA and Sub-RDARA boundaries should be added to the Appendix of Aer/2 Document No. 104.

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas

2a Reunión

GINEBRA 1949

Las páginas siguientes que contienen la descripción de las delimitaciones de las RDARA y sub-RDARA deben ser agregadas al Apéndice al documento Núm 104 Aer/2.



## - 15 - (Appendix-Aer/2-104)

#### RDARA - 1

#### From

North	Pole to
72°N	15°W
$40^{\circ}N$	50 <b>°</b> W
30°N	390W
30 <b>°</b> N	100W
310N	100M
31.°N	100E

along the Libya-Tunisia border to the Mediterranean, thence along the coastal border of Libya and Egypt, thence to Cairo, and eastward along the parallel to intersect the 40°E meridian, and north along the 40°E meridian to the South Coast of the Black Sea, thence west along the Black Sea coast of Turkey to intersect the 30°E meridian, then along the 30°E meridian to the border of Rumania and the U.S.S.R., thence along the border between the U.S.S.R. and the following countries: Rumania, Hungary, Czechoslovakia, Poland, along the U.S.S.R. Baltic Sea Coast, to boundary between Finland and the U.S.S.R.

to 70°N 32°E to the North Pole.

#### Sub-Area lA

From	65 <sup>0</sup> N	26°W	to
	400N	50 <b>°</b> W	
	400N	130W	
	$60^{\circ}N$	130W	
	60°N	26°W	
	65 <b>0</b> N	26°W	

#### Sub-Area 1B

From North Pole to

72°N	15 W	to
65 <b>°</b> N	26°W	
60°N	26°W	
$60^{\circ}N$	130W	
500N	130W	

thence eastward through territorial waters between the Channel Islands and French Coastline. Thence following the northeastern boundary of France, touching the following countries: Belgium, Luxemburg and Germany. Thence along the border between Switzerland and Germany, and along the border between Austria and Germany.

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Then following the boundary between the Eastern and Western Occupied Zones of Germany, touching the Western border of Czechoslovakia to the Baltic Sea. Then westward along the German coast line to the boundary between Germany and Denmark. Along this boundary to the North Sea. Thence along 55° N parallel to a point 55° N 4° E. Thence to the North Pole.

#### Sub-area 1C

From North Pole to

thence eastward along the 55 N parallel and the border between Denmark and Germany to the Baltic Sea. Then along the German Baltic Sea **coast** to the boundary between Eastern and Western Occupied Germany. Along this boundary touching the Western borders of Czechoslovakia and Austria. Thence eastward along the southern borders of Austria and Hungary and thence to the junction of the borders of Czechoslovakia, Hungary and Roumania, thence along the border between the U.S.S.R. and the following countries: Czechoslovakia, Poland, Along the U.S.S.R. Baltic Sea coast, to the boundary between Finland and the U.S.S.R. and from

the North Pole.

#### Sub-Area 1D

From the junction of the borders of Czechoslovakia, Hungary and Roumania, westward along the southern borders of Hungary and Austria to the border between Switzerland and Italy and the border between France and Italy to the Mediterranean Sea. Thence

thence along the 07°E meridian to the North African coast. Then along the North African coast, Tunis, Tripoli, Benghazi, to the coastal border between Libya and Egypt. Thence to Cairo, and along the Cairo parallel to intersect the 40°E meridian. North along the 40°E meridian to the South Coast of the Black Sea. Thence west along the Black Sea coast of Turkey to intersect the 30°E meridian. Along the 30°E meridian to the border of Roumania and the Ukrain &, to the junction of the borders of Czechoslovakia, Hungary and Roumania.

#### Sub-Area 1E

From	50° N	13° W	to
	40° N	130 W	
	40 <sub>b</sub> N	50° W	
	300 M	39° W	
	30° N	10° W	
	31° N	10° W	
	31° N	10° E	

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10° E

Along the Libya-Tunisia border to the Mediterranean thence along the Tunisian coast to intersect the 10° East meridian to

13<sup>0</sup> N

thence to the border between Italy and France and between Italy and Switzerland, Switzerland and Austria, Switzerland and Germany, and between France and Germany, France and Luxembourg, and France and Belgium to the Channel coast. Thence westwards through the territorial waters between the Channel Islands and the French coast to

50° N 13° W.

#### RDARA 2

From

North Pole to

70° N 32° E

then along the border between Finland and the U.S.S.R., to the Baltic Coast. Along the territorial waters of the U.S.S.R. Baltic Coast to the boundary between the U.S.S.R. and Poland. Thence along the border between the U.S.S.R. and the following countries: Poland, Czechoslovakia, Hungary and Roumania, to the Black Sea Coast at the intersection of the 30°E meridian and along this meridian to the Black Sea Coast of Turkey, along this coastline to the Caucasian border with Turkey and Iran. Along the southern border of the U.S.S.R. to the intersection of the Mongolia-China - U.S.S.R. borders at approximately 52°N 90°E. Along the 90°E meridian to 55°N. Then along the 55°N parallel to CC°E. Thence to the North Pole.

#### Sub-Area 2A

From the North Pole to

70° N 32° E

then along the border between Finland and the U.S.S.R. to the Baltic Coast, and along the territorial waters of the U.S.S.R. Baltic Coast, to

55° N 20° E

thence to Moscow,

thence to 55° N 60° E to

the North Pole.

#### Sub-Area 2B

From 55° N 90° E to 55° N 60° E 47° N 53° E

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thence along the Eastern coast of the Caspian Sea to the Iran coast thence eastwards along the southern border of the U.S.S.R. to the intersection of the Mongolia-China U.S.S.R. borders at approximately

ਸ<sup>ਂ 0</sup>0ਵ

Thence along the 90° E meridian to 55° N.

#### Sub-Area 20

From

55° N

60° E

to Moscow to 55°N 20°E

thence southwards along the boundary between the U.S.S.R. and Poland. Thence along the border between the U.S.S.R. and the following countries: Poland, Czechoslovakia, Hungary and Roumania, to the Black Sea Coast at the meridian 30°E. Along the meridian 30°E to the Black Sea Coast of Turkey'. Along this coastline to the Caucasian border between Caucasus, Turkey and Iran to the South Caspian Sea Coast. Thence northwards along the East Caspian Sea Coast to

53° E 60° E

## RDARA 3

From North Pole to

thence along the 55° N parallel to 90° E. Thence to the intersection of Mongolia-China-U.S.S.R. borders at approximately 52°N 90°E. Then along the border between Mongolia and China, and U.S.S.R. and China, to the Coast. Along the territorial waters between U.S.S.R. and Japan to

to North Pole.

#### Sub-Area 3A

From North Pole to

60° E

along the  $55^{\circ}$ N parallel to  $90^{\circ}$ E.

90° E 110° E

to the North Pole. '

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#### Sub-Area 3B

From North Pole to

60° N	110° E	to
60° N 43° N	7 A70 Tr	
43° N	147° E	
50° N 65° N	165° E	
65 <sup>0</sup> N	170° W	

to the North Pole.

#### Sub-Area 3C

From 60°N 90°E

thence to the intersection of Mongolia-China-U.S.S.R. border at approximately 52°N 90°E. Along the border between Mongolia and China, and U.S.S.R. and China, to the Coast. Along the territorial waters between U.S.S.R. and Japan to

43° N	147° E	to
60° N	147° E	
60° N	90° E.	

#### RDARA 4

thence along the northern border of the Belgian Congo, excluding Cabinda territory, to the border between Anglo-Egyptian Sudan and French Equatorial Africa. Thence northwards along the western border of Anglo-Egyptian Sudan. Along the western border of Agypt, northwards to the Mediterranian and along the North African Mediterranian Coast to a point 30°N 10°W. Westward along the 30°N parallel to close the area at 30°N 39°W.

#### Sub-Area 4A

to Gao, to Zinder. From Zinder, along the northern border of Nigeria, to a point West of Lamy, Then along the Lamy parallel to 12°N 22°E. Thence northward along the western border of Anglo-Egyptian Sudan, and along the western border of Egypt, to the Mediterranean. Along the North African Mediterranean Coast and Atlantic Coast to a point 30°N 10°W. Thence along the 30°N parallel to close the area at 30°N 39°W.

<sup>\*</sup> and Atlantic Coast

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#### Sub-Area 4B

From	$21^{\circ}N$	31°W	to
	10°N	20°W	
	05 °S	20°W	
	05 <sup>0</sup> S	12 <sup>0</sup> E	

thence along the northern border of Belgian Congo excluding Cabinda territory, to the junction between Belgian Congo, Anglo-Egyptian Sudan and French Equatorial Africa. Along the western border of Anglo-Egyptian Sudan

to 12° 22°E

Thence along the LAMY parallel to the Nigerian border. Then westerby along this border to Zinder. From Zinder to close the area at 21 N 31 W.

#### RDARA B

From	$41^{O}N$	40°E	to
	37°N	40°E	

then along the border between Turkey and Syria to the Mediterranean Coast. Thence to the common border of Libya and Egypt on the North African Coast excluding Cyprus. Southwards along the western boundary of Egypt, and Anglo-Egyptian Sudan to the border of the Belgian Congo. Thence eastwards along the borders of the following countries: Uganda, Anglo-Egyptian Sudan, Kenya, and Abyssinia. Southwards between the borders of Kenya and Somaliland, to the east African Coast at 02 S 41 E

02°S 73°E to 37°N 73°E

eastward along the Afghanistan border thence westwards along the southern boundary of the U.S.S.R. to

41°N 40°E

#### Sub-Area 5A

From 37°N 40°E

then along the border between Turkey and Syria to the Mediterranean Coast. Thence to the common border of Libya and Egypt on the North African Coast, excluding Cyprus. Southward, along the western boundary of Egypt. Thence eastwards along the common border of Egypt and Anglo-Egyptian Sudan to 24 N 37 E

to 
$$12^{\circ}N$$
  $44^{\circ}E$  to  $12^{\circ}N$   $49^{\circ}E$   $30^{\circ}N$   $49^{\circ}E$ 

thence along the border between Iran and Irak, and the border between Irak and Turkey to

37°N 40°E

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#### Sub-Area 5B

From  $41^{\circ}N$   $40^{\circ}E$  to  $37^{\circ}N$   $40^{\circ}E$ 

thence eastwards along the border between Turkey, Syria and Irak, and along the border between Irak and Iran to a point

30°N 49°E

thence along the middle of the Persian Gulf to a point

24°N 60°E to 20°N 73°E 36°N 73°E

eastward along the Afghanistan-Indian border and westwards along the southern boundary of the U.S.S.R. to

40°E 41°N Sub-Area 5C 30<sup>0</sup>N 49°E From to 12°N 49°E  $13^{\circ}N$ 54°E 02<sup>0</sup>S 54°E 02<sup>0</sup>S 73°E 20°N 73°E 60°E

thence along the middle of the Persian Gulf to

30°N 49°E

#### Sub-Area 5D

From the junction point between Egypt, Libya and Anglo-Egyptian Sudan southwards along the western border of the Anglo-Egyptian Sudan to the border of the Belgian Congo. Eastwards, along the borders of the following countries: Uganda, Anglo-Egyptian Sudan, Kenya, Abyssinia. Southwards between the border of Kenya and Somaliland to the east African coast, at a point 02 S 41 E

thence northwest along the middle of the Red Sea to 24°N 37°E. Thence along the southern border of Egypt to close the area.

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#### RDARA 6

From 52° N 90° E

Along the border between China and the U.S.S.R., between Afghanistan and Pakistan, and Iran and Pakistan to a point 23°N 61°E. Thence to Bombay. Then along the 73°E meridian to

02° S	73° E
02 <sup>0</sup> S	92° E
10° S	92° E
10° S	141° E
000	141° E
Ω <sup>U</sup>	170° W
10° N	170° W
50° N	165° E
43° N	147° E

Thence eastward along the territorial waters between Japan and the U.S.S.R. Along the northeastern and northern boundary of China, to

52° N 90° E.

#### Sub-Area 6A

From 37° N 75° E

thence along the border between Pakistan and Afghanistan, and Iran and Pakistan to a point 23°N 61°E to Bombay

to 24° N 80° E to

Calcutta. Thence along the coast of Burma to reach the border between Burma and Siam. Northward along this border and along the border between China and the following countries: Burma, Bhutan, Nepal, India to

37° N 75° E

#### Sub-Area 6B

From 52° N 90° E

along the common border between China and the U.S.S.R. to

37° N 75° E

thence along the border between China and the following countries: India, Nepal, Bhutan, India, Burma, French Indo-China to the coast of South China Sea. Thence along the south territorial waters of Hainan Island to

20° N 113° E 20° N 176° W 50° N 165° E 43° N 147° E

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thence eastwards along the territorial waters between Japan and the U.S.S.R. and then along the border between China and the U.S.S.R., and along the border between China and Mongolia to

52° N 90° E

#### Sub-Area 6C

From	20° N	130° E 130° E	to
	04° N	130° E	
	04°N	117° E	

thence along the border between the British and Indonesia Borneo to

03° N 03° N 10° S 10° S 0° O 10° N 20° N	109° E 106° E 106° E	to
03° N	106° E	
10° S	106° E	
10° S	141° E	
00	141° E 170° W	
00	170° W	
10° N	170° W	
20° N	176° W	
20° N	130° E	

#### Sub-Area 6D

From the junction of China, India and Burma southward along the India-Burma border to the Bay of Bengal. Along the coast of Burma to its southernmost point,

then along the 113°E meridian to the border between British and Indonesia Borneo. Thence east along this border to a point

04° N 04° N 20° N 20° N	118° E	to
04 <sup>0</sup> N	130° E	
20° N	130° E	
20° N	113° E	

thence southward around the island of Hainan, and along the border between China and Indo-China, and China and Burma to close the area at the junction of China, India and Burma.

#### Sub-Area 6E

	_	_	
From	20° N	73° E	to
	02° S	73°E	
	02 <sup>0</sup> S	92° E	
	10° N	97 <sup>0</sup> E	

thence along the coast of Burma, Pakistan and India to Calcutta to

$$23^{\circ}$$
 N  $80^{\circ}$  E to  $20^{\circ}$  N  $73^{\circ}$  E.

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#### Sub-Area 6F

From the junction of the China-India-Burma borders northeast to the 100°E meridian. North on this meridian to the northern boundary of Syb-Area 6B. Eastward along this boundary to 130°E. Thence South along the 130°E meridian to 04°N. Then westward along the boundary of Sub-Area 6D to the junction of the China-India-Burma borders.

#### RDARA 7

From the South Pole to

05°S 20°W to

thence along the northern border of the Belgian Congo, including Cabinda Territory, along the border between Uganda, and Anglo-Egyptian Sudan, and between Kenya and the following countries: Anglo-Egyptian Sudan, Abyssinia, Somaliland to

02°S 42°E to 02°S 60°E

to the South Pole.

#### Sub-Area 7A

From the South Pole to

05°S 20°W to 05°S 10°E 40°S 10°E 40°S 60°E

to the South Pole.

#### Sub-Area 7B

From 05°S 10°E to 05°S 12°E

thence along the northern border of the Belgian Congo, including Cabinda territory, to the junction of Uganda, Belgian Congo and Anglo-Egyptian Sudan, Thence southward along the Eastern and Southern border of Belgian Congo and Angola to the coast of the South Atlantic. Thence to

17°S 10°E to

#### Sub-Area 7C

From the junction of Uganda, Belgian Congo and Anglo-Egyptian Sudan along the border between Belgian Congo, Uganda and Tanganyika and then along the southern border of Tanganyika to the coast. Thence to

11°S 41°E to 11°S 60°E 02°S 60°E

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the eastern coast of Africa then northward along the border between Kenya and the following countries: Somaliland, Abyssinia and Anglo-Egyptian Sudan to close.

#### Sub-Area 7D

From the border of Tanganyika and Mozambique on the Lake Nyasa Southward along the whole Western Mozambique border to the African East Coast to

27°0S	33°E	to
40°S	33 E	•
40°S	60°E	
11°S	60°E	
11 S	41 E	

thence along the Northern border of Mozambique to Lake Nyasa.

#### Sub-Area 7E

From	17 <sup>0</sup> S	10°E	to
	40°S	100E	
•	40°S	33 E	
	27 <sup>0</sup> S	33 <sup>°</sup> E	

thence along the whole Western Mozambique border to Lake Nyasa. Thence along the border between Rhodesia and Tanganyika. Thence along the border between Belgian Congo and Rhodesia and between Angola and Rhodesia and Angola and South-West Africa to

#### RDARA 8

From the South Pole to

02°S	60°E	to
02°S 02°S 10°S	92°E	
100S	92°E	•
30°G	7707	

to the South Pole

#### Sub-Area 8A

From the South Pole to

to the South Pole.

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#### RDARA 9

From the South Pole to

10° s 10° s	110° E
10° S	141° E
00	141° E
o°	1.70° W
10° N	170° W
10° N	120° W

to the South Pole.

#### Sub-Area 9 A

10° S 24° S 24° S	110° E
24° S	110° E
24 S	141° E
10° S	141° E
10° S	110° E

#### Sub-Area 9 B

#### Sub-Area 9 C

From the South Pole to

10<sup>6</sup> N 170<sup>°</sup> W 120° W

to the South Pole.

#### Sub-Area 9 D

From the South Pole to

24° S 139° E 24° S 170° W

to the South Pole

#### Sub-Area 9 E

From the South Pole to

24° S 110° E 24° S 139° E

to the South Pole.

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## RDARA 10

### Sub-Area 10A

From to	50° N 66° N	164° E 169° W	to the North Pole.
• *	57° N 57° N	130° W 150° W	
to	50° N close the	175° W Sub-Area at	50°N 164°E.

#### Sub-Area 10B

From	57°	N	140° W
to .	the	North	Pole
4	48°	N	91° W
	48°	N	127° W
•	57°	N	139° W
	57 <sup>0</sup>	N	140° W

### Sub-Area 100

From	57 <sup>0</sup> N	140° W
to	60° N	140° W
	60° N	91° W
	48° N	91° W
	48° N	127° W
	57° N	139° W
	57° N	140° W

#### Sub-Area 10D

From	48° N	98° W
to	the North I	Pole
23	69° N	45° W
•	61° N	70° W
•	45° N	7 5 11
	41° N	81° W
	41° N	88° W
	48° N	91° W
·	48° N	98° W

### Sub-Area 10E

From	45° N	74° W	
to	61°N	74° W 72° W	
•	69° N	47° W	•
to	the North	Pole	
	72° N	15 <sup>0</sup> W	*
•	40° N	50°W	•
	40° N	65° W	
to	close the	sub-area at	45°N 74°W.

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### RDARA 11

## Sub-Area 11A

From	29° N	180° W				
	along the	I.T.U. boundary	between	Regions	2 a	nd 3
to	50° N	164° E		2		
	50° N	150° W				
	57° N	139° W	•			
	50° N	127° W				
	33° N	127° W				
	33° N	153° W				
	29° N	153° W				
to	close the	sub-area 29°N 18	30°W•			

### Sub-Area 11B

From	33° N	127 <sup>0</sup> W	
to	50° N	127° W	
	50° N	104° W	
	27° N	104° W	
	33° N	119 <sup>0</sup> W	
to	close the	sub-area at 33°N 127°W.	

### Sub-Area 110

From to	29° N 50.5° N 50.5° N	106° W 106° W 92° W
•	47° N 45° N	72° W 72° W
٠	40° N	81 W
	40° N 30° N	85° W 85° W
•	25° N	96° W
to	close the	sub-area at 29°N 106°W.

#### Sub-Area 11D

From to	29° N 50° N	90° W	
	47° N	64° W 78° W	
	23° N	83° W	
to	close the	sub-area at	29°N 90°W.

#### Sub-Area 11E

From	39° N	125° W	
to	50° N	125° W	
	50° N	93 W	
	46° N	93° W	
	42° N 36° N	86° W	
	36° N	86° W	
	$36^{\circ}$ N	121° W	•
to	close the	sub-area at 39°	N 125 W.

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### Sub-Area 11F

From	46° N	94 <sup>0</sup> W	
to	49° N	94° W	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	47° N	65 ຼ̃ ₩ 🕠	
	36° N	74 W	
	36° N	88° W	• .
•	42° N	88° W	0 0
to	close the	sub-area at	46°N 94°W.

### Sub-Area 11G

From	29° N	95° W	
to	39° N	95° W	
	44° N	66° W	
	23° N	77° W	
	23° N	83° W	
	23 <sup>0</sup> N	91° W	
to	close the	sub-area at 29°	N 95°W.

### Sub-Area 11H

From	33° N 40° N	127° W 127° W	
	40° N 29° N	89° W	
	25° N	98° W 119° W	
to	33°N close the	sub-area at 33	5°N 127°W.

## Sub-Area 11 I

From to	25° N 77° W 42° N 68° W 40° N 65° W
	40° N 50° W
	along the I.T.U. boundary between Regions 1 and 2
to	25° N 35° W
to	close the sub-area at 25°N 77°W.

## RDARA 12

## Sub-Area 12A

From	10° N	170° W			
	along t	the I.T.U. boundary	between	Regions	2 & 3.
	290 И	180° W			
	29° N	153° W			
	33° N	153° W			
	33° N	120° W		٠.	
	17° N	115° W			
	$14^{\circ}$ N	93° W			
	2° N	86. ₩	4		4
	2° N	93 <sup>0</sup> ₩			

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 $5^{\circ}$  S  $93^{\circ}$  W  $5^{\circ}$  S  $120^{\circ}$  W along the I.T.U. boundary between Regions 2 & 3 to close the sub-area at  $10^{\circ}$  N  $170^{\circ}$  W

#### Sub-Area 12B

From	10° N 170° W	
	along the I.T.U. boundary between Regions 2 & 3	
to	29° N 180° W	
	29° N 153° W	
	10° N 153° W	
to	close the sub-area at 10° N 170°W.	

#### Sub-Area 12C

From	33° N	120° W	
to	35 N	120° W	
	32° N	104 <sup>0</sup> W	
٠	25° N 23° N	91° W	
	230 N	83° W	
	22 <mark>0</mark> N	83° W	
	13° N	90° W	
	16° N	116° W	
to	close the	sub-area at 33°N 120°W.	

#### Sub-Area 12D

From	20° N	91°. W	
to	26° N	91° W	
	260 N	79° W	
•	27° N	79° W	•
	27° N	76 <sup>0</sup> 30¹ W	
	26° N	73° W	
•	17° N	58° W	
	10° N	58° W	•
	to Balboa, C.	$Z_{\bullet}$	
	to Swan Islar	nd	
	to Belize		
	to close the	sub-area a	t 20°N 91°W.

#### Sub-Area 12E

From	15° N 23° N 23° N 19° N 9° N 2° N 2° N	95° W 92° W 85° W 85° W	
	9° N	77 W	
	2° N	79° W	
	2°N	86° W	
	$14^{\rm O}$ N	93° W	,
to	close the	sub-area at 15°N	95 W.

#### Sub-Area 12F

From to	04° S 02° N 02° N	93° W 93° W 79° W
	to Balboa, C.Z.	,
to	130 N	77° W
	13° N	77° W 70° W 70° W
	OQ NT	70° W
	06° N	70° W 67° W 66° W
	Ol N	66° W
	04°s	70 <sup>℃</sup> ₩

along the frontier between Colombia and Peru to the junction of the borders of Colombia, Peru and Ecuador - along the frontier between Peru and Ecuador

to 04° S

81° W

to close the sub-area at 04°S 38°W.

#### Sub-Area 12G

From	07° N	73° W	
to	14° N	73° W	ı
	140 N	58° W	
	Olo N	58° W	
•	Ol N	68 <sup>0</sup> W 69 <sup>0</sup> W	
	05° N	69° W	
to	close the	sub-area at	7°N 73°W.

#### Sub-Area 12H

From	04° S	70° W	
to	05° N	70° W	
	_05 N	61 <sup>0</sup> 15' W	,
	08 <b>45</b> N	60° W	
•	08° N	58 W	
•	080 N	540 W	
	08° N 00° 04° S	44° W	
	04°S	44 W	0 0
to	close th	e sub-area at	04 S 70 W.

#### Sub-Area 12 I

From to		25° N 25° N	70° W 35° W			
	along	the I.T.U.	boundary	between	Regions	1 & 2.
to .	J	00	200 W		Ū	
		0°	44° W			
		08° N	54° W			
		08° N	. 58° ₩			
		17 <sup>0</sup> N	58° W	_	_	
to		close the	sub-area	at 25°N	70°W.	

### Sub-Area 12J

From	31° N	117° W	
	33 N	107° W	
	33° N 33° N	96° W	
	31° N	81° W	
	33° N	64° W	
	18° N	60° ₩	
	08° N	60° W	
	08° N	85° W	
	18° N	102° W	
to	*	ne sub-area at	31 N 117 W.

## RDARA 13

## Sub-Area 13A

From	05° S	120° W		
	05 S 05 S	81° W		
	19° S	81° W		•
	19° S 25° S	73° W		
	25° S	73° ₩		
	25 <sup>0</sup> S	81° W		÷
*	57° S	81° W		
	57° S	90° W		
to	the South	Pole	_	_
to	close the	sub-area at	05°S	120°w.

### Sub-area 13B

From	29° S	111° W		
	24° S	111° W		
	24° 8	104° W		*
	29° \$	104° W	_	_
to	close the	sub-area at	29°S	111°W.

## Sub-Area 13C

From		19°	S	81°	W				
	_	050	\$	81°	W		•		
		030	ន	800	W				
	then	along	the	Northern	frontier	between	Peru	and	Ecuador
to		00		75°					
	then	along	the	Northern	frontier	between	Peru	and	Colombia
to		೦೦		69°	W				
		110	S	69°	W				
		110	S	67°	W				4
		19°	S	67°	W	•	•		,
to		clos	se tl	he sub-ar	ea at 19 <sup>0</sup> 8	81°W.			

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Sub-Area 13D

From

19° \$

```
73°
70°
                  15° S
15° S
                                         W
                                         W
                                    70°
                  09° S
                  09°
09°
18°
21°
                                    65°
                       S
                                         W
                                    56°
                       S
                                         W
                                    56°
                       SS
                                         W
                  \overline{24}^{\circ}
                                    61<sup>0</sup>
                  24<sup>0</sup>
                                    69<sup>0</sup>
                       S
                                         W
                  19° S
                                    69° W
                  close the sub-area at 190S 730W.
to
Sub-Area 13E
                  57°
25°
                                    81° W
From
                       S
                 25°
                                    73° W
                       S
                  16°
                                    73° W
68° W
                       S
                 16°
                       S
                  22° S
                                    67° W
        then on the Eastern boundary of the frontier between Chile and Argentina.
                                   67° W
67° W
40° W
to
                  52° S
                  57° S
57° S
                  the South Pole
to
                                    90° W
                  57° S
                  close the sub-area at 57°S 81°W.
to
Sub-Area 13F
                 57°
                                   81° W
81° W
From
                       S
                 32°
                       S
                 32° S
                                   69° W
        then along the Eastern side of the frontier between Chile and Argentina 52^{\circ} S \phantom{0}67^{\circ} W
                                   67° W
to
                 57°
                       S
                                   40° W
                 57° S
to
                  the South Pole
                                   90° w
                      3
                 close the sub-area at 50°S 81°W.
 to
Sub-Area 13G
                 57°
                                   90°
                       S
From
                                   70°
                 57° S
52° S
                                        W
                                   70° W
        then along the Western side of the frontier between Argentina and Chile 21 S 68^{\circ} W 21^{\circ} S 62^{\circ} W
to
                                   62° W
56° W
53° W
                 25° S
25° S
                 28° S
                                   53° W
```

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29° S 56° W

57° S 56° W

57° S 40° W

to the South Pole

to close the sub-area at 57°S 90°W.
```

#### Sub-Area 13H

```
From 57° S 90° W
57° S 70° W
52° S 70° W
then along the Western side of the frontier between Argentina and Chile
32° S 70° W
34° S 56° W
57° S 56° W
57° S 40° W
to the South Pole
to close the sub-area at 57°S 90°W.
```

and Peru:

#### Sub-Area 13 I

From	24 <sup>0</sup> S	63° W	
	18 <mark>°</mark> ප	63° W	
	18 <sup>0</sup> S	56° W	
	22 <sup>0</sup> S	56 W	
	22 <sup>0</sup> S	53° W	•
	180 S S S S S S S S S S S S S S S S S S S	53° W	,
as	<b>2</b> 9° S	470 W	
•	37 <sup>0</sup> S	56° W	
	57° S	59° W	
	25 S	59 W	
to	close the	sub-area at	24 <sup>0</sup> 5 63 <sup>0</sup> W.

#### Sub-Area 13J

From	01° S	70° 63°	W		
	01° S 03° N 03° N	630	W		
	03° N 03° N	60°	M.	,	
	V1 A G	60°	W		
		48° 48° 50°	W		
	03 S	48°	W		
. ,	03 S	50°	W		
	16 <sup>0</sup> S	50°	W	,	
	16° S	480	W		
	20° S 32° S 20° S 10° S	50° 48° 39° 50°	W		
•	32° S	50° 58°	W		
	20° S	66°43'	W		*
thon	10°S along the	honden he		Brogil	Bolizzia
then				Draziti	DOTTATE
to	07 <sup>0</sup> 33 ¹S	74 <sup>0</sup>	W		

to close the sub-area at 01°S 70°W.

(Appendix-Aer/2-104)

Sub-Area 13K	
frem	04° 30'N 52° W 04° 30'N 51° W 00° 48° W 03° S 38° W 03° S 32° W 05° S 32° W 20° S 39° W 27° S 45° W 20° S 50° W 03° S 50° W 03° S 50° W 03° S 52° W 010se the Sub-area at 04°30'N 52°
Sub-Area 13L	
from	20° S 58° W 20° S 53° W 16° S 53° W 16° S 48° W 20° S 39° W 34° 50'S 52° 40' W 50° S 58° W close the sub-area at 20° S 58° W
to	close the sub-area at 20°S 58°W
Sub-Area 13M	0° 32° W
to	the South Pole  57° S
to	close the sub-area at 0° 32° W.

Geneva 1949

The Brazilian Delegation after careful consideration of Aer/2 Doc.5 submits for adoption the following:

The I.A.A.R.C. considering

- lst that the Plan developped for the use of H.F. channels for the aeronautical mobile R service will probably not be implemented prior to 1951;
- 2nd that in the intervening period and even, during and after the implementation period, air traffic operations are subject to continuous changes;
- 3rd that those changes will require attention by the Administrations concerned, but
- 4th that in seeking to satisfy new communication requirements no decision should be taken that will prevent or handicap the coordinated utilisation of those HF-"R" frequencies as prescribed in the Plan adopted at this Conference;

#### RECOMMENDS

that Administrations individually or in collaboration take the necessary steps:

- I to make as great a use as possible of V.H.F. in order to lessen the load on the HF-"R" bands;
- II 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;
- III to coordinate the use of families of frequencies necessary for a given communication segment in accordance with the technical principles adopted by the I.A.A.R.C. and in the light of the latest propagation data available;
- IV to improve operating techniques and procedures and to use the best equipment possible in order to attain the highest possible efficiency in handling air-ground H.F. communication;
- V to collect precise data on the operation of their H.F. communication systems so as to facilitate such re-examination of this Plan as may be undertaken in the future;
- VI to establish, through regional agreements, the best method to provide the required communications for any new long distance international or regional air traffic which is not or cannot be accommodated within the system of MWARA and RDARA adopted by the I.A.A.R.C., in such a manner as not to cause any interference to the utilisation of frequencies as prescribed in the "R" Frequency Plan adopted by this Conference.



Aer/2 Document No.106-E 22 September 1949

International Administrative Aeronautical Radio Conference

2nd Session

Geneva 1949

#### UNITED KINGDOM DELEGATION

The statement contained in Aer/2 Document No.91 was issued by the United Kingdom Delegation in order to bring to the attention of the Conference certain matters of importance concerning the Final Report and the implementation of the Frequency Allotment Plan.

Being now assured that these matters will receive due consideration, the United Kingdom Delegation is satisfied that Aer/2 Document No.91 has served the purpose for which it was issued and wishes to formally notify its withdrawal.

H.A. ROWLAND U.K. Delegation

Conférence internationale administrative des Radiocommunications aéronautiques

2e session

Genève 1949

Aér/2 Document No.106-F

#### DELEGATION DU ROYAUME-UNI

La publication de la déclaration contenue dans le document Aér/2 No.91 a été demandée par la Délégation du Royaume-Uni en vue d'attirer l'attention de la Conférence sur certains points importants du rapport final et sur la mise en application du Plan d'allocation des fréquences.

Ayant pu s'assurer que les questions soulevées recevront l'attention nécessaire, la Délégation du Royaume-Uni constate avec satisfaction que le Document Aér/2 No.91 a rempli son but. Elle désire en notifier formellement le retrait.

H.A. ROWLAND Délégation du Royaume-Uni

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas

<u>2a Reunión</u>

Ginebra 1949

Documento Núm. 106-Aer/2-S 22 de Septiembre de 1949

#### DELEGACION DEL REINO UNIDO

La declaración contenida en el Documento Aer/2 Núm.91 fué presentada por la Delegación del Reino Unido con el objeto de llamar la atención de la Conferencia acerca de ciertos asuntos de importancia referentes al Informe Final y a la aplicación del Plan de asignación de frecuencias.

En la certeza ahora de que tales asuntos serán considerados debidamente, la Delegación del Reino Unido se encuentra satisfecha ya que juzga que el documento Aer/2 No.91 ha cumplido con su objetivo y desea por lo tanto formalmente notificar su retiro.

H.A. ROWLAND Delegación del Reino Unido



### International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### REPORT OF THE CREDENTIALS COMMITTEE

(Committee 2)
6th meeting

22 september 1949

- 1. The meeting was opened at 2.35 p.m. under the chairmanship of Mr. Souto Cruz (Portugal).
- 2. No comments were made on the reports of the 4th and 5th meetings (doc. 78 and 84) which were approved as such.
- 3. The committee considered the credentials of the delegate of the Belgian Congo and found them to be in order.

The following information should be added to Document 32.

No. of Annex 1 to the Atlantic City Convention (1)	Member of the Union (2)	Name of delegate
21	Belgian Congo and Territories of Ruanda-Urundi	L. LAMBIN

The meeting was adjourned at 2.40 p.m.

Chairman: SOUTO CRUZ



# Conférence internationale administrative des Radiocommunications aéronautiques

2e session Genève 1949 Aér/2 Document No.108-F 22 septembre 1949

Le Secrétaire appelle l'attention de MM. les délégués sur la communication ci-dessous qu'il a reçue du délégué du Congo belge.

"Monsieur le Secrétaire,

J'ai l'honneur de vous faire savoir que la Délégation du Congo belge, lors de ses absences des réunions de la Conférence administrative des radiocommunications aéronautiques, sera représentée par la Délégation du Maroc et de la Tunisie, qui est autorisée à discuter et à voter à sa place pendant la durée de la Conférence.

Veuillez agréer, Monsieur le Secrétaire, l'assurance de ma considération très distinguée.

L. LAMBIN Délégué du Congo belge"

International Administrative
Aeronautical Radio Conference

2nd Session
Geneva 1949

Aer/2 Document No.108-E 22 September 1949

The Secretary wishes to draw the attention of Delegates to the following communication from the Delegate of Belgian Congo.

"Sir.

I have the honour of informing you that the Delegation of Belgian Congo, when absent from the meetings of the International Administrative Aeronautical Radio Conference, will be represented by the Delegation of Morocco and Tunisia, which is authorized to speak and vote in its place throughout the duration of the Conference.

L. LAMBIN
Delegate for Belgian Congo"

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas

2a Reunión

Ginebra 1949

Documento Num.108-Aer/2-S 22 de Septiembre de 1949

El Secretario ruega a los Señores Delegados tengan a bien atender a la comunicación del delegado del Congo Belga, citada a continuación.

"Señor Secretario:

Tengo el honor de participarle que la Delegación del Congo Belga, en los casos en que esté ausente de las sesiones de la Conferencia Administrative de Radiocomunicaciones Aeronauticas, estara representada por la Delegación de Marruecos y Tunez la cual está autorizada a discutir y votar en su lugar, mientras dure la Conferencia.

L. LAMBIN
Delegado del Congo Belga"

# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### DRAFT FINAL REPORT OF WORKING GROUP C

There are attached the following:

- a) a list of frequencies in numerical order showing for each frequency the areas of authorized use, the purpose for which allotted, necessary restrictions.
- b) A list of MWARA, RDARA and Sub-RDARA showing the frequencies allotted to each.
- c) A description of MWARA, RDARA and Sub-RDARA boundaries.

These documents, together with the following maps still in preparation comprise the substance of the recommendations of this Working Group.

- d) Map of the world showing MWARA boundaries.
- e) Map of the world showing RDARA and Sub-RDARA boundaries.
- f) Map of the European area showing on a larger scale MWARA, RDARA and Sub-RDARA boundaries.
- g) Map of North America showing on a larger scale RDARA and Sub-RDARA boundaries.
- h) Map of South America showing on a larger scale RDARA and Sub-RDARA boundaries.

The Working Group recommends the approval of these documents and their inclusion in the Final Report of the Conference.

The Working Group has prepared seven transparencies designed for use with either map d or e above which show the expected interference range of each order of frequencies. The Working Group believes that these transparencies will have continuing value and therefore recommends that they be reproduced and included in the Final Report of the Conference.

In preparing this material the Working Group has taken note of the recommendations of ICAO and Region 2 with respect to boundary changes. These and the changes specifically adopted at this Session are included in the description c above. The Working Group has also verified the other portions of the description to insure accuracy.

The Working Group has also noted and included, where appropriate, the recommendations of the First Session and ICAO on other matters, notably with respect to the use of the common and meteorological broadcast frequencies.



International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

### MINUTES OF THE 26th PLENARY SESSION

held on Friday and Monday,

2nd and 5th September, 1949.

The Meeting was opened at 0945 hrs. by the Chairman, Mr. Arthur Lebel.

The following countries and organisations were represented:

People's Republic of Albania; Argentine Republic; Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Brazil; Bulgaria; Canada; Chile; Colombia (Republic of); Portuguese Colonies; Colonies, Protectorates, Overseas Territories and Territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland; Overseas Territories of the French Republic and Territories administered as such; Cuba; Denmark; Dominican Republic; Egypt; Ecuador (Observer); United States of America; France; People's Republic of Hungary; India; Indonesia; Ireland; Iceland; Italy; Luxembourg; Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curação and Surinam; Philippines (Republic of the); Poland (Republic of); Portugal; French Protectorates of Morocco and Tunisia; People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumania; United Kingdom of Great Britain and Northern Ireland; Sweden; Switzerland (Confederation); Czechoslovakia; Territories of the United States of America; Union of South Africa and the mandated territory of South-West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (United States of); I.F.R.B.; I.C.A.O.; I.A.T.A.

At the request of <u>Dr. Franco-Franco</u> (Dominican Republic), <u>Mr. Lopez</u> (Venezuela) agreed to represent the interests of the Delegation of the Dominican Republic.

The Chairman requested that all delegates sign the attendance sheet, so that their presence at meetings might be recorded in the Minutes.

At the request of Mr. Bolkhovitine (U.S.S.R.), it was agreed that a new item "Examination of Aer/2 Document No.70" be inserted in the agenda between items 2 and 3.

## 1. Item 1 of the Agenda (Aer/2 Doc.61): APPROVAL OF THE MINUTES OF THE 24th AND 25th PLENARY SESSIONS (Aer/2 Docs. 54 and 60)

#### 1.1 Aer/2 Doc.54.

The following typographical errors were corrected:

page 2, No.1.2.2, last line of Mr. Harizanov's statement, read: "data supporting the requests.";

page 4, No.1.3.4, 12th line of English text, read: "...aeronautical mobile R services...";

last line: insert a full stop between the words "all" and "Bulgaria";

page 5, No.1.3.9, 5th line, read: "large regions of the world...".

The following were added to the list of countries represented: Cuba, Dominican Republic, Norway.

Thus amended, Aer/2 Doc.54 was approved.

1.2 Subject to the amendments contained in the Corrigendum, Aer/2 Document No.60 was approved.

#### 2. Item 2 of the Agenda: REPORTS OF CHAIRMEN OF COMMITTEES AND WORKING GROUPS.

- 2.1 The Chairman, speaking as Chairman of Committee 1 (Steering Committee), said that he had no report to make on the work of this Committee.
- 2.2 Mr. Chef (Morocco and Tunisia), Vice-Chairman of Committee 2 (Credentials Committee), said that four meetings had been held; the credentials of all Delegates had been checked and found to be in order. He moved the adoption of Aer/2 Documents Nos.32, 50, 62 and 76. These documents were unanimously approved.
- 2.3 Mr. Mouchez (France), Chairman of Committee 3 (Drafting Committee), said that the first meeting of the Committee had been held on 30 August. The report of this meeting was contained in Aer/2 Document No.75. In accordance with the Steering Committee's recommendations (Aer/2 Doc.No.66), the form of the final report of the Conference had been discussed. It would contribute greatly to the quality of the report if Spanish and Russian-speaking Delegates would assist in its preparation.

At the request of Mr. Jouk (Bielorussian S.S.R.), approval of Aer/2 Document No.75 was deferred in accordance with the 24-hour rule.

Mr. White (U.S.A.), Chairman of Working Group C, said that the work of Group C was progressing on the basis of the program adopted at its third meeting (Appendix A to Aer/2 Document No.52). A plan for frequency sharing in both Eastern and Western Hemispheres had been agreed and a third sub-group (C.3) appointed. Under the present terms of reference the Group would probably complete its work during the month of September.

Working Group C had received a request from the Delegates of Austria (Annex to Aer/2 Document No.72) that the boundaries of sub-areas 1B and 1C be revised to prevent the division of Austrian territory. At its fourth meeting, the Group had decided to recommend that the territory of Austria be included in sub-area 1B, and it was for the Plenary Assembly to ratify this decision.

2.4.1 Mr. Selis (Netherlands) said that he had originally proposed that Austria be included in sub-area 1B. After reconsideration of the problem, particularly with respect to sharing possibilities, he wished to propose that this country be included in sub-area 1C. This proposal was seconded by Mr. Harizanov (Bulgaria) and adopted unanimously.

Mr. Pangratz (Austria) expressed his appreciation of the Plenary Assembly's decision to unify Austrian territory in a manner acceptable to all Delegations.

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## 3. Item 3 of the Agenda: EXAMINATION OF Aer/2 Document No.70 (STATEMENT OF THE USSR, THE BIELORUSSIAN SSR AND THE UKRAINIAN SSR)

- The Chairman said that after careful study of Aer/2 Document No.70 he would suggest that the Plenary Assembly examine first the general arguments presented as far as the second paragraph on page 2, and afterwards deal separately with the eight technical proposals which followed.

  Mr. Jouk (Bielorussia) said that, as the first part of the document embodied the reasons for the proposals, it would be preferable to discuss first of all the document as a whole.
- Mr. Quijano (Colombia) said that certain expressions appearing in the second and third paragraphs of Aer/2 Document No.70 were tantamount to accusations against certain un-named Delegations. The term "voting machine" was insulting to the entire Assembly. He was strongly opposed to any discussion of Aer/2 Document No.70 as it stood, and moved that, unless paragraphs 2 and 3 were deleted from page 1, the document be not considered. Mr. Tabio (Cuba) seconded this proposal.
  - Mr. Deuchars (United Kingdom Colonies) said that, in response to directives given in the Resolution and Annex of the Interim Report, many countries had worked hard for many months to supply statistical data which would enable the Conference to draw up an aeronautical frequency plan, ensuring as far as possible the safe and efficient operation of long-distance, regional and domestic flying. Certain Delegations, however, had not only arrived late for the Second Session but had been unwilling to submit data until after the expiry of the prescribed period. They had, moreover, published contradictory statements in Aer/2 Documents Nos. 24, 25, 26 29 and 31. Aer Document No.249 included a request for 16 frequencies in the 3.5 Mc/s band in one sub-area, whereas the total number of 3.5 Mc/s channels available was 14. Such methods served only to obstruct the Conference, and he moved that Aer/2 Document No.70 be summarily rejected.
- The Chairman asked for the cooperation of all Delegates in a difficult situation, and invited the Delegations of the USSR, the Bielorussian SSR and the Ukrainian SSR to consider whether they would be prepared to withdraw the second and third paragraphs from their joint statement. If Delegates representing sovereign countries felt that language had been used which was offensive to national dignity and to that of the Conference, they were entitled to protest. The deletion of the paragraphs in question would be a small sacrifice to ensure that the document was properly discussed, and he appealed personally to the authors to cooperate as far as possible.
- Mr. Bolkhovitine (USSR) said that his Delegation had consistently tried to cooperate in a spirit of goodwill and mutual understanding. No offence was intended in the Soviet statement, which did not mention the names of any Delegates. The document contained an expression of opinion which was based on fact, and this should not prevent the discussion of proposals designed to assist the Conference. As the introductory passage embodied the reasons for these proposals, the Soviet Delegations wished to retain it.
- Mr. Flisak (Poland) said that it would be regrettable if the Soviet statement were rejected out of hand. If the practical proposals contained therein were discussed in good faith, a frequency plan could be developed which would be acceptable to all countries. It appeared that some Delegations favoured an immediate vote in order to avoid discussion.

3.7

Mr. White (U.S.A.) agreed with the Delegate of Colombia that the Assembly should not consider a document which attacked the integrity of Delegates. The United States Delegation was not part of a voting machine. Mr. Mouchez (France) considered that the expression "voting machine" could be applied more appropriately to the minority, where individual votes never failed.

3.8

Mr. Harizanov (Bulgaria) supported Mr. Bolkhovitine's point of view. There was no question that the first Plenary Assembly of the Second Session, by a simple majority vote, had adopted the ICAO draft Plan before this had been translated into all working languages or discussed by any group of Delegates. Such a procedure was in contradiction to the decisions taken at the First Session. The Interim Report had invited ICAO to submit a plan, but had stipulated that it be studied by the Conference.

3.9

Mr. Gudovic (Yugoslavia) said that the Soviet statement was fully justified in view of the summary decision taken at the 23rd Plenary Meeting to adopt the ICAO Plan before all Delegations had had an opportunity to examine it and to express their views.

3.10

The Chairman said that he had made every endeavour to induce the three Soviet Delegations to withdraw the two unnecessary and apparently offensive paragraphs from their statement. The refusal might mean that Aer/2 Document No.70 would not be considered by the Assembly. According to the rules of procedure he was obliged to put Mr. Quijano's motion (No.3.2) to the vote.

3.11

Mr. Khan (Pakistan) recognized the point of order raised by the Chairman, and regretted that the Soviet Delegations had been unable to comply with the Chairman's personal appeal. He felt, however, that the Soviet proposals merited examination, and requested that the Chairman declare a recess to permit of informal discussions between the authors of Aer/2 Document No.70 and other Delegates. In this way, agreement might be reached. Mr. Tyengar (India) supported Mr. Khan's view that a compromise solution should be sought.

3.12

Mr. Deuchars (United Kingdom Colonies) said that he maintained his motion (No.3.3). If, however, the authors were prepared to withdraw Aer/2 Document No.70 and to submit straightforward technical proposals, he would be willing to participate in a discussion of them.

3.13

<u>Dr. Franco-Franco</u> (Dominican Republic) said that he fully supported Mr. Quijano's proposal (No.3.2), which should be put to the vote.

3,14

Mr. Bodeaga (Rumania) said that the more important part of the Soviet statement consisted of the technical proposals, which would improve sharing possibilities in certain areas and particularly in Region 1. Mr. Quijano's motion was directed against a few remarks in the first part of the document, and, if accepted, would prevent any examination of these extremely useful proposals.

3,15

Mr. Quijano (Colombia) said that Document 70 could not be considered in two parts because the Delegate of the Bielorussian SSR had requested that it be discussed as a whole. The assertion that the introduction to the proposals was based upon fact was quite unacceptable, and he moved that the debate be closed and a vote taken upon his original proposal (No.3.2). Mr. Tabio (Cuba) seconded this motion.

- The proposal of the Delegate of Colombia to close the debate was put to the vote and was rejected by 16 votes to 14, with 7 abstentions.
- 3.16 Mr. Selis (Netherlands) moved that the proposal submitted by the Delegate of Colombia (No.3.2) be amended to the effect that the Plenary Assembly should examine the second part of Aer/2 Document No.70 only, from the third paragraph on page 2 (English text).
  - 3.16.1 Mr. Khan (Pakistan) seconded this amendment. Although exception could be taken to certain remarks in the document, he was convinced that all Delegates were anxious to consider the Soviet proposals in an effort to develop the most satisfactory plan possible.
  - 3.16.2 Mr. Tabio (Cuba) said that his Delegation sincerely desired a world frequency plan which would satisfy all countries, including the USSR, and appealed to the Delegate of Colombia to accept the amendment proposed by the Delegate of the Netherlands.
    - Mr. Quijano (Colombia) agreed to accept the Netherlands amendment.
  - 3.16.3 In reply to Mr. Deuchars (United Kingdom Colonies), the Vice-Chairman said that, although the Plenary Assembly might vote against discussion of part 1 of Aer/2 Document No.70, the complete document would be filed in its original form in the ITU archives.
  - 3.16.4 At the request of the <u>Chairman</u>, <u>Mr. Quijano</u> (Colombia) withdrew his original proposal (No.3.2), and joined <u>Mr. Selis</u> (Netherlands) and the <u>Vice-Chairman</u> in submitting the following compromise proposal:

"The Plenary Assembly, when dealing with Aer/2 Document No.70, considers that the first part of that document cannot be taken into consideration and must be disregarded by the Assembly for the reason that it offends elementary dignity, and decides to discuss only the ideas contained in points 1) to 8) on page 2 of that document."

This proposal was seconded by Mr. Khan (Pakistan), Mr. Tabio (Cuba) and Mr. Iyengar (India).

- of Colombia that the first and second paragraphs of Aer/2 Document No.70 were insulting. The last paragraph of this document expressed a wish for international cooperation and mutual understanding, but if this were genuinely felt the authors would have agreed to withdraw the offending paragraphs. The Delegate of Poland, moreover, had suggested that some Delegations were unwilling to discuss the Soviet statement. Surely the efforts made to ensure examination of the second part of the document had disposed of such an allegation. His Delegation was concerned that the document in its present form would appear in the records of the Conference, and therefore fully supported the amended proposal.
- 3.16.6 The joint proposal was put to the vote and adopted by 34 votes to 6. with 7 abstentions.
- 3.16.7 Mr. Deuchars (United Kingdom Colonies) said that as the complete Aer/2
  Doc.No.70 would be filed as a Conference document he had abstained from voting.
  He would, however, cooperate to the fullest extent possible, in accordance
  with the majority decision, and would withdraw his proposal (No.3.3).

The Chairman opened discussion on the second part of Aer/2 Doc.No.70.

#### 3.17 Point 1) of Aer/2 Document No.70

- Mr. Selis (Netherlands) said that the problem of the European MWARA boundaries had already been discussed at length. The present extensions were based on requirements submitted at the First Session and cutting off would be of little value. No repetition possibilities would result in area 2, for example, and in area 3, where they would be slightly increased, no more frequencies had been requested. The advantages to be gained were not such as to warrant further consideration, and he moved that point 1) should not be further discussed.
- Mr. Greven (ICAO) referred to ICAO Recommendation 3.3.7 in Aer/2
  Document No.5, concerning MWARA boundaries, and to Recommendation 3.5.6 on
  the extension of certain families of frequencies into the EU area.
  Approval of the proposal contained in point 1) would tend to destroy the
  primary purpose of MWARAs.
- Mr. White (U.S.A.) said in regard to the second part of point 1) that experience of long distance operation over water had shown that discontinuity of frequencies was dangerous. No economy would, in any event, be achieved since frequencies would always be required at both ends. The recommendation in point 1) should be rejected.
- In reply to <u>Mr. Selis</u> (Netherlands) and <u>Mr. Ivengar</u> (India),

  <u>Mr. Jouk</u> (Bielorussia) said that points 1) to 8) were closely interrelated and, if adopted in toto, would ensure a more economical and
  efficient use of frequencies. Without graphs and maps it was difficult
  to demonstrate the advantages of division into sub-areas, but preliminary
  checks had confirmed that a considerable economy of frequencies would
  result. The number of frequencies for aircraft equipment would not be
  increased, as the total number of frequencies for MWARAs would be reduced
  and they would be repeated more often.
- 3.17.5 Mr. Brant (Canada) found it difficult to appreciate the relationship between sharing possibilities and the number of frequencies necessary for MWARAS, since these were allocated on the basis of statistics and timetables for a known volume of traffic.
- Mr. Harvey (Union of South Africa) and Mr. Khan (Pakistan) considered that technical data was necessary for satisfactory evaluation of the Soviet proposals.
- 3.17.7 Mr. Layzell (IATA) asked whether the proposal to divide MWARAs into sub-areas meant that in a case, for instance, where 4 frequencies were allocated, 2 frequencies would be used at each end of the route; or would two different sets of 4 frequencies be used?
- Mr. Jouk (Bielorussia) cited as an example a MWARA to which one frequency was allocated. If this route were divided into two sections, a different frequency would be used at each end. If several frequencies were allocated, the question would depend on the loading. Since the total loading for an area would be divided between two sub-areas, the number of frequencies allotted to those sub-areas could be reduced. If the loading were high enough to require 4 frequencies for each sub-area in the North Atlantic, for instance, the first 4 frequencies could be repeated immediately after the second sub-area, i.e. in Europe. Thus, if frequency allocation were considered as a whole, increased repetition could be achieved without interference.

- 3.17.9 Mr. Quijano (Colombia) said that owing to the technical implications of the Soviet proposals it was inappropriate to discuss them in Plenary Assembly. He proposed that they be referred to Working Group C, which could make a detailed study and submit recommendations to the next Plenary Assembly.
- 3.17.10 Mr. White (U.S.A.) said that as Chairman of Group C, he was opposed to such a step, which would necessitate changing the terms of reference of the Group. The document should be disposed of by the Plenary Assembly. Mr. Quijano agreed to withdraw his motion (3.17.9), and proposed that a decision on doc.70 be taken that day.
- 3.17.11 Mr. Harizanov (Bulgaria) agreed with the Delegate of Bielorussia that the Assembly could not properly evaluate the proposals by discussing them separately. It would save time if they were referred as originally proposed by Mr. Quijano, to a working group.
- The <u>Vice-Chairman</u> did not favour reference to Working Group C, since this Group had a specifically defined task, viz. to draft a plan on the basis of principles and standards approved by the majority. Any examination of new proposals would involve discontinuing the present work and considering another plan based on principles not approved by the Conference. He suggested, however, that the Delegations concerned might submit a detailed plan.

The Conference had been adjourned a year previously because some Delegations had considered that there were several possible approaches to the problem, and the Soviet Delegation had had almost a year in which to prepare a detailed plan for comparison. Unless it could be proved that a set of parameters different from those already adopted would produce better results, it would be a waste of time to discuss them. The Delegation of Brazil was opposed to the adoption of Document 70.

- 3.17.13 Mr. Harvey (Union of South Africa) agreed with the Delegate of the USA that consideration of Doc. 70 should be completed in the Plenary Assembly, and seconded the Netherlands proposal for termination of discussion on point 1) (see 3.17.1).
- 3.17.14 Mr. Brant (Canada) also supported the U.S. point of view, and suggested that if the Delegates concerned had drawn up a detailed plan they might explain it to the Assembly by means of a blackboard. If they had not, they might prepare one for submission to the Conference.
- 3.17.15 Mr. Layzell (IATA) concurred in Mr. Brant's suggestions. It was difficult to understand from Mr. Jouk's reply how the recommendations in para.l) would lead to any economy in the number of frequencies for MWARAS.
- 3.17.16 Mr. White (USA) agreed with Mr. Quijano's suggestion that a decision on doc.70 be taken during the present Meeting, pointing out that the Plenary Assembly and Working Group C were of almost the same composition. He was joined in this by Mr.Selis (Netherlands) and Mr. Overgaard (Sweden). He also supported the opinions expressed by the Vice-Chairman.
- 3.17.17 Mr. Bolkhovitine (USSR) emphasized that the 8 Soviet proposals were closely linked together and should not be voted upon separately. He proposed that they be referred for study to a working group, which need not necessarily be Group C, the results of this study to be submitted to the next Plenary Assembly for final decision.

- 3.17.18 Mr. Khan (Pakistan) said that a majority of Delegations had adopted a draft plan which reasonably satisfied requirements for RDARAs and MWARAs, and Group C should be left to complete this work under its present terms of reference. He proposed, however, that, as Mr. Bolkhovitine had suggested, another group might develop simultaneously a plan based on the Soviet proposals. This should be done as quickly as possible to avoid prolonging the Conference. The two plans could be compared and the best features selected from each. Like other Delegates, he found it extremely difficult to grasp the implications of points 1) to 8) in the absence of specific data.
- 3.17.19 Mr. Mouchez (France) supported Mr. Khan's point of view. Due to the time factor, any new plan should be confined to the European area.
  - Mr. Jouk (Bielorussia) supported Mr. Bolkhovitine's proposal. If the Conference adopted the Soviet proposals, a draft plan covering the most complicated areas could be worked out on those bases in a short time, provided that all Delegations interested in those areas cooperated in this work. As an example of the advantages to be derived from such a plan, calculations had shown that the number of frequencies required for MWARAs in the 3 and 3.5 Mc/s bands could be reduced to half the number provided in the ICAO Plan.
- 3.17.20 Mr. Iyengar (India) said that if another working group were appointed, a time limit should be set for completion of its work. He wished to know whether a plan had or had not been prepared on the basis of the Soviet proposals.
- 3.17.21 The Chairman said that, as Working Group C was expected to finish work in approximately two weeks, this was the maximum period permissible for the drawing up of any alternative plan.
- Mr. Searle (New Zealand) said that any new working group should work on principles approved by the Conference. His Delegation, however, was opposed to the principles set out in Document 70 and was prepared to vote against them immediately. After one year's consideration the majority of Delegations had taken definite decisions, and the setting up of another working group would serve no useful purpose. It would be unfair to vote on all the Soviet proposals together. He proposed, therefore, that the proposals be immediately presented by the authors and discussed as a whole, and then voted upon separately.
- 3.17.23 The Chairman said that several other proposals had already been tabled. In his view nothing would be lost if the Delegations concerned were to draw up an alternative plan, in accordance with the proposal made by the Delegate of Pakistan (No.3.17.17), provided it was clearly understood that Working Group C would not interrupt its work and that the Conference was not to be prolonged. He asked whether Mr. Searle was prepared to accept this solution.
- 3.17.24 Mr. Searle (New Zealand) emphasized that his Delegation had already approved the terms of reference for Group C, and could not undertake to approve a different set of principles or any plan based thereon.
- 3.17.25 The Vice-Chairman, speaking as the Delegate of Brazil, said that he had shared Mr. Searle's views. If a new working group were set up, its terms of reference would have to be approved by the Plenary Assembly. This involved the approval by a majority of points 1) to 8). Consideration of the document could, on the other hand, be postponed for perhaps a week to enable the authors to prepare a specific plan.

- of new basic principles. The Netherlands proposal (Aer/2 Doc. No.54, No.1.3) for the calculation of frequency requirements from the data required by the Annex to the Interim Report had already been adopted at the 24th Plenary Session. The plan at present being prepared would provide a reasonable number of frequencies even to countries which had not submitted statistics. The Netherlands Delegation, therefore, was opposed to any changes of principles, and he proposed that Aer/2 Doc.70 be rejected.
- 3.17.27 Mr. Khan (Pakistan), replying to Mr. Searle and Mr. Costa, explained that he had not intended that the work of Group C should be interrupted. It would be useful, however, if a group be set up by the Conference to examine, but not necessarily to adopt, the principles suggested in Doc.70. In this way, these principles might be modified with a view to obtaining unanimity.
- 3.17.28 Mr. White (USA) referred to the Resolution concerning the temporary suspension of the Conference contained in Volume III of the Interim Report, and to the provision for the submission by 30 June 1949 of statistical data and new principles. Doc.70, which proposed new principles, but which contained no supporting data, had not been submitted until one month after the opening of the 2nd Session. He suggested that Mr. Khan's proposal be amended to read as follows: "The Conference decides to suspend consideration of Doc.70. If and when its proponents submit a plan based on the suggested principles, it will be considered. This plan should be submitted by 10 September at the latest, and in the meantime the Conference shall proceed on the basis of the principles already adopted."
- 3.17.29 Mr. Khan (Pakistan) agreed to accept Mr. White's amendment if this were further amended to read: "...Doc.70. When Working Group C has completed its plan, the proponents of Doc.70 shall submit another plan, based on their suggested principles, and the two plans shall be considered simultaneously. In the meantime...".
- 3.17.30 Mr. Deuchars (United Kingdom Colonies) drew attention to Mr. Quijano's proposal (No.3.17.9) to terminate discussion of Doc.70 that day. He supported this motion.
- 3.17.31 Mr. Brant (Canada) proposed that the Colombian proposal be amended to the effect that the Assembly should take a decision on Doc.70 during the present Plenary Meeting, irrespective of its duration. Mr. Iyengar (India) seconded this amendment, which was put to the vote and adopted by 18 votes to 17, with 8 abstentions.
- 3.17.32 The Colombian proposal, thus amended, was then put to the vote and adopted by 25 votes to 10, with 4 abstentions.

The proposal of the Delegate of the USA, amended by the Delegate of Pakistan (Nos.3.17.27 and 3.17.28) was therefore declared invalid.

- 3.17.33 Mr. Bodeaga (Roumania) said that the first point of para.l had not been sufficiently discussed. It should be considered whether 5 MWARAS should extend over the territory of Europe, where the volume of traffic was greater than anywhere else.
- 3.17.34 Mr. Jouk (Bielorussia) said that in Group C he had already raised the question of the acute situation prevailing in Europe, where the boundaries of several MWARAs were extended. According to the draft Plan, more than 100 frequencies out of a total of 149 would be used in the territory of Western Europe in MWARAs and RDARAs. On the other hand, the draft Plan provided only 38 frequencies for use in Eastern Europe (sub-areas 2A and 2C), where the volume of traffic was much greater. These provisions discriminated against Eastern Europe, and the Conference should, therefore, seriously consider the Soviet proposals, which would do much to ensure a world plan more satisfactory to all countries.

- Mr. White (U.S.A.) said that the MWARA boundaries had been discussed a year ago in Committee 6, when his Delegation had felt that it might be advantageous to confine these to the edge of the EU area, in view of the consequent improvement in repetition possibilities. However, it appeared that such measures would not release frequencies in the areas where they were needed, whereas the extension of boundaries offered improved operational conditions. All the relevant arguments were contained in the First Session records and he proposed that the discussion of point 1) be terminated.
- 3.17.36 Mr. Jouk (Bielorussia) gave a practical example of the efficacy of the Soviet proposals. Tables had been prepared showing how MWARAS could be served by 5 frequencies in the 3 Mc/s band and 3 frequencies in the 3.5 Mc/s band, making a total of 8, instead of the 16 frequencies provided in the ICAO draft Plan. He offered these tables to the delegates for study.
- 3.17.37 Mr. Selis (Netherlands) seconded Mr. White's proposal, which was similar to his own (No.3.17.1).
- 3.17.38 In reply to Mr. Harvey (Union of South Africa), Mr. Jouk (Bielorussia) said that his example was based on points 1), 2), 3), 5) and 6). Mr. Harvey said that except in area 2B, the cutting back of MWARAS would not release more than 2 low order frequencies.
- 3.17.39 Mr. Jouk (Bielorussia) emphasized that only the combined application of the Soviet proposals would ensure improvements to the extent indicated (No.3.17.35).

Mr. White's proposal (No.3.17.34) was put to the vote and adopted by 27 votes to 8, with 4 abstentions.

#### 3.18 Point 2) of Aer/2 Document No. 70

3.18.1 Mr. Jouk (Bielorussia) referred to the ICAO draft Plan, and said that although the number of frequencies for MWARAs was calculated by the same formula, there appeared to be considerable variations in the loading per frequency for various areas. For instance, the loading per frequency was 170,000 km weekly in NSA 2, 73,000 km weekly in NA, 37000 km weekly in SA, 44000 km weekly in CEP, and 32000 km weekly in SP. At the beginning of the First Session, Mr. White (U.S.A.) and Mr. Betts (Australia) had proposed that, to simplify the compilation of a plan, 35 to 40 frequencies should be allotted to MWARAs and the remainder to RDARAs. Apparently this proposal had been based on practical considerations concerning MWARA requirements. The 74 MWARA frequencies which had been calculated later in the First Session, and which had not been altered, did not, therefore, represent real minimum requirements. The allotments made to areas SA. CEP, NP and NA, for instance, were in excess of present requirements, and other examples could be quoted to show that the loading per channel could be increased.

- 3.18.2 Mr. Brant (Canada) said that it was not correct to say that requests were in excess of present requirements. In the case of area NA; extra provision had to be made for meteorological services.
- 3.18.3 Mr. Layzell (IATA) agreed with Mr. Brant. Difficulties had been experienced in obtaining the necessary frequencies for the A-3 organization in area NA. In addition, the 3 A-1 families were now being operated on an adjacent channel simplex basis.
- Mr. O'Dalaigh (Ireland) supported the statements of Mr. Brant and Mr. Layzell. Excessive use was being made of the present frequencies on the North Atlantic route and even the 4 families of frequencies provided in the ICAO Plan were barely sufficient to support the heavy volume of traffic.
- 3.18.5 In reply to Mr. Harvey (Union of South Africa), Mr. Jouk (Bielo-russia) said that, in assessing the mileages per frequency for the different areas, he had used the same method as had been used in the preparation of Doc. No. 242 of the First Session.

In reply to Mr. Jyengar (India), he said that the loading on MWARA channels should correspond to the volume and method of communications. It had been said during the First Session that high capacity means of communication should be provided for MWARAS. In this case, the loading per frequency would have to be increased, otherwise any plan prepared on such a basis would be wasteful. When A-1 type of emission on low speed was used, the loading per standard A-3 channel could be increased, since this channel could be divided into two A-1 channels. For a group of 4 or 5 frequencies the actual loading per frequency would clearly be less than 12 aircraft, since all of these aircraft would not use the same frequency all the time.

3.18.6 Mr. Layzell (IATA) explained that, owing to earlier mistakes in loading calculations, the figures quoted for areas NSAl and NSA2 could not be compared on a mileage basis without correction. He understood that the Africa-India Ocean ICAO meeting had recognized this problem and had considered that the reduced allotment could be accepted in the lower frequency orders.

Five MWARs were at present using A-3 type of emission either entirely or partly, and it was planned to extend this practice to other MWARs.

- 3.18.7 Mr. Jouk (Bielorussia) said that if A-3 type of emission were used. higher loading per channel would be possible, and Mr. Layzell's examples only served to confirm this.
- 3.18.8 Mr. White (U.S.A.) pointed out that answers at the First Session to these same arguments were clearly registered in the records of that Session.
- 3.18.9 Mr. Jouk (Bielorussia), in reply to Mr. Layzell, said that he had based his calculations on the total loading figures given in ICAO Doc.211.

- 3.18.10 Mr. Layzell (IATA), supported by Mr. Jyengar (India) and Mr. Greven (ICAO), pointed out that the figures given in column 12 of ICAO Doc. 211 were lower than the corrected figures. Mr. Greven added that, in one particular case, the ITU Western Hemisphere meeting had assigned to subarea 12J traffic which normally was considered MWAR traffic. He recommended that loading be not increased.
- 3.18.11 Mr. Jouk (Bielorussia) said that his previous statements illustrated the loading possibilities in the cases mentioned. Two adjacent areas, for example, NP and CWP, could be combined and could operate on the same frequency, as a result of low loading.
- 5.18.12 Mr. Bodeaga (Rumania) said that the objections raised to Point 2) should be supported with figures. This proposal had not been adequately discussed, and reference to proceedings at the First Session were merely attempts to evade the issue. The ICAO Plan sharing basis was unacceptable, and the superimposition on Europe of 6 MWARs was not economical.
- 3.18.13 Mr. Chef (Morocco and Tunisia) maintained that the problem had to be considered from the operational standpoint. The superimposition of MWARs in Europe was inevitable, since this area was a hub of operations. Mr. Jouk's suggestion for the amalgamation of adjacent areas, with a view to their operation on one family of frequencies, was impractical.
- Mr. Layzell (IATA) said that operational experience had proved that no increase in loading was possible. The problem had been carefully studied by IATA on a world basis and, had there not been a recommendation for economy in the final resolution of the First Session and an extreme shortage of frequencies, IATA would have pressed for an increased number of frequencies for certain MWARAS.
- Mr. Greven (ICAO) said that he had made a statement in Committee 6 on requirements for areas CWP, NP and CEP. The ICAO NP regional meeting in July, 1948, not being aware of events at the First Session, had recommended certain families of frequencies for A-3 type of emission in the North Pacific area. As these were allotted on an operational basis, it seemed impossible for the Conference to decide that they should be reduced.
- 3.18.16 Mr. Bodeaga (Roumania) said that Mr. Chef's explanations concerning the loadings on MWARs could be applied also to RDARs, whose requirements were equally justified. It appeared, however, that a strictly mathematical formula was being applied to RDARs, while allowance for other factors was being made in the case of MWARs.
- 3.18.17 Mr. Chef (Morocco and Tunisia) referred to paragraph 13, c) of Vol. III of the Interim Report, which invited Administrations to coordinate the results of their studies as far as possible. Some European countries had complied with this directive, and as a result a considerable reduction of requirements had been achieved.

3.18.18

Mr. Greven (ICAO) referred to a statement by Mr. Jouk that 8 flights per week were made in area NP. ICAO Doc. 211 indicated that there were 102 flights per week, 14 route segments and a loading on 3 Mc/s of 1.05 channels.

Mr. Jouk (Bielorussia) said that only 8 flights covered the best part of area NP. The remainder were confined to North America, and being short-distance flights should be considered as RDARs.

- 3.18.19 Mr. Harvey (Union of South Africa) explained, with several numerical examples, that from a practical point of view the loading for the areas in question was, in fact. correct.
- 3.18.20 Mr. Jyengar (India) said that, with regard to area ME, the total requirements in the 3,3.5 and 4.7 Mc/s bands amounted to 3.998, for which 2 frequencies had been allotted. Certain flights had been omitted in the calculations, and therefore in this area also MWAR frequencies were loaded more heavily than the figures indicated.

#### Point 3) of Document 70

- Mr. Jouk (Bielorussia) said that this proposal had been included in view of the tendency to give priority to MWARs in regard to number of frequencies and protection ratio. Sharing conditions on MWARs and RDARs were not the same. The protection standards for sharing among MWARs were in fact equal to 25 db. Attempts had been made to reassign frequencies only for RDARs on the basis of lower power emission, e.g. 200 watts. Frequency allocation should be made on the basis of like conditions for both systems. If MWARs and RDARs were given equal consideration, increased sharing possibilities would result. The safety of life was equally important in both services.
- The <u>Vice-Chairman</u> said that for the protection of life the different conditions of operation on MWARs and in certain areas had to be taken into account. Most domestic flights took place in the daytime, whereas MWARs were operated day and night, and at the First Session it had been decided that certain night frequencies should be allotted to MWARs. With regard to the power of transmission, in some areas nothing less than 1 kw would suffice, and therefore the draft Plan correctly provided for a uniform use of 1 kw.

There being no further comment on paragraph 3), discussion was opened on point 4 of Document 70.

#### 3.20 Point 4) of Document 70.

- 3.20.1 Mr. Harvey (Union of South Africa) said that it might be advantageous to repeat certain MWARA lower order frequencies on a daytime basis. For example, NA and SA frequencies could be repeated into Regions 2 and 3. In that case, "daytime" would have to be carefully defined.
- 3.20.2 Mr. Greven (ICAO) said that the possibility of sharing lower order frequencies had been recognized for some time. If daytime sharing were undertaken, however, care should be taken to avoid interference with primary allotments under night protection conditions.

### - 14 - (Aer/2-110-E)

- 3,20,3

  Mr. Barajas (Mexico) referred to the provisions of the Radio Regulations for the use of frequencies on a secondary basis, provided harmful interference was not caused to existing services. Assignments based on the repetition of daytime frequencies, as proposed in point 4) of Doc. 70, would be unwise.
- 3.20.4 Mr. Jouk (Bielorussia) said that the purpose of the proposal was not properly understood. It was not intended merely to duplicate the Regulations and to allot frequencies on a secondary basis. The draft Plan should give no preference to MWARs in the allotment of frequencies.
- 5.20.5 The Chairman asked whether Mr. Jouk would agree to the insertion of a footnote to the allotment table; this footnote would specify that MWAR frequencies could be repeated only on condition that interference was not caused to services enjoying night-time protection privileges.

Mr. Jouk (Bielorussia) said that, since no privileges should be granted, it would be incorrect to insert any footnote in the draft Plan,

If some frequencies were needed by MWARs for night-time operation and by RDARs for daytime operation, both services might encounter mutual interference in the morning or evening.

- 3.20.6 Mr. Barajas (Mexico) referred to Mr. Jouk's statement (No.3.20.4). Allocation on a secondary basis was clearly defined in the Radio Regulations. Here the question was one of assignment within the same service, and frequencies could only be repeated if no interference would result.
- Mr. Greven (ICAO) said that under the Regulations Administrations could assign any frequency to domestic services. For the aeronautical service, however, every possible provision must be made on both MWARs and RDARs for the safety of life, and co-channel interference between stations on a given route already involved risks enough. Daytime sharing interference might be difficult to eliminate and a suitable footnote to the allotment tables would help to reduce risks.

#### 3.21 Point 5) of Document 70.

Mr. Jouk (Bielorussia) said that this proposal had to be considered in conjunction with those contained in points 1), 2) and 3). If it were applied alone, the difference in the protection of frequencies allocated to MWARs and RDARs would be even greater. Application of all four proposals would result in increased sharing possibilities for both MWARs and RDARs. Under existing sharing conditions requirements were not fully satisfied and therefore the protection ratio should be reduced to 12 db, on condition that the provisions in point 1) were adopted. The ICAO Plan applied this ratio in a number of cases and the proposal was merely for the extension of this practice to ensure adequate repetition. In many cases, e.g. on frequencies in the 10 to 18 Mc/s bands, where requirements were not so great, such reduction would not be necessary. The proposal therefore applied merely to night frequencies, requirements for which were particularly difficult to meet.

- In reply to Mr. Layzell (IATA), who queried the figure of 25 db, Mr. Jouk (Bielorussia) said that the First Session draft plan provided a 25 db protection ratio for MWARS, and the total number of frequencies, including those for meteorological services, amounted to 73. Later calculations on the basis of 15 db showed that almost the same number of frequencies would be required. Therefore, since no economy of frequencies would result, the former protection ratio of 25 db remained.
- 3.21.3 Mr. Layzell (IATA) said that 15 db and not 25 db had been used for the frequency pattern. The same number of frequencies was allotted, but these were repeated into RDARAs and sub-areas. He could not agree that MWARs had been protected on a basis of 25 db.
- Mr. Jouk (Bielorussia) said that, although MWAR frequencies had been repeated into RDARs on a ratio somewhere between 15 and 25 db(due to the erroneous use of curves), sharing among MWARs was still based on 25 db; this was due to the fact that MWARAs were very extensive. A frequency could not be repeated into an overlapping adjacent area and therefore the repetition distance was great enough to ensure a ratio of 25 db. For this reason it was proposed in point 1) of Document 70 that MWARA boundaries be revised.
- Mr. Searle (New Zealand) said that in fact no mistake had been made in the calculations referred to. One working group had scaled repetitions quickly to test the position, while the Propagation Group had used a different method and achieved more accurate results. He agreed with Mr. Layzell that the curves used at present were much the same as those used last year. Mr. Jouk said that Working Group C 1 had found the curves incorrect and the Chairman of the Group had considered that nevertheless very few repetition possibilities existed. This applied only to 15 db ratio cases. If the curves were corrected, and the ratio reduced to 12 db, these possibilities would be much greater. The mistakes of last year were due to the fact that repetition distances had been increased by adding the service range to the interference range.
- 3.21.6 Mr. Greven (ICAO) said that ICAO had recommended a minimum of 15 db.
  Any reduction of this minimum would not appreciably influence the satisfaction of requirements.
- 3.21.7 Mr. White (U.S.A.) said that he was opposed to any further reduction of the protection ratio. This would involve the risk of interference because of the difference in strength between the desired and interfering signals.
- 3.21.8 Mr. Jouk (Bielorussia) emphasized that the ratio of 12 db had been adopted in the ICAO draft Plan for certain bands, and that this principle might be extended to other bands where the frequency problem was particularly acute.
- 3,21.9 Mr. Selis (Netherlands) proposed that, since this subject had been thoroughly discussed at the First Session, the Assembly should pass to consideration of point 6) of Document 70.

This proposal was seconded by Mr. Barajas (Mexico), and adopted by 19 votes to 9, with 8 abstentions.

### 3.22 Point 6) of document 70.

- Mr. Jouk (Bielorussia) said that this proposal had been made at the First Session. Several stations usually operated according to schedule and one family of frequencies divided into groups should be sufficient for meteorological broadcasts.
- 3.22.2 The <u>Chairman</u> asked whether the proposal implied (1) that meteorological information would not be transmitted on A-3 frequencies, and (2) that A-1 channels only would be used for such broadcasts.

Mr. Jouk (Bielorussia) agreed that this was the intention. At the present time only A-1 emissions were used by the meteorological services, and provision should be made accordingly in the draft Plan.

- Mr. Greven (ICAO) said that at the First Session 2 families of frequencies had been allotted for meteorological broadcasts to aircraft in flight. These did not meet requirements, particularly in the European area. The present tendency was toward the use of A-3 type of transmission, and one family of frequencies would not suffice. From the point of view of economy and efficiency it would be unwise to disregard meteorological requirements.
- 3.22.3 Mr. Jouk (Bielorussia) said that in the European area such information was transmitted mainly over medium wave frequencies and could easily be broadcast over ultra-short waves. For large coessis areas, of course a family of high frequencies might be required.
- Mr. Chef (Morocco and Tunisia) said that in European sub-areas meteorological information was transmitted every half-hour on the 3 and 8 Mc/s bands simultaneously. France alone transmitted eight meteorological broadcasts every half-hour, using 24 minutes of transmitting time. Four North African stations used 12 minutes every half hour.

The frequencies in question were used by the mobile service and the information was destined mainly for aircraft. The allotment of frequencies to the aeronautical service enabled the loadings on other frequencies to be reduced.

- 3.22.5 Mr. Greven (ICAO) said that in Europe requirements for meteorological broadcasts had existed since the first European ICAO meeting. Medium frequency broadcasts did not cover the required area, and therefore high frequencies were the only solution at present.
- 5.22.6 Mr. Brant (Canada) supported Mr. Chef's view, and said that in Canada weather reports were broadcast for seven stations on one family of frequencies. This type of broadcast was very specialized in comparison with the fixed meteorological service.

#### 3.23 Point 7) of Aer/2 Document No. 70

- 3.25.1 Mr. Jouk (Bielorussia) said that the opinion had been expressed that the Conference should allot frequencies to areas and sub-areas only. This, however, would contradict the Soviet resolution unanimously adopted at the 5th Plenary Meeting (Aer Docs. Nos. 161 and 21).
- 3.23.2 The Chairman said that the Atlantic City Radio Regulations prescribed the manner in which use was to be made of the bands allocated to R and OR services. He doubted therefore whether the Conference was competent to over-rule these provisions, and invited other Delegates to express their views.
- 3.23.3 Mr. Jouk (Bielorussia), in reply to Mr. Deuchars (United Kingdom Colonies) said that the allotment of frequencies to countries would be to the advantage of many European countries whose territories did not form a single sub-area. The smaller the area served, the greater would be the repetition possibilities.
- 5.23.4 Mr. Flisak (Poland) supported the Soviet proposal for allotment of frequencies to countries; it was important that Delegations should be able to report in detail to their Administrations on the allotments made to them.
- Mr. Kito (Albania) said that, under the terms of reference given to the Aeronautical Conference, and to the international maritime conference, in paragraphs c) and d) of Article 6 of the Annex to the Resolution on the New International Frequency List, allotments were to be made to countries. This principle had been endorsed in the Resolution adopted at the First Session. He agreed with the Polish Delegate that Administrations should know which frequencies would be available to meet their requirements.
- 5.23.6 The Chairman emphasized that paragraph and page references should be given whenever documents were quoted. Paragraph c) of Article 6,Mr.Kito referred to, made no mention of the allotment of frequencies to countries.
- 5.23.7 The <u>Vice-Chairman</u> did not agree that allotment to countries would improve repetition possibilities. He cited in support of this the conditions in Area 1.
- 3.23.8 Mr. Barajas (Mexico) agreed with the Chairman's interpretation of the Atlantic City Convention provisions. Although paragraph c) of Article 6 referred to above did not exclude allotment to countries, practical considerations made such allotment at the present time undesirable. In view of the work already carried out by the Conference, Mexico was opposed to the adoption of paragraph 7) of Document 70.
- 3.23.9 Mr. Harizanov (Bulgaria) was opposed to the Mexican viewpoint.

  Some countries did not comprise a single sub-area. He referred to paragraph b) on page 2 of the Report of the First Session. If the Conference did not allot to countries, regional conferences would be necessary. He supported the Delegates of Albania and Poland and appealed for a more disinterested approach.

3,23.10

The Vice-Chairman considered that the will to cooperate had been manifested by the majority more frequently than by the minority. The Brazilian Delegation could not accept the motive underlying Document 70, namely, the adoption of a new set of principles which would provide more frequencies for certain areas whose minimum requirements had not been met and for which statistics had not been submitted. The increased repetition possibilities called for by the Soviet proposal could only be obtained by lowering standards below the acceptable minimum.

3.23.11

Mr. Barajas (Mexico) said that, although all countries naturally wished to safeguard their own interests, the over-riding consideration was the assurance of better flying conditions in the future.

3.23.12

Mr. Selis (Netherlands) made the following statement:

"I assume from the statements just made by our Vice-Chairman and other Delegates that we are now ready to make some general remarks on the proposals contained in Document 70. I may recall that the Conference decided that frequency requirements should be determined by calculation from data, as required by the Annex to the Interim Report of the First Session of this Conference. This decision meant that it was considered impossible to work on stated requirements only, as was proved very clearly at the First Session.

Some countries have still not submitted the required data. Nevertheless the Conference, in a spirit of international cooperation, has provided a considerable number of frequencies, which are generally considered fair and sufficient, for the areas concerned. Apart from their general purport, the specific object of the proposals 1) to 8) seems to be to provide more frequencies for area 2. But how can the Conference know exactly whether it is necessary to increase the number of frequencies in that area when no statistics whatever have been submitted? In these circumstances, that is to say in the absence of detailed information, we think that there is only one question before the Delegates: on the basis of available information, is it considered that a reasonable number of frequencies have been allotted to Areas 2 and 3?.

In this connection, I would like to make it clear that the Delegation of the Netherlands, Curacao and Surinam would not agree to a plan which, in its opinion, did not attempt to treat every country on an equal footing, even if all the Netherlands requirements were fulfilled.

In these circumstances, as explained above, we think that the plan as it stands now is drafted in a spirit of international cooperation and provides, as far as can be judged, a reasonable number of frequencies for those areas which did not submit statistics.

It is therefore the opinion of the Netherlands that the basic principles which have been used until now for the Plan, and which were thoroughly discussed last year, should not be changed essentially in the manner proposed in Document 70<sup>n</sup>,

He then proposed the following resolution:

"The Conference decides:

(1) To instruct Working Group C to continue its present work and to introduce no new principles, as proposed in paragraphs 1) to 3) and 5) to 8) of Aer Doc.70, since this would necessitate recommencing the work from the beginning.

#### - 19 -(Aer/2-110-E)

(2) To instruct Working Group C to make provision in its plan for the use by sub-area 1D and areas 2 and 3, on a daytime basis, of any frequency, on condition that such use will not interfere with the unlimited use of the frequency by any other area to which it is allotted in the present plan."

The above text incorporates amendments suggested by Mr. Souto Cruz (Portugal) and Mr. Harvey (Union of South Africa). The proposal was seconded by Mr. Khan (Pakistan).

3.23.13

Mr. Jouk (Bielorussia), replying to the Vice-Chairman and Mr. Selis, said that the Soviet Delegation had made statistical data available one day after the final date for submission, and had given the reasons for the delay. However, the Conference had thereupon decided that no useful purpose could be served by continuing the work of Working Group B. At the First Session, the Soviet Delegation had reduced its requirements to the very minimum on the basis of the fully coordinated use of frequencies within "Calculated requirements" would show a substantial increase, areas 2 and 3. as could be confirmed by statistical data.

The underlying purpose of point 4) of Document 70 was to give greater satisfaction to the small countries of Central Europe by repeating certain MWARA frequencies on the basis of daytime protection standards, since domestic flights in those countries took place mostly during the day.

3.23.14

Mr. Bolkhovitine (USSR) supported Mr. Jouk's statement regarding the disbandment of Working Group B as soon as the data for areas 2 and 3 had been made available. It was regrettable that Document 70 had been so superficially discussed. Obviously, complicated engineering problems should not be studied in the Plenary Assembly and reference to a working group would have been more appropriate. No convincing arguments had been advanced against Document 70, and the necessity for principles other than those contained in Aer/2 Document No. 5 had clearly emerged from the discussion.

3.23.15

Mr. Souto Cruz (Portugal) considered that Document 70 contained few arguments which had not been examined at the First Session. He proposed that the debate on points 1) to 7) be closed.

This proposal was seconded by Mr. Searle (New Zealand) and adopted by 29 votes to 10, with 4 abstentions.

3.23.16

Mr. Harizanov (Bulgaria) made the following statement:

"The Delegate of the P.R. of Bulgaria considers that the motion by the Delegate of the Netherlands concerning the proposals contained in Doc. 70 amounts to a complete rejection of all these proposals, and shows a desire to take into account the difficulties and the unsatisfactory situation of countries in sub-area ID - difficulties which have not, until now, been recognised by some Delegations. This desire can be seen in the grant to countries in sub-area 1D of the right to daytime use of frequencies allocated to the MWARs, on condition that harmful interference is not caused. The Bulgarian Delegation considers that such a step is unnecessary, since the Atlantic City Convention authorises national administrations to use any frequencies whatsoever, provided that harmful interference does not result.

- 20 - (Aer/2-110-E)

The Administration of the P.R. of Bulgaria, which is in sub-area 1D, is satisfied neither with the ICAO plan nor with point (2) of the motion by the Delegate of the Netherlands.

The Bulgarian Delegation considers that the proposals contained in Doc. 70 are constructive and, if adopted, could contribute to the improvement of the ICAO plan in respect of the economical distribution of frequencies for the aeronautical mobile (R) service, and of the increase of repetition possibilities.

For these reasons, the Bulgarian Delegation considers that the USSR proposals should be adopted in full, and will vote against the motion of the Delegate of the Netherlands.

3,23,17

Mr. Khan (Pakistan) said that the detailed discussion of points 1) to 7) of Document 70 had confirmed his belief that the bases on which the frequency allotment plan was being evolved would provide the best possible solution. The only useful proposal in Document 70 was that advanced in point 2), but this could only be accepted at the expense of operational efficiency. The sharing of lower frequencies on a daytime basis, with a view to improving conditions in certain areas, was a concession made in a spirit of goodwill. The recommendations in Mr. Selie proposal would ensure a greater degree of satisfaction for all countries.

#### 3.23.18

Mr. Kito (Albania) made the following statement:

"The Delegation of the People's Republic of Albania states that it cannot accept the motion of the Delegate of the Netherlands for the rejection of the proposals contained in Doc. Aer/2 No.70, and will vote against this motion. Moreover, the Albanian Delegation entirely supports Doc.Aer/2 No. 70. It considers that the proposals in this document are realistic, practical, and constructive and that, if adopted, they would enable the Conference to prepare a rational and equitable allocation plan which would, within the limits of available spectrum space, take account of the interests of all countries."

#### 3.23.19

Mr. Balazs (Hungary) made the following statement:

"The Delegation of the People's Republic of Hungary is unable to accept the formal proposal submitted by the Netherlands Delegation. The Hungarian Delegation considers that the principles and practical proposals set out in Aer/2 Document No. 70 could assist the International Administrative Aeronautical Radio Conference in the work of drawing up a realistic frequency allotment plan for the aeronautical mobile "R" services capable of satisfying all countries on the basis of the frequency requirements submitted by national Administrations.

The Hungarian Delegation believes that, in conformity with the Atlantic City directives and with the decision taken by this Conference at its First Session, frequencies for the aeronautical mobile "R" services must be allotted not only to areas and sub-areas but also to countries.

The Delegation of the People's Republic of Hungary, therefore, will vote against the adoption of the Netherlands proposal."

#### 3,23,20

#### Mr. Bodeaga (Roumania) made the following statement:

"Before explaining its viewpoint in regard to the motion of the Netherlands Delegation, the Delegation of the People's Republic of Rousania wishes to make the following observations on the motion for closure of the debate submitted by the Portuguese Delegation.

During the debate on the proposals contained in Document 70, motions for closure of the debate have been too frequently resorted to in order to prevent the thorough discussion of these proposals. By means of such motions, instead of well-founded arguments, the Delegations less concerned with improving the allotment of frequencies for Region 1, and particularly extra-European Delegations, have succeeded in confining the discussions to the sphere of generalities. The motion for closure of the debate submitted by the Portuguese Delegation is no exception to this "general rule" of procedure.

With regard to the proposal of the Netherlands Delegation, the Delegation of the P.R. of Romania wishes to state that the first paragraph thereof, recommending the rejection of all the constructive proposals in Document 70, is an attempt to prevent any possible compromise solution.

The 2nd paragraph of the Netherlands motion concerning paragraph 4) of Document 70 is unsatisfactory and will not improve the allotment of frequencies for Region 1. It represents rather an attempt to correct the bad impression created by the discussion of the 26th Plenary Assembly on the proposals in Document 70.

Mr. Searle (New Zealand) said that, although his country did have national interests to protect, it was also concerned with aviation on a world-wide scale. The issues raised in Document 70 had been examined thoroughly during the First Session; during the recess, New Zealand had consolidated and reduced its requirements. He approved the motions for closure of debate, and proposed that the Netherlands motion be put to the vote.

This proposal was seconded by the Delegate of Egypt, and adopted by 30 votes to 10, with no abstentions.

- 3.23.22 The Netherlands proposal (No. 3.23.12) was then put to the vote, and adopted by 34 votes to 10, with no abstentions.
- 3.23.23

  Mr. Koffer (Czechoslovakia) said that the bases adopted by the Conference for a frequency allotment plan could not satisfy the requirements submitted by a number of countries and, on behalf of his Administration, he supported the proposals advanced in Aer/2 Document No. 70.
- 3.23.24 The following statements were made:

#### Mr. Bolkhovitine (USSR):

"In connection with the acceptance by means of voting of the unfounded decision to reject the practical proposals set forth in document 70, the purpose of which was to create a spirit of co-operation and mutual understanding at the conference, the delegations of the USSR, Ukrainian SSR and Bielorussian SSR state that this decision once again clearly demonstrates the lack of objectivity and incorrect nature of the working methods

#### Mr. Gudović (Yugoslavia):

"The discussion on Document 70 has merely demonstrated once again how logical in all respects are the arguments contained therein. It has proved that the technical principles proposed are fair and reasonable because they provide the basis for a satisfactory plan. The authors of the document were absolutely justified in submitting it to the Conference. Several Delegates have called the first part of this document aggressive. On the other hand, the lack of arguments to prove this has not prevented the majority from voting against its adoption. No reply has been given to our question as to which principles have been adopted by the majority, although everyone knows that only on those advocated in Document 70 can a plan be drawn up which would satisfy all countries.

As it considers Document 70 to be quite impartial, the Delegation of the People's Federal Republic of Yugoslavia has voted unreservedly for its adoption and against the proposal of the Delegate of the Netherlands.

Moreover, I repeat that the ICAO Plan which has been adopted as the working basis of the Conference is against the interests of my Administration and does not satisfy its requirements.

The People's Federal Republic of Yugoslavia makes all necessary reservations and does not consider itself bound by the decision to adopt the Netherlands motion concerning Document 70."

#### Mr. Flisak (Poland):

"In view of the decision by a majority vote of the Conference to reject the proposals contained in Aer/2 Document No. 70, despite the serious arguments put forward by the Delegation of the U.S.S.R., the Polish Delegation wishes to state that it does not consider itself bound by this decision and reserves the right to act as it sees fit."

#### Mr. Bodeaga (Rumania):

"The Delegation of the People's Republic of Roumania, considering:

- 1) that the allotment of frequencies based on the ICAO Plan ensures the best operational conditions for MWARs at the expense of domestic and regional services in certain areas;
- 2) that the attempt by the Delegations of the USSR, the Bielorussian SSR and the Ukrainian SSR to improve the allotment
  of frequencies for domestic and regional services, so that
  frequencies might be distributed more equitably between
  MWARS and RDARS, has not met with any response from Delegations who find themselves fully satisfied by the distribution
  provided for in the ICAO Plan;
- 5) that the distinctly negative attitude adopted by some Delegations, and clearly demonstrated during the discussions, towards the compromise proposals in Document 70 can result only in the development of an unacceptable plan;

states, on behalf of its Administration, that it reserves complete freedom of action with respect to the plan which is being prepared on the bases adopted by the Conference."

#### Mr. Kito (Albania):

"The Delegation of the People's Republic of Albania considers that the decision which has just been taken by the customary majority of the Assembly is incorrect. This decision is unfounded, since the examination of the various points of the Soviet proposal was more of a formality than a reality and was governed by procedural considerations from which the majority did not find it expedient to depart. Despite this superficial examination, the decision taken clearly shows that the majority wishes to impose its will on a large number of countries; this has already been admitted by the Delegate of Brazil, Colonel Costa, who said that the minority should accede to the majority. In point of fact, several Delegations who voted just now for the Netherlands motion said last Friday that the proposals in Document 70 were of a technical nature and could not be examined in sufficient detail by the Plenary Assembly for their content and importance to be understood. Mr. Quijano, the Delegate of Pakistan, the Delegate of France, etc., thought that the Soviet proposals should be referred to a working group for thorough examination. However, at the insistence of the United States Delegation, they abandoned this opinion, to which they are entitled, and agreed, or did not object, to a superficial examination of the proposals in Document 70 by the Plenary Assembly.

In his last statement, Col. Costa said that it was the minority which did not wish to cooperate and that the majority on the other hand was doing everything possible to take account of the views of the minority. As an example, he mentioned the examination of Document 70. Such a statement is untrue and is an attempt to distort the facts. The procedure adopted for the examination of the proposals in Document 70 and the results thereof show clearly that the majority did not undertake this examination in order to consider the views of the minority or to reach a compromise solution in a spirit of mutual understanding. The Delegations which have voted against the proposals in Document 70, and particularly those of the United States and of the United Kingdom, defined their attitude in this regard well in advance of this superficial examination. It is clear, therefore, that this superficial examination has had no effect upon the voting results and was merely a screen behind which the majority tried to hide its hostility to international cooperation.

The proposals made by the USSR, Bielorussian SSR and Ukrainian SSR Delegations are proof of their spirit of international cooperation and of their desire to see this Conference conclude its work successfully and to the satisfaction of all countries. On the other hand, the baseless rejection by the majority of these constructive and equitable proposals shows that it is the majority, and particularly the Delegations of the United States and of the United Kingdom, which does not wish to come to an understanding with the minority, which does not want cooperation or unanimous agreement, and which demonstrates its hostility and its intention to impose a decision on the minority in its own interests and at the expense of other countries. Such a course will only result in the development of an arbitrary plan serving the interests of certain countries. It is obvious that such a plan, which is not supported by all countries, cannot be applied and will remain a dead letter. In conclusion, and in view of the situation created at this Conference by the rejection of the proposals in Document 70, the Delegation of the People's Republic of Albania protests against the decision taken and reserves full freedom of action during the Conference. "

#### -24 -(Aer/2-110-E)

#### Mr. Harizanov (Bulgaria):

"It has become clear, during discussion on Document 70, submitted by the USSR Delegation, that the Delegations of countries members of ICAO will accept no revision of the ICAO plan with a view to the preparation by the IAARC of a frequency allocation plan for the (R) service which would be acceptable to all Delegations. On the basis of unconvincing arguments, and by means of motions for closure of debate, the majority has rejected the constructive proposals contained in Document 70. These proposals, if adopted, would make it possible to economise in frequencies and to increase, as is so necessary, frequency repetition possibilities.

In view of this hostile attitude, which is so inimical to collaboration, the Bulgarian Delegation considers it necessary to state the following:

- 1) It has voted against the motion by the Delegate of the Netherlands for the rejection of the proposals contained in Doc. 70.
- 2) It considers that the delegations of countries members of ICAO, and their supporters, do not wish to collaborate, and wish to sponsor the ICAO plan as an IAARC plan, heedless of criticism of it and of the interests of all countries By pursuing this course, the IAARC will merely draw up a frequency allocation plan for MWARs and for areas and sub-areas, and not one allocating frequencies to individual countries. Such procedure is unacceptable to the Bulgarian Administration.
- 5) The Delegation of the P.R. of Bulgaria associates itself with the statement made by the USSR Delegation, and reserves full freedom of action in respect of the consequences of such discriminatory procedure at this Conference."

#### Mr. Balazs (Hungary):

"The Delegation of the People's Republic of Hungary fully supports the statement and protests made by the USSR Delegation concerning the decision which has just been taken by the majority on Aer/2 Document No. 70. The Hungarian Delegation feels that this majority decision has not been taken in a spirit of cooperation. The Hungarian Delegation does not consider itself bound by this decision and reserves the right to act as it sees fit."

#### Mr. Harvey (Union of South Africa):

"The Delegation of the Union of South Africa deprecates the statements of reservations made by certain Administrations in that they seem to indicate that the Conference has not based its conclusions on sound technical
and operational foundations and that it has not adequately concerned itself
with the proposals raised in the second portion of Doc. 70. It is desired to
place on record that the Delegate of the Union of South Africa considers that
adequate discussion has taken place on Doc. 70 and that adequate and sound
counterarguments were advanced, based on conclusions arrived at over a considerable period of activity and detailed study as to the best method of serving
the aviation interests of all countries."

### - 25 - (Aer/2-110-E)

- 3.23.25 Mr. Khan (Pakistan) rejected the suggestion of the Delegate of Albania that the Pakistan Delegation had succumbed to pressure from Delegations of either the United Kingdom or the United States.
- 3.23.26 Mr. Mouchez (France) deprecated the use by the Delegate of Albania of certain derogatory expressions similar to those appearing in the first part of Document 70.

#### 4. ITEM 4 OF THE AGENDA: DURATION OF THE CONFERENCE

After Mr. White (U.S.A.) and Mr. Mouchez (France), the Chairmen of Working Group C and of the Drafting Committee, respectively, had given their estimates of the time required for completion of the work, Mr. Harvey (Union of South Africa) proposed that the Conference set its closing date as "within the first week of October 1949". This proposal was seconded by Mr. Souto Cruz (Portugal), and was adopted, the results of the vote, by show of hands, being as follows:

In Favour 27 Opposed 0 Abstentions 7

#### 5. ITEM 5 OF THE AGENDA: ANY OTHER BUSINESS

Mr. Chef (Morocco and Tunisia) suggested that, in view of the fact that a decision to alter the boundaries of Sub-Area 1C had been taken at the beginning of the Meeting (See No. 2.4.1), the Assembly might also consider the alteration of the boundaries of areas 1 and 1E. He quoted, in support of this proposal, para. 3.4.2 of Aer/2 Doc. 5, and para. 3.4 of Aer/2 Doc. 74 (Report of the 4th Meeting of Working Group Cl). This Report still awaited approval by Working Group C. He suggested that the southern boundaries of area 1 and of sub-area 1E should lie along a line joining two points having coordinates 31° N, 10° W and 31° N, 11° E. He was supported in this by Mr. Harvey (South Africa), the Chairman of Working Group Cl and, in the absence of objections, Mr. Chef's proposal was de-clared unanimously adopted.

The Chairman closed the 26th Plenary Session at 18.20 hrs. on Monday, September 12th, 1949.

Rapporteurs:

Secretary:

Chairman:

G.M. Forrest

J. Kunz

A.L. Lebel

I.H. Hamilton

2nd Session

Geneva 1949

### MINUTES OF THE 27th PLENARY SESSION held on Friday, September 9th 1949

The Meeting was opened at 14.30 hrs. by the Chairman, Mr. Arthur Lebel.

The following countries and organisations were represented:

Albania (PR); Argentine; Australia; Belgium; Bielorussian SSR; Brazil; Bulgaria (PR); Canada; Chile; Colombia; Czechoslovakia (PR); Denmark; Dominican Republic; Egypt; France; French Overseas Territories; Hungary; Iceland; India; Indonesia; Ireland; Italy; Luxembourg; Morocco and Tunisia; Mexico; New Zealand; Norway; Pakistan; Paraguay; Philippines (Republic of); Poland (Republic of); Portugal; Portuguese Colonies; Roumania(PR); Ukrainian SSR; Union of South Africa; USSR; United Kingdom; UK Colonies; United States; US Territories; Venezuela; Yugoslavia (FPR): I.F.R.B.: I.C.A.O.

The Agenda: (Doc. 83): RECOMMENDATIONS OF THE DRAFTING COMMITTEE ON THE FORM OF THE FINAL ACTS OF THE CONFERENCE

1. Mr. Mouchez (France), Chairman of the Drafting Committee, introducing Doc. 87, explained that the Drafting Committee's task was laid down in Aer Doc. 194 of the First Session.

The uniformity of the final document in all languages, recommended at point 5.2.2 of Doc. 87, was essential if page and paragraph references were to be given. The entry into force, since the First Session, of the relevant provisions of the Atlantic City Convention, and the related decisions of the Administrative Council, had influenced the Drafting Committee's work.

- 2. The Chairman proposed that only the "Conclusions" (point 5) of Doc.87 be considered by the Assembly, since the preceding parts contained only information on the various factors bearing on the form of the final document, and did not therefore require approval. Mr. Mouchez agreed with this proposal, and, since no objections to it were raised by any Delegation, it was accordingly declared adopted unanimously, each sub-para, of point 5 to be treated as a proposal by Mr. Mouchez.
- 3. Proposal 5.1.5., for the printing of the final report, was seconded by Mr. Hansen (Argentine).
- Mr. Harizanov (Bulgaria) pointed out that, under the terms of the Atlantic City Resolution relating to the new International Frequency List, the I.A.A.R.C. would merely submit a provisional, or working report, to the P.F.B. for incorporation in the Draft Frequency List. Allocations might be altered at the Special Administrative Conference. The printing of a large number of copies of the final document, on good quality paper, would therefore involve needless expenditure, and he was opposed to it.
- 3.2 <u>Mr. Bolkhovitine</u> (U.S.S.R.) agreed with Mr. Harizanov. The final document of the I.A.A.R.C. would be merely a <u>draft</u> plan, and should therefore be published by the same process as the report of the First Session and the working documents of both Sessions.



- 3.3 Mr. Iyengar (India) pointed out that the manner in which the I.A.A. I.A.A.R.C. report would be incorporated in the final P.F.B. list remained undecided.
- Mr. Hansen (Argentine) said that any Conference had to prepare a final report at the conclusion of its work, and the IAARC was no exception. The Soviet and Bulgarian Delegations, in opposing the printing of the final document, were attempting to make the Conference produce a mere working document which would not require signature. He moved that debate on point 5.1.1 be closed.
- 3.5 This motion was seconded by <u>Dr. Franco-Franco</u> (Dominican Republic), and was <u>adopted</u>, the results of the vote, by show of hands, being as follows:

In favour 24

Opposed

9

Abstentions 1

In accordance with the above decision, a further vote by show of hands was
In accordance with the above decision, a further vote by show of hands was then taken on Mr. Mouchez's proposal in point 5,1,1 of Aer/2 Doc.87.
The results were as follows:

In favour

27

Opposed

10

Abstentions

2

Point 5.1.1 was accordingly declared approved.

Mr. Bolkhovitine (U.S.S.R.) said that the right of all Delegations to express their views had to be respected. In reply to Mr. Hansen's statement (see 3.4), he maintained that the latter had no right to impute any such motives to the Soviet Delegation, or to presume to speak on its behalf. The question of publication of the final report was in no way connected with the decision to sign or not to sign.

#### Mr. Bodeaga (Roumania) made the following statement:

"Mr. Chairman; I asked for the floor long before the Delegate of the Argentine submitted his motion for closure of the debate. I was not given permission to speak and you, Mr. Chairman, proceeded to the vote on the motion for closure of the debate without giving delegates the opportunity to express their opinions on this motion.

I am now given permission to speak after the vote has been taken, and I can only protest against such procedure.

It is no coincidence that the motion for closure of the debate was submitted by the Delegation of the Argentine. During practically the whole Conference, the Latin American delegations have made a specialty of motions for closure of debate, which are made with the object of preventing discussion on the substance of questions. This desire to prevent discussion, on the part of countries which are favoured in frequency allocations, is one of the characteristic features of a perfect voting machine.

The Delegation of the People's Republic of Roumania protests most vigorously against the procedure being followed".

8

3.9

The Chairman emphasised that neither Mr. Mouchez nor Mr. Hansen had proposed that the final report of the Conference be immutable. They had merely maintained that this report, being a terminal report, should be published in a definitive form, rather than as a working document.

3.10 Mr. Harizanov (Bulgaria) made the following statement:

"The Delegation of the People's Republic of Bulgaria considers it necessary to state the following:

- 1) By following a procedure which is without precedent in Conferences of the International Telecommunication Union, this Conference, with the staunch support of its Chairman, is taking deisions without adequate preliminary discussion. The Bulgarian Delegation is vigorously opposed to, and strongly protests against, such procedure.
- 2) In regard to the question under discussion, viz, the method of publication of the final document of the Conference, the Bulgarian Delegation considers that the Conference should not take decisions which will involve national Administrations in unnecessary expenditure".

3.11 Mr. Kito (Albania) made the following statement;

"We came to this Meeting to discuss Doc. 87, which sets out various economic considerations relating to the publication of the final documents of the Conference. The incorrect procedure followed by the Chairman, who has passed directly to examination of the "Conclusions" at point 5 of Document 87, without considering the remainder of the Document, and the use of the voting machine to close debates as soon as they have begun, have prevented Delegations from expressing their viewpoints. Moreover, the first recommendation of Committee 3 (Point 5.1.1 of Doc. 87) has been adopted mechanically and without study. Such procedure is anti-democratic, and is unacceptable in an international conference. If it were accepted, there would be no point in convening plenary meetings, which would become forums in which, on account of the votings machine, it would be impossible to express one's opinion.

Doc. 87 concerns all Administrations, and it deals with financial questions which should not be decided by voting. Paragraph 2.4.2 of Doc. 87 says, in fact, that we must safeguard the finances of the Union, which are also those of our countries. Various possible methods of publication of the final documents are set out in Doc. 87, and figures of the cost of each process are given on pages 3 and 4. However, these figures are not very clear. The final documents will be published in 4 or 5 languages; the number of copies in each language will not be the same. All of these points should be examined before deciding which is the best method of reproduction. In addition, the final documents of the Conference will be merely of a provisional nature; whatever allocations the Conference makes, these can be considered only as a draft plan to be forwarded to the P.F.B. and submitted to the Special Administrative Conference for study.

This being the case, we consider that the final documents of the Conference should be mimeographed; printing would involve considerable and needless expenditure for Administrations.

In regard to the statement of the Delegation of the Argentine, my Delegation considers that this is of a tendentious and political nature, and is out of place in a technical conference. It is but one further demonstration

of the discriminatory attitude, inimical to international cooperation, which has been adopted by certain Delegations at our Conference. No one has given the Delegate of the Argentine any right to prejudge whether a country will or will not sign the final acts; this question does not concern him. It can be seen quite clearly from the statement of the Delegate of the Argentine that he would like to see certain countries excluded, if possible, from the Conference. It must, however, be realised that we are participating here in an international conference of all countries, and not merely a group of countries. In a conference of this nature, dealing with waves, for which there are no frontiers, a partisan and uncooperative attitude is, in the first place, dangerous for its proponents since an arbitrary draft plan, which is not accepted by all countries, will remain a mere expression of the wishes of some delegations and will never be implemented.

Finally, the Delegation of the People's Republic of Albania protests categorically against the procedure adopted by the Chair, and against the tendentious statement by the Delegate of the Argentine. It has, in addition, voted against the adoption of point 5.1.1 of the "Conclusions" of Aer/2 87.

The Chairman wished to be excused from answering, but called attention to the decisions made a few minutes earlier concerning procedure (see Par.2)

Mr. Hansen (Argentine) declared his confidence in the Chair, and his approval of the manner in which the debate had been conducted. The question of signature of the final documents did not concern him, but he was, however, concerned lest the negative attitude adopted by the Soviet Delegation would delay the work of the Conference. If it wished to insist on such an attitude, its participation in the work of the Conference could serve no useful purpose.

Mr. Balazs (Hungary) made the following statement:

"The Delegation of the People's Republic of Hungary states that it has voted against the adoption of the recommendation in No. 5.1.1 in Doc. 87 of the Drafting Committee. The Delegation of Hungary is opposed to procedure which prevents Delegates from expressing their views during the debate, and vigorously protests against the statement of the Delegate of the Argentine".

- 3.14 Mr. Deuchars (United Kingdom Colonies) said that his Delegation, and that of the United Kingdom, had every confidence in the Chairman, whose conduct of the debates had been, in his opinion, completely unbiased.
- 3.15 Mr. Vorobiev (Ukrainian)SSR) objected to the Argentine proposal for closure of the debate. The Assembly had been convened for the express purpose of discussing Doc. 87 in detail.

He also protested against the Argentine Delegate's statement (No.3.4) regarding the motives of the Soviet Delegation. Such a statement was incompetible with the spirit of international cooperation which should prevail at international Conferences; the procedure followed by the Chair was likewise contrary to this spirit. The Ukrainian Delegation considered that the final document should be roneoed.

The Chairman again appealed to Delegates for brevity in their statements. He thanked Mr. Hansen and Mr. Deuchars for their expressions of confidence in the Chair.

3.13

### $(Aer72^{\frac{5}{2}}1I1-E)$

- Mr. Bolkhovitine repeated his protest against the Delegate of the Argentine's viewpoint. The latter apparently thought that Delegates who disagreed with him should leave the Conference. The Soviet Delegation strongly objected to such an attitude, which was destructive of the spirit of interenational cooperation.
- 3.18 Mr. Gudovic (Fugoslavia) made the following statement:

"This is not the first time that you, in your capacity of Chairman, have violated the rules of our Conference. You often pay no notice when Delegates of the people's democracies ask for the floor, and you are constantly steking means of violating the letter of the provisions of the Atlantic City Convention. By way of example, I would point out that, at the last Plenary Session, I requested that a vote be taken by roll call, and you thereupon gave an explanation of the situation which was most tendentious and in conflict with the provisions of Chapter 6, Rule 16, paragraph 3, of the General Regulations annexed to the Atlantic City Convention.

Moreover, the Delegate of the Argentine is conducting himself here in a magisterial manner, I do not think he has the right to make such statements. Nobody has authorised him to do so. The procedure imposed on us by the motion of the Delegate of the Argentine deprives us of our rights; it is now impossible for me to explain my point of view in regard to the proposal by Mr. Mouchez, Chairman of the Drafting Committee. I consider that the time has come to put an end to such procedure, against which I wish to enter a protest.

I should be grateful if you would have it put on record that the Delegate of Yugoslavia voted against the proposal of the Chairman of the Drafting Committee".

- Mr. Brant (Canada) considered that the Chairman had never placed any unnecessary obstacles in the way of full and free discussion. The Canadian Delegation had full confidence in the Chairman, and approved his method of conducting the debate. He moved that the meeting proceed to discussion of point 5.1.2 of Doc. 87.
- Mr. Mouchez, Chairman of the Drafting Committee, replied to enquiries from Mr. Khan (Pakistan) and Mr. Harizanov (Bulgaria) concerning, respectively, the terms "most appropriate method", and "charts and certain tables" which appeared in point 5.1.2.
- Point 5.1.2, point 5.2, and point 5.3 were, after consideration by the Assembly, ruled adopted unanimously.

The Chairman closed the Meeting at 15,30 hrs.

Rapporteur:

Secretary:

Chairman:

G.M. FORREST

J. KUNZ

A.L. LEBEL

# International Administrative Aeronautical Radio Conference <u>2nd Session</u>

Geneva 1949

#### LIST OF DOCUMENTS

Nos. 51-100

Notice: If a document has been followed by a corrigendum or an addendum, the number of the document is followed by an asterisk.

Number	<u>Date</u>	<u>Subject</u>	Remarks
51	18-8	Report of Working Group Cl - 1st Meeting.	· · · · · · · · · · · · · · · · · · ·
52	18-8	Report of Working Group C (Allotment of Frequencies) 3rd Meeting, 17 August 1949.	
53	19-8	Note from the Secretariat - Letter from the Delegation of Hungary.	,
54	19-8	Minutes of the 24th Plenary Session (August 9th 1949).	· ·
55	19-8	Report of Sub-Working Group C 1/2 (Allotment of Frequencies 1st Meeting, 19 August 1949.	s)
56	22-8	Note from the Secretariat - Letter from the Delegation of Iceland.	
57	23-8	Communication from the Chairman of the Conference.	•
58	24-8	Note from the Secretariat - Letter from the Delegation of the United Kingdom of Great Britain and North Ireland.	· · ;
59	24-8	Statement by the Delegate of the Kingdom of Greece.	
60*	15-8	Minutes of the 25th Plenary Session (August 16th and 17th)	. Corrigendum
61	24-8	Agenda for the 26th Plenary Meeting of 2 September 1949	
62	25-8	Report of Credentials Committee - 3rd Meeting.	
<b>.63</b>	<b>26-</b> 8	Report of Working Group B (Eastern Hemisphere) 5th and Final Meeting, 24 August 1949.	$Y_{i_1,\ldots,i_{m+1},\ldots,i_{m+1}}^{(i_1,i_2,\ldots,i_{m+1},\ldots,i_{m$
64	<b>26-</b> 8	List of Documents Nos. 1 to 50.	
65	26-8	Letter from the Chairman of the PFB to the Chairman of the Conference (reply to letter annexed to Doc.Aer/2 No. 13).	•
66	29-8	Report of the Steering Committee - 35th Meeting, August 24	•
67	29-8	Note: from the Secretariat - Letter from the Delegation of Paraguay.	
68 *	29-8	Report of Working Group Cl (Eastern Hemisphere) 2nd Meeting 23rd August 1949.	
		/	RCHIVES

Number	Date	Subject	Remarks
69	29 <b>-</b> 8	Report of Working Group Cl (Eastern Hemisphere) 24 August 1949.	
70	30 <del>-</del> 8	Statement of the Delegations of the Union of Soviet Socialist Republics, the Bielorussian SSR and the Ukrainian SSR.	
71	30-8	Statement of the Indian Delegation.	
72	29-8	Report of Working Group C (Allocation of Frequencies) 4th Meeting, 26 August 1949.	
73	31-8	Note from the Secretariat - Letter from the Delegation of Chile.	
74	31-8	Report of Working Group Cl (Eastern Hemisphere) 4th Meeting, 3l August 1949.	_
75	3 <b>1-</b> 8	Report of the Drafting Committee - First Meeting - 30 August 1949.	
76	1-9	Report of Credentials Committee -(Committee 2) 4th Meeting, 1 September 1949.	
77	1-9	Report of Working Group C3 (Sharing Plan) - 1st Meeting, 1 September 1949.	
<b>7</b> 8	1-9	Note from the Secretariat - Letter from the Delegation of Portugal.	
79	1-9	Note from the Secretariat - Letter from the Delegation of the Portuguese Colonies.	
80	3-9	List of Participants replacing that given in Aer/2 Doc.33.	·
81	5-9	Report of Working Group Cl - (5th Meeting) 1 September 1949	•
82	<b>5-</b> 9	Note from the Secretariat - Letter from the Delegation of the Netherlands.	
83	<b>6-</b> 9	Agenda - Plenary Assembly (27th), September 9th, 1949.	
84	6 <b>-</b> 9	Report of the Credentials Committee - 5th Meeting, September 5, 1949.	
85	6-9	Statement by the Delegation of the U.S.A.	
86	6 <b>-</b> 9	Report of Working Group C - 5th Meeting, September 1st 1949	•
87	<b>7-</b> 9	Recommendation by Committee 3 (Drafting).	
88	<b>7-</b> 9	Recommendation by Committee 3 (Drafting)	
89	9-9	Note from the Secretariat - Letter from the Delegation of Poland.	:

Number	Date	<u>Subject</u>	Remarks
90 *	10-9	Report of the Chairman of Subworking Group C 3/1.	Corrigendum
91	10-9	Statement of the United Kingdom.	
92	13-9	Draft Resolution submitted by the United States.	
93	13-9	Circular telegram sent to all Administrations Members of the Union concerning subscriptions for the final documen	t.
94	14-9	Report of Sub-Working Group C4 - 1st Meeting, 14 Septembe	r.
95	14-9	Report of Sub-Working Group C3 (Sharing Plan). 2nd Meetin 13th September 1949.	g
96	<b>15-</b> 9	Report by Working Group C (Frequency Sharing) 6th Meeting 13 September 1949,	
97	15-9	Drafting Committee - 14 September 1949, Report.	
98	15-9	Report of the Drafting Committee (2nd Meeting) 7 September	r.
99	16-9	Report of the Drafting Committee (4th Meeting) 16 September	er.
100	16-9	Report of the Special Group on the format of the Final Report of WG-C.	

The Secretary wishes to draw the attention of Delegates to the following communication received from the Delegation of the Commonwealth of Australia:

"Will you please note that during the absence of the Australian Delegate from meetings of the I.A.A.R.C., the Australian interests will be represented by the Delegation of the United Kingdom, which will vote on its behalf.

D.J. ANDERSON
Delegate of the Commonwealth
of Australia"

Conférence internationale administrative des Radiocommunications aéronautiques

<u>2e session</u>

Genève 1949

Aér/2 Document No.113-F 26 septembre 1949

Le Secrétaire appelle l'attention de MM. les Délégués sur la communication ci-dessous qu'il a reçue de la Délégation de la Fédération de l'Australie:

"Voulez-vous avoir l'obligeance de noter que durant les absences de la Délégation de la Fédération de l'Australie des séances de la C.I.A.R.A., ce pays sera représenté par la Délégation du Royanne-Uni.

D.J. ANDERSON Délégué de la Fédération de l'Australie

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas

2a Reunión
Ginebra 1949

Aer/2 Documento Núm.113-S 26 de septiembre de 1949

El Secretario llama la atención de los Señores Delegados sobre la siguiente comunicación remitida por el Delegado de la Foderación de Australia:

"Ruego al Señor Secretario se sirva tomar nota de que la Delegación de Australia estará representada por la Delegación del Reino Unido con voz y voto, cuando no le sea posible asistir a las sesiones de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas.

D.J. ANDERSON
Delegado de la Federación de
Australia"

Geneva 1949

# AGENDA FOR THE 28th PLENARY MEETING to be held on Thursday, 29th September, 1949 at 0930 h.

- 1. Approval of the Minutes of the 26th and 27th Plenary Meetings (Aer/2 Docs. 110 and 111).
- 2. Reports of Working Group C (Aer/2 Doc.109) (For annexes and appendixes, see Aer/2 Doc.104).
- 3. Recommendation of the Drafting Committee relating to the "Minimum and maximum range charts" (Aer/2 Doc.88).
- 4. Preamble of the Final Document (Aer/2 Doc.102).
- 5. Points 5.2, 5.3 of the report of the 4th meeting of the Drafting Committee (Aer/2 Doc.99).
- 6. Draft Resolution submitted by the United States Delegation (Aer/2 Doc.92).
- 7. Draft Recommendation submitted by the Brazilian Delegation (Aer/2 Doc.105).
- 8. Any other business.



### Conférence internationale administrative des Radiocommunications aéronautiques 2e session

Aér/2 Document No.115-F 27 septembre 1949

Genève 1949

Le Groupe de travail qui a établi les tableaux d'allocation dans la bande des 6.6 Mc/s (tableaux 5/1 et 5/2 du doc.Aér/2 No.104) a préparé, à la demande du délégué du Pakistan, un nouveau projet pour cette bande, en y incorporant les propositions présentées par ce délégué. Ce projet est annexé et un tableau comparatif des incompatibilités y est joint.

International Administrative Aeronautical Radio Conference 2nd Session

Aer/2 Document No.115-E 27 September 1949

Geneva 1949

Attached hereto is a redraft of the 6.6 Mc/s plan (tables 5/1 and 5/2 of Document No.Aer/2-104) made by the original working group at the request of, and incorporating proposals of, the Delegate of Pakistan, together with a conflict comparison table.

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas 2a Reunión

Aer/2 Documento Núm.115-S 27 de Septiembre de 1949

Ginebra 1949

El Grupo de trabajo que se encargó de preparar los cuadros de distribución en la banda de los 6.6 Mc/s (Cuadros 5/1 y 5/2 del documento Núm.104 Aer/2) ha preparado, a petición del delegado del Pakistan, un nuevo proyecto para esta banda, incorporando las propuestas presentadas por dicho delegado. Este proyecto figura en anexo y se adjunta un cuadro comparativo de las incompatibilidades.

# TABLEAU D'ATECATION DES FREQUENCES NOMINALES AUX INDICATIFS TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

6.6 Mc/s

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAI, ORDER BY DESIGNATOR FRECUENCIAS POR ORDEN NUMERICO

	1			
Fréquence Frequency Frecuencia (1)	Indicatif de la voie Channel Designator Distintivo del canal (2)	Allouée à Allotted to Distribuida a (3)		Incompatibilité Conflict Incompatibilidad (4)
6529.5	16	1B 1D 6A 9B 12F	1C 3B 6E 11C 13L	NSAM1 & 12F 1 & 1B 1 & 1C
6537	6	NSAM1 6B 9B 9E	1 9A 9D 10D	1 & 1D 9B & 9B 10 <sup>D</sup> & 11C NSAM1 & 11B
6544.5	17	4 6F* 11B	5 9D <b>12D</b>	NSAM1 & 12D 6B & 6F 9D & 9D 6A & 5
6552	15	1D 6A 9E 12C*	3A 7B 11F 13J	12C & 12D  EU & 1D  3 & 3A  7 & 7B
<b>65</b> 59 <b>.</b> 5	7	EU 6C 1OD 13G	3 7 120	10D & 11F 12C & 12C
6567	21	2A 6A 6E 11D	4B 6B 9 13F	NSAM2 & 11D NSAM2 & 13F 6A & 6A
6 <b>5</b> 74 <b>.</b> 5	5	NSAM2 3A 7D 9D	1 6A 7E 10A	9D & 9 NSAM2 & 11D NSAM2 & 12H
	18			9D & 9

# TABLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX INDICATIFS TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

6.6.Mc/s

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY DESIGNATOR FRECUENCIAS POR ORDEN NUMERICO

Fréquence	Indicatif de	Allouée à	Incompatibilité
Frequency	la voie Channel	Allotted to	Conflict
Frecuencia	designator Distintivo	Distribuida a	Incompatibilidad
(1)	del canal (2)	(3)	(4)
6582	18	2A 4A 6B 9 11D 12H	(11F & 11D
6589,5	11	1E 3C 5B 6C	
		7B 11F* 12C 13C	(SA EXT. & 1E
6597	3	SA EXT. 2D 6F 7B 7C 7D	(SA EXT. & 13K (6F & 6C (7B & 7B
		7E 10B 12D	(SA EXT. & 4B (SA EXT. & 13K
6604.5	19	2/3 4B 6D 9D 11E 12F 13K	(2B & 2/3 (6F & 6D (10B & 11E (12D & 12F
6612	8	EU 6 7E 10C	6 & 6D 10C & 11E
		12C 13I	6 & 60
66 <b>19</b> •5	14	2 6C 6D 11B	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	a de la companya del la companya de	12D 13D	(CEP 11B (6A & 6D
6627	2	SA CEP 3B 6A 6E 7B 7E 9 10E	(SA & 4B (3B & 2/3 - (6A & 6D
	9		(9 & 9D (SA & 13H

# TABLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX INDICATIFS TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

6.6 Mc/s

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY DESIGNATOR FRECUENCIAS POR ORDEN NUMERICO

Fréquence	Indicatif de	Allouée à	Incompatibilité
Frequency	Channel	The state of the s	
Frecuencia	designator Distintivo del canal	Distribuida a	Incompatibilidad
(1)	(2)	(3)	(4)
6634.5	9	2/3 4B 6C 6D	
		6C 6D 9D 12J 13H	{ 2/3 & 3B
6642	12	1 3B	( 2/ 3 3 3 3 2
		6A 7 8A 9A 9E 11G 12A 13J	( 2/3 & <b>3</b> B
6649.5	10	2/3 4B	(11F& 11G
		6D 9D 11F 12G 13G	( 3C & 2/3 9 & 9D
6657	4	ME EXT. 3C 7B 9	\ ii & iig
		10C 11G 12F 13E 13J	( ME EXT & 1 ( 9 & 9B
,			(9 & 95
6664.5	13	1 3B 6A 9B 11B 12D 13K	( 3B & 2/3 - (11B & 11H
6672	20	2/3 4B 6D 9D 11H 12G	(6A & 6D (9D & 9D
6679,5	1	SA CEP 2A 2C 3B 6E 9A 9B 9D 9E	(3B & 2/3 (5A & 4B (CEP & 11H (2A & 2/3 (2C & 2/3
		10E 12E	

# ALLOCATION DES FREQUENCES FREQUENCY ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

6.6 Mc/s

,	· ;				
Zone Area Area	Indicatif de la voie Channel Designator Distintive del canal	Fréquences Frequency Frecuencia	Zone Area Area	Indicatif  de la voie Channel Designator Distintive del canal	Fréquences Frequency Frecuencia
SA SA (Ex) CEP ME (Ex) NSAM - 1 NSAM - 2 EU  1  1 B 1 C 1 D 1 E 2 A 2 B 2 C 3 + 3 3 B 3 C 4 A 4 B 4 B	E E E E E E E E E E E E E E E E E E E	6679,5 6627 6597 6679,5 6627 6657 6537 6537 6559,5 6612 6574,5 6537 6642 6664,5 6529,5% 6552 6529,5% 6552 657 6597 6679,5% 6559,5 6634,5 6649,5 66672 6674,5 6657 6552 6670,5 6657 6552 6670,5 6657 6552 6670,5 6657 6552 6670,5 6627 6642 6664,5 6657 6552 6670,5 6627 6642 6664,5 6657 6582 6664,5 6657 6582 6664,5 6657 6582 6664,5	4 B 5 5 6 A B 6 C D 6 E 7 7 B 7 7 7 8 9	E 2171 8 2 5 2 3 6 1 6 8 1 7 9 1 4 9 0 4 9 0 1 2 6 1 3 7 7 2 2 3 4 1 5 3 3 5 2 3 5 8 2 2 4 8 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 4 1 5 3 3 5 2 3 5 8 2 2 4 8 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	6672 6567 6544,5% 6589,5 6612 6627% 6574,5 6642 6664,5 6552 6529,5% 6537 6582 6567 6589,5 6619,5% 6634,5% 6649,5 6619,5% 6604,5 6672 6679,5 6529,5% 65
(20-02-20)	1		11	•	

# ALLOCATION DES FREQUENCES FREQUENCY ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

6.6 Mc/s

Zone   Indicatif   de la voie   Channel   Designator   Distintivo   del canal         9 A	Fréquence Frequency Frecuencia	Zone Area Area	Indicatif de la voie Channel	Fréquence Frequency Frecuencia
E 6 E 12 E 13 E 6 E 13 E 16 9 D E 1 E 5 E 6 E 9 E 10 E 17 E 19 E 20 E 1 E 6 E 12 E 15 IO A E 5 IO B E 3 IO C E 4			Designator Distintivo del canal	
E 8 E 6 E 7 LO E E 1 E 2 LL B E 13 E 14 E 17 LL C E 16 LL D E 18 E 21 LL E 19 LL E 19 LL E 10 E 11 E 15 LL E 12 LL E 13 LL E 14 LL E 15 LL E 15 LL E 15 LL E 15 LL E 12 LL E 13 LL E 14 LL E 15 LL E 1	6679,5% 6537% 6642% 6679,5% 6537% 6664,5 6537% 6634,5 6649,5 6679,5% 6537% 6642% 6552 6574,5 6597 6657 6612, 6537 6559,5 6679,5 6664,5 6519,5 6664,5 6529,5 6582 6567 6664,5 6582 6567 6664,5 6582 6567 6664,5 6582 6567 6664,5	12 A 12 C 12 D 12 E 12 F 12 G 13 D 13 E 13 F 13 G 13 H 15 I 13 J	E 12 E 7 E 8 E 11 E 15 E 13 E 14 E 17 E 16 E 10 E 10 E 10 E 11 E 14 E 21 E 10 E 12 E 15 E 11 E 13 E 11 E 13 E 16 E 19 E 11 E 14 E 15 E 11 E 16 E 17 E 18 E 19 E 10 E 10 E 10 E 10 E 10 E 10 E 10 E 10	6642 6559,5 6612 6589,5 6552 + 6597 6664,5 6619,5 6657 6529,5 6649,5 6672 6582 6634,5 6619,5 6657 6550,5 6649,5 6634,5 6612 6657 6642 6552 6589,5 6642,5 6552 6589,5 6644,5 6645,5 6645,5 6604,5 6529,5 ====================================

#### TABLEAU COMPARATIF DES INCOMPATIBILITES

#### CONFLICTS COMPARISON TABLE

#### CUADRO COMPARATIVO DE LAS INCOMPATIBILIDADES

6.6 Mc/s

NOUVEAU PROJET REDRAFT NUEVO PROYECTO

Incompatibilités éliminées

Nouvelles incompatibilités

Conflicts eliminated

New Conflicts

Incompatibilidades eliminadas

Nuevas incompatibilidades

5B & 6A 11F & 11C 13K & 13L 1E & 1 7B & 7 11F & 11G 13K & 13J 5B & 6A 5 & 6A SA (EXT) & 4A 6F & 6B NSAM1 & 12J NSAM1 & 13H 9D & 9D NSAM1 & 12G NSAM1 & 13H 9D & 9D 10D & 11F

NSAM1 & 12F

1 & 1B/C/D

9B & 9B

10D & 11C

NSAM1 & 11B

NSAM1 & 12D

6B & 6F

9D & 9D

11F & 11D

SA (Ext) & 1E

SA (Ext) & 1E

SA (Ext) & 3E

2/3 & 3B

2/3 & 3B

11F & 11G

Les incompatibilités de la limite de la bande restent inchangées Band edge conflicts remain unchanged

Las incompatibilidades en el borde de la banda permanecen sin cambios

Conférence internationale administrative des Radiocommunications aéronautiques

Aér/2 Document 116-F 28 septembre 1949

2e session

Genève 1949

Le secrétaire appelle l'attention de MM. les Délégués sur la communication ci-dessous qu'il a reçue de la Délégation du Danemark:

Monsieur,

"Voulez-vous avoir l'obligeance de noter que durant les absences de la Délégation du Danemark des séances de la C.I.A.R.A., ce pays sera représenté par la Délégation de la Suède qui est autorisée à discuter et à voter en son nom."

B. NIELSEN

Délégué du Danemark

International Administrative Aeronautical Radio Conference

Aer/2 Document 116-E 28 september 1949

2nd Session

Geneva 1949

The secretary wishes to draw the attention of Delegates to the following communication received from the Delegation of the Danish Delegation:

Sir,

"Will you please note that during the absence of the Danish Delegate from the meetings of the I.A.A.R.C., the Danish interests will be represented by the Delegation of Sweden, which is authorized to speak and vote on its behalf."

B. NIELSEN

Delegate of Danemark

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas

Documento Núm. 116-Aer/2-S 28 de septiembre de 1949

2a Reunion

Ginebra 1949

El secretario llama la attención de los señores Delegados sobre la siguiente comunicación remitida por el Delegado de Dinamarca:

"Muy Sr. mio:

Ruego al señor secretario se sirva tomar nota de que la Delegación de Dinamarca estará representada con voz y voto por la Delegación de Suecia, cuando no le sea posible asistir a las sesiones de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas."

B. NIELSEN
Delegado de Dinamarca

Geneva 1949

#### REPORT OF THE DRAFTING COMMITTEE

(Committee 3)
5th Meeting

Friday, 23 September 1949

- 1. The meeting was opened at 9.30 a.m. by the Chairman, Mr. Mouchez, France.
- 2. Delegations of the following countries were represented at the meeting: Argentine, Cuba, United States of America, France, Morocco and Tunisia, Venezuela.
- 3. The Committee approved the Reports of its 2nd, 3rd and 4th meetings (Aer/2 Documents Nos. 97, 98, 99).
- The Committee decided that final documents for submission to the Plenary Assembly should be published on coloured paper in the following order:

First reading: blue Second reading: pink Final proofs: white

- 4.1 The Drafting Committee to be free to omit the second reading edition (pink paper) for the sake of economy, if few corrections or minor amendments only were made in any documents at its first reading (blue paper).
  - 5. The meeting rose at 10.30 a.m.

Rapporteur

Chairman:

M. CHEF

R. MOUCHEZ



Conférence internationale administrative des Radiocommunications aéronautiques

<u>2e Session</u>

Genève, 1949

Aér Document No. 118-F
29 septembre 1949

Un nouveau projet de plan d'allocation dans la bande des 6.6 Mc/s a été préparé par un groupe ad hoc du sous Groupe de travail C4 (tableaux 5/1 et 5/2 du doc. Aér/2 No. 104).

Ce plan suppose le transfert de la fréquence allouée à l'Hémisphère Ouest (12J et 13H) de la voie E9 à la voie D17, et le transfert de la fréquence allouée à l'Hémisphère Ouest (11E et 12F) de la voie D17 à la voie E9.

International Administrative Aeronautical Radio Conference

2nd Session
Geneva 1949

Aer/2 Document No. 118-E
29 September 1949

Attached hereto is a second redraft of the 6.6 Mc/s plan (tables 5/1 and 5/2 of document No. Aer/2 104) made by a special Ad Hoc Working Group of Committee C4.

This plan is based upon the transfer of the Western Hemisphere allotment (12J and 13H) from channel E9 to channel D17, and the transfer of the Western Hemisphere allotment (11E and 12F) from channel D17 to channel E9.

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas

2a Feunion

Ginebra 1949

Documento Núm, 118-Aer/2-S 29 de septiembre de 1949

Un nuevo proyecto de plan de distribución en la banda de los 6.6 Mc/s (Cuadros 1/2)/1 y 5/2 del documento Núm 104 Aer/2) ha sido preparado por un grupo ad hoc del sub-Grupo de Trabajo C4.

Este plan està basado en la transferencia de la frecuencia distribuida al Hemisferio occidental (12J y 13H) del canal E9 al canal D17, y la transferencia de la frecuencia distribuida al Hemisferio occidental (11E y 12F) del canal D17 al canal E9.

### TABLEAU D'ALLOCATION DES FREQUENCES NOMINALES AUX INDICATIFS

#### TABLE OF DISCRETE FREQUENCY ALLOTMENTS TO DESIGNATORS

#### CUADRO DE DISTRIBUCION DE FRECUENCIAS NOMINALES A LOS DISTINTIVOS

6.6 Mc/s

FREQUENCES PAR ORDRE NUMERIQUE NUMERICAL ORDER BY DESIGNATOR FRECUENCIAS POR ORDEN NUMERICO

	**************************************	the second secon	
Fréquence Frequency ecuencia	Indicatif de la voie Channel Designator Distintivo del canal (2)	Allouéea Allotedto Distribuidaa(3)	Incompatibilité Conflict Incompatibilidad  (4)
<b>6</b> 529 <b>.</b> 5	16	1B%, 1C%, 1D%, 3B, 6A%, 6E%, 9B, 11C, 12F, 13L	1D%-4%; 1D%-5%; 9B-9D; 11C-11B; 12F-12D;
6537	17	4%, 5%, 6F+, 9D, 11B, 12D	4%-lD; 4%-6A; 5%-lD;
6544.5	15	1D, 3A, 6A, 7B, 9E, 11F, 12C+, 13J	5%-6A; 9D-9E; 11B-12C+;  1D-EU; 3A-3; 7B-7;
6552	7	EU, 3, 6C, 7, 10D, 12C	11F-10D; 12C+-12C;
6559,5	21	2A, 4B, 6A%, 6B%, 6E%, 9, 11D, 13F	6%-6A ; 9-9D ; 11D-NSAM-2
6567	5	NSAM-2, 1, 3A, 6A, 7D%, 7E%, 9D, 1OA	1-4A; 9D-9; NSAM-2-11D;
6574,5	18	2A-4A, 6B, 9, 11D, 12 H,	NSAM-2-12H ; EU-4A ; 6-6B ; lOC-11D ;
6582	8	EU, 6, 7E, 100, 120, 131	6-6D ; 10C-11E
65 <sup>89</sup> •5	19	2/3, 4B, 6D, 9D, 11E, 12F, 13K	2/3-2B; 4B-SA(E); 6D-6F; 11E+10B; 12F-12D; 13K-SA(E)

(1)	(2)	(3)	(4)
6597	. 3	SA(E), 2B, 6F, 7B%, 7C%, 7D%, 7E%, 10B 12D	SA(E)-1E; 7B-7B; 12C-12D;
6604.5	11	1E, 3C, 5B, 6C, 7B, 11F+, 12C, 13C, 13K	TE-SA ; 11F-10E ; 12C-12E;
6612	1	SA, CEP, 2A%, 2C%, 3B, 6E, 9A%, 9B%, 9D%, 9E%, 1OE, 12E	CEP-11B ; 2-2A% ;
619,5	14	2, 60%, 6D%, 11B, 12D, 13D	2-2C%.  No Conflict
6627	4	ME(E), 3C, 7B, 9, 10C, 11G, 12F, 13E, 13J	1-ME(E); 6A-ME(E); 9B-9; 11B-10C; 12D-11G; 12D-12F;
66 <b>34</b> •5	13	1, 3B, 6A, 9B, 11B, 12D, 13K	13K-13J 2/3-3B ; 6D-6A ; 9D-9B ;
6642	10	2/3, 4B, 6D, 9D, 11F, 12G, 13G	12G-12D 6A-6D; 3B-2/3; 9B-9D;
6349.5	12	1, 3B, 6A, 7%, 8A% 9A%, 9E%, 11G, 12A, 13J	11G-11F 3B-2/3 ; 11G-11H ;
`657	20	2/3, 4B, 6D, 9D, 11H, 12G.	9B%-9D ; 9D%-9D ;
6664.5	6	NSAM-1, 1, 6B, 9A%, 9B%, 9D%, 9E%, 10D	9E%-9D NSAM-1-12F; 9D%-9D;
6672	9	2/3, 4B, 6C%, 6D%, 9D, 11E, 12F	10D-11E 3B-2/3; 6A%-6D%; 9-9D; SA-4B
6679.5	2	SA, CEP, 3B, 6A%, 6E% 7B%, 7E%, 9, 10E	JOHNES CONTRACTOR

# ALLOCATION DES FREQUENCES FREQUENCY ALLOTMENTS DISTRIBUCION DE FRECUENCIAS

j		
Zone	Indicatif de la voie	Fréquence
Area	Channel	Frequency
Area	designator Distintivo del canal	Frecuencia
(1)	(2)	(3)
SA	E1. E2	6612 6679.5
SA(E)	E3	6597
CEP	E1 E2	6612 6679.5
ME(E)	E4	6627
NSAM-1	E6	6664.5
NSAM-2	E5	6567
EU	E7 E8	6552 6582
1	E5 E6 E12 E13	6567 6664.5 6649.5 6634.5
1B	E16	6529.5%
10	E16	6529.5%
10	E15 E16	6544.5 6529.5%
1E	Ell	6604,5
2	E14	6619,5
2A	E1 E18 E21	6612 % 6574.5 6559.5
2B	E3	6597
2C	El	6612%
3	E7	6552
2/5	E9 E10 E19 E20	6672 6642 6589,5 6657
3A	E5 E15	6567 6544,5
<b>3</b> B	E1 E2 E12 E13 E16	6612 6679.5 6649.5 6634.5 6529.5

	<del></del>	
Zone	Indicatif	Fréquence
Area	de la voie Channel designator	Frequency
Area	Distintivo del canal	Frecuencia
(1)	(2)	(3)
3C	E4 E11	6627 6604,5
4	E17	6537 %
4A	E18	6574.5
4B	E9 E10 E19 E20 E21	6672 6642 6589,5 6657 6559,5
5	E17	6537 %
5B	E11	6604.5
6	E8	6582
6 <b>A</b>	E2 E5 E12 E13 E15 E16 E21	6679.5 % 6567 6649.5 6634.5 6544.5 6529.5 %
6B	E6 E18 E21	6664.5 6574.5 6559.5 %
6C	E7 E9 E11 E14	6552 6672
6D	E9 E10 E14 E19 E20	6672 % 6642 6619.5 % 6589.5 6657
6E	E1 E2 E16 E21	6612 6679.5 % 6529.5 % 6559.5 %
6F	E3 E17	6597 6537 %
7	E7 E12	6552 6649,5 %

age	2

(1)	(2)	(3)		(1)	(2)	(3)
7B	E2 E3 E4	6679.5 % 6597 % 6627		118	E13 E14 E17	6634,5 6619,5 6537
	E11 E15	6604.5 6544.5		110	E16	6529,5
7C	E3	6597 %		11D	El8	6574,5
7D	E3 E5	6597 % 6567 %		17E	E21 E19	6559,5 6589,5
7E	E2 E3 E5 E8	6679,5 % 6597 % 6567 % 6582		llf	E9 E10 E11 E15	6672 6642 6601,5 + 6541,5
8A	E12	6649,5 %		11G	E4 El2	6627 6649 <b>.</b> 5
9	E2	6679.5		17H	E20	665'7
	E4 E18	6627 6574,5		12A	E12	6649,5
9A	E21 E1 E6 E12	6559,5 6612 % 6664,5% 6649,5%		120	E7 E8 E11 E15	6552 6582 6604.5 6541.5 +
9B	E1 E6 E13 E16	6612 % 6664,5% 6634,5 6529,5		12D	E3 . E13 E14 E27	6597 6634,5 6619,5 6537
9D	E1 E5 E6 E9 E10 E17 E19	6612 % 6567 6664.5% 6672 6642 6537 6589.5		12E 12F 12G	E1 E4 E9 E16 E19 E10 E20 E18	6612 6627 6672 6529.5 6589.5 6642 6657
9E	El	6612 %		130	E11	6604.5
	E6 E12	6664,5% 6649,5%		13D	E14	6619,5
	E15	6544.5		13E	E4	6627
10A	E5	6567		13F	E21	6559.5
10B 10C	E3 E4	6597 6627		13G	E7 E10	6552 6642
TÓO	E8	6582		131	E8	6582
lod	E6 E7	6664.5 6552		13J	E4 E12	66 <b>2</b> 7 66 <b>4</b> 9。5
10E	E1 E2	6612 6679,5		13K	E15 E11 E13	6544.5 6604.5 6634.5
	• • • • • •		h		E19	6589,5

GENEVA 1949

#### REPORT OF SUB-WORKING GROUP C4

#### 2nd Meeting

#### 28th and 29th September 1949

The Meeting was opened by the Chairman Mr. Andrews (New Zealand) at 09.40 hours 28th September.

Mr. Deuchars (Colonies of United Kingdom) was elected rapporteur.

2. The following countries and organizations were represented:

Argentine (Republic of); Australia (Commonwealth of); Belgium; Canada; Portuguese Colonies; Colonies, Protectorates, Overseas Territories and Territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland; Belgian Congo; Cuba; Denmark; United States of America; France; Indonesia; Ioeland; Ireland; Italy; Luxembourg; Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curação and Surinam; Philippines (Republic of); Portugal; Morocco and Tunisia; United Kingdom of Great Britain and Northern Ireland; Sweden; United States Territories; Union of South Africa; Venezuela.

- 5. Document No. 94 was discussed and adopted subject to the following amendment to Para. 4.1 Allocation Groups.
- Documents Nos. 104, 115 and 118 were discussed at some length; finally Mr. Rowland (U.K.) moved that Doc. 104 including the plan for 6.6 Mc/s be adopted. This motion was seconded by Mr. Tabio (Cuba). The vote count being;

For the motion : 20
Against the motion : 4
Abstain the motion : 2

#### 4.1 Allocation groups:

C 4/1 (5.6 and 11.3 Mc/s) - Messrs Anderson (IATA) (leader),
D.J. Anderson (Australia), Brant (Canada),
C 4/2 (3 and 10 Mc/s) - Messrs D. Mitchell (USA) (leader),
Louris (Indonesia) Chaf (Message and

Leunis (Indonesia), Chef (Morocco and Tunisia).

C 4/3 (3.5) - Messrs W. Weaver (U.S.A.) (leader), T.O'Dalaigh (Ireland), Layzell (IATA).

C 4/4 (4.7 and 9 Mc/s) - Messrs B. Rafuse (Canada) (leader), R. Service (U.S.A.), Deuchars (U.K. Colonies).

C 4/5 (6.6 Mc/s) - Messrs Brant, Greven.

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### - 2 - (Aer/2-119-E)

C 4/6 (13 and 18 Mc/s) - Messrs Rowland, Deuchars.

4.2 Liaison and Checking Group:

C 4/6 - Messrs Cole (U.S.A.) (leader), Seydel (Belgium).

4.3 Adjacent Channel Group (P.F.B. and O.R. bands):

C 4/7 - Messrs G. Harvey (Union of South Africa) (leader), P. Greven (ICAO), R. Shores (U.S.A.), P. Oomen (ICAO).

- 5. Mr. Barajas (Mexico) expressed himself as unsatisfied with the vote and pointed out he abstained and reserved the right to make a full statement later.
- 6. Mr. Khan (Pakistan) wished it to be recorded that he voted against the plan for 6.6 Mc/s in Doc. 104 and reserved the right to raise this matter later. The Delegate for India associated himself with the Delegate for Pakistan.
- 7. A number of amendments to Doc. 104 were adopted by the meeting and these amendments appear in the Corrigendum to Doc. 104 dated 30th September 1949.
- 8. Mr. Brant (Canada) requested that the following statement appears in the minutes of the meeting:

"Mr. Chairman, You have just asked if there is any objection to the Document 104 frequency tables. Lest by our silence, the document would be unanimously accepted, the Canadian Delegation wishes to state that it is not in a position to approve the document at this time, as the Canadian Administration still has the matter under review. If Document 104 is put to the vote at this time we shall abstain."

The Chairman then summarised the docisions of the meeting as follows:

Document Number 104 but not the Appendice to that Document had been adopted and would be forwarded, together with the approved amendments, to working Group "".

The meeting closed at 12,55 hours on 29th September 1949.

The Rapporteur:

The Chairman :

G.D. Deuchars

F.R.W. Andrews

GENEVA 1949

#### RECOMMENDATION

#### SUBMITTED BY THE SWEDISH DELEGATION.

Considering that the next step following approval of the work of this conference is the assignment of frequencies to stations on the basis of the I.A.A.R.C. allotment plan and considering that it is essential in view of the nature of the aeronautical operations that assignments should be coordinated between the countries comprising the areas as a whole, both the M.W.A.R.A: a and the R.D.A.R.A:

and considering that the United Nations has recognized the I.C.A.O. as specialized agency for the coordination of international aeronautical operations, it is recommended

that I.C.A.O. be invited to convene\* regional or special meetings as appropriate and necessary before the extraordinary administrative Conference, September 1950, in order that the countries concerned may coordinate and establish their requirements in the M.W.A.R.A.:s and in the R.D.A.R.A.:s to develop assignment plans and notify the P.F.B. accordingly.

However,

considering that R.D.A.R.A:s l covers an area which includes certain countries not memberstates of I.C.A.O., and considering that such countries do not normally attend I.C.A.O. meetings it is recommended that for the purpose of establishing the initial assignment plan the I.T.U. convene a meeting of the I.T.U. member states comprising R.D.A.R.A. l for the purpose of carrying out the necessary planning of frequency assignment to stations.



The I.C.A.O. Air navigation Regions and the corresponding M.W.A.R.A:s and R.D.A.R.A:s are as follows:

### - 2 -(Aer/2-120-E)

(Hely 2-120-E)		
EU MED RDARA	1	EU
MID (Middle East)	45	ID ME
AFI (African Indian Ocean)	45	IE ID
	7	NSAI NSA2
SEA (South East Asia)	6	5B 5C F@l FE2 ME
CAR (Carribean)	12	
SAM (South American)	13	
SAT (South Atlantic)		SA
NA NP ) CEP )		
SP ) CWP )	9	

#### - 2 -(Aer/2-120-E)

Page 2 of document Aer/2 No. 120-E should be replaced by the following:

ICAO AIR NAVIGATION REGIONS		MWARA's	RDARA's
1.	European-Mediterranean	EU	1
2.	Middle East	ME, NSA-2	1D, 5, 6A
3 •	African Indian Ocean	NSA1, NSA2, SA	1E, 1D, 4, 5A, 5D 7, 8A
4.	South East Asia	ME, FE <sub>1</sub> , FE <sub>2</sub> , CWP	6, 8A, 9A, 9E
5.	Carribean	NSAM <sub>1</sub> , NSAM <sub>2</sub> , NA	12
6.	South American	NSAM <sub>1</sub> , NSAM <sub>2</sub> , SA	13, 12F, 12G, 12H
7.	South Atlantic	NSAM2, SA	
8.	North Atlantic	ŅA	
9.	North Pacific	NP	
10.	South Pacific	SP, CWP, CEP FE <sub>1</sub> , FE <sub>2</sub>	9

#### RECOMMENDATION BY THE DRAFTING COMMITTEE

(Committee 3)

Final Document of the Conference

#### FINAL AGREEMENT AND PLAN

on the

#### AERONAUTICAL MOBILE SERVICE

#### CONTENTS

Preamble

#### PART I

#### General Provisions

#### Section I - <u>Definitions</u>

- 1. Radio Regulations.
- 2. Interim Report.
- 3. Plan.
- 4. Terminology.
- 5. Categories R and O.R. of the Aeronautical Mobile Service.
- 6. Western and Eastern Hemispheres.
- 7. Major World Air Routes.
- 8. Major World Air Route Areas.
- 9. Regional and Domestic Air Routes.
- 10. Regional and Domestic Air Route Areas.

#### Section II - Technical and Operating Principles.

#### Section III - Recommendations and Resolutions.

- 1. Provisions of a special or temporary nature.
  - Recommendation N° 1, to the P.F.B., concerning the protection of aeronautical radiocommunications at the edges of the frequency bands of the Aeronautical Mobile Service.



#### - 2 --(Aer/2-121-E)

- Recommendation N° 2, to the High Frequency Broadcasting Conferences, concerning the protection of aeronautical radiocommunications at the edges of the frequency bands of the Aeronautical Mobile Service.
- Resolution No 3, concerning the communication to the International Civil Aviation Organization of copies of complaints and reports relating to interference within the Aeronautical Mobile Service frequency bands.
- Recommendation N° 4, to the Provisional Frequency Board, relating to frequency assignments to stations in the Aeronautical Fixed Service.

#### 2. Provisions of a general or permanent nature.

- Resolution  $N^{\circ}$  , concerning the handling of public correspondence aboard aircraft.
- Resolution N° , concerning the form of the frequency list established by the Conference for bands allocated to the Aeronautical Mobile R Service.
- Recommendation No , concerning the coordination of telecommunications in the Aeronautical and Maritime Services for rescue work at sea.
- Recommendation No , concerning the publication by the I.T.U. of certain service documents.
- Recommendation No , concerning the use of aeronautical mobile R frequencies for the Aeronautical Fixed Service.
- Recommendation  $N^{\circ}$  . , concerning the repetition of frequency assignments for the Aeronautical Mobile R Service.
- Resolution No , on cooperation between the I.T.U. and the I.C.A.O.

#### PART II

Plan for the Allotment of Frequencies for the Aeronautical Mobile R Service.

#### PART III

Plan for the Allotment of Frequencies for the Aeronautical Mobile OR Service.

#### Section I - Determination of Requirements.

- 1. Compilation of Requirements.
- 2. Minimum Information Necessary.
- 3. Study and Disposition of Information.

#### Section II - Available Frequency Bands and Channels

- Bands
- Assignable Frequencies.
  - (1) Exclusive Bands.
  - (2) Shared Bands.
- 6. Selection of Frequencies.
  - (1) Exclusive Bands.
  - (2) Shared Bands.

#### Section III - Adaptation of Technical Principles.

- 7. Division of Channels.
- 8. Modification of Class of Emission.
- 9. Allotment of Adjacent Channels. 10. Repetition of Assignments.
- 11. Lower Standards.

#### Section IV - Preparation of Frequency Allotment Plan for the OR Bands.

- 12. Allotment Data.13. Allotment Procedure.
- 14. Frequency Plan.

#### Section V - Conclusions and Recommendations.

- 15. New International Frequency List.
  16. Future Allocations to the Aeronautical Mobile OR Service.
  17. Limitation of Power,

#### Section VI - Frequency Allotment Plan for Aeronautical Mobile OR Service Bands.

- 18. Abbreviations used:
  - a) Alphabetical List of Country Designations.
  - b) Other abbreviations.
- 19. Allotment Plan.

#### PART

Statements and Signatures.

International Administrative Aeronautical
Radio Conference
Second Session
Geneva, 1949.

#### RECOMMENDATION BY COMMITTEE 3

(Drafting)

Final Document of the Conference

Part 1

Section 1

#### <u>Definitions</u>

- 1. The words "Radio Regulations" shall be taken to mean the Radio Regulations annexed to the International Telecommunication Convention signed at Atlantic City in 1947 or any revision which may replace them, once it has become effective.
- 2. The words "Interim Report" shall be taken to mean all the documents prepared by the First Session of the Conference, either to finish its work or to prepare for the Second Session. These documents form four volumes:
  - Volume I : Report prepared at the First Session together with Annex I Minimum and Maximum Range Charts for use as a Guide to the Allotment of Frequencies.
  - Volume II : Final Report on the Plan for the Allotment of Frequencies for the Aeronautical Mobile O.R. Service.
  - Volume III: Interim Report on the Establishment of the Plan for the Allotment of Frequencies for the Aeronautical Mobile R. Service.

Volume IV : Recommendations and Resolutions.

- 3. The word "Plan" shall be taken to mean the Plan for the Aeronautical Mobile Service, Geneva, 1949, as given in this document.
- 4. <u>Terminology</u>:
  - a) The Conference has observed that doubts are liable to arise over the terms used in frequency distribution, and that such doubts are liable to lead to confusion.

The terms used by the Conference are therefore given below:

(82-108-82)



Distribution to	French	English	Spanish
Services	Allocation	Allocation	Distribucion
	(allouer)	(to allow)	(Distribuir)
Areas, Regions	Attribution	Allotment	Distribucion
•	(attribuer)	(to allot)	(Distribuir)
Stations	Assignation	Assignment	Asignacion
	(assigner)	(to assign)	(Asignar)

<sup>b) For technical words or expressions the Conference has taken the definitions given in Articles 1 and 2 of the Radio Regulations.
5. The definitions of the categories R and O.R. are given in Nos. 256 and 257 of the Radio Regulations, as follows:</sup> 

<u>Category R</u> applies to communications between any aircraft and those aeronautical stations primarily concerned with the safety and regularity of flight along national or international civil air routes.

<u>Category O.R.</u> applies to communications between any aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.

- 6. To simplify this document, the Conference has used the expressions "Western Hemisphere" and "Eastern Hemisphere".
  - a) The <u>Western Hemisphere</u> is Region 2 of the I.T.U., whose boundaries are defined in Chapter III, Article 5 of the Radio Regulations.
  - b) The <u>Eastern Hemisphere</u> is the whole of Regions 1 and 3 of the I.T.U. whose boundaries are defined in Chapter III, Article 5 of the Radio Regulations.
  - Note) The areas and sub-areas are based on the frontiers of the Western and Eastern Hemispheres (lines B and C defined in Nos. 105 and 106 of the Regulations)
- 7. 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.

### -3 - (Aer/2-122-E)

- 8. A <u>Major World Air Route Area</u> 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.
- 9. 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 7 above.
- 10. A Regional and Domestic Air Route Area is one embracing a certain number of the air routes defined in the preceding paragraph.

Geneva, 1949

#### REPORT OF THE DRAFTING COMMITTEE

(Committee 3)

6th Meeting

Monday, 3 October 1949

- 1. The meeting opened at 2.30 p.m. with Mr Mouchez (France) in the Chair.
- 2. The following Delegations were represented at the meeting :

Argentine, Canada, United States of America, India, France, Morocco and Tunisia.

Mr. Petit of the I.F.R.B. was present at the meeting.

- 3. The Committee approved without change the Report of the 5th meeting. (Doc. Aer/2 N° 117).
- 4. The Committee proceeded to consider the heading and form of the Final Act of the Conference, and decided to refer the question to the Plenary Assembly for its approval. (Doc. Aer/2 N° 121).
- 5. In the course of its discussion of the preceding item the Committee was led to contemplate the possibility of the Final Act requiring the inclusion of certain Definitions for the better understanding of its text, and decided to submit certain of the Definitions in question to the Plenery Assembly. (Doc. Aer/2 N° 122).
- 6. The Committee thereupon proceeded to revise Doc. Aer/2 N° 102, the text of which had been submitted to the Plenary Assembly, and redrafted paragraphs 11 and 12, which the Assembly had not approved. In the course of this revision and of the lengthy discussions to which it gave rise, reproducing all the arguments put forward at the 28th Plenary Assembly, the Committee made various amendments of detail in the Articles already approved. The Committee decided to submit the text of the new draft, which it approved unanimously, to the Plenary Assembly under the heading Doc. Aer/2 N° 102 (revised).
- 7. There being no other item on the Agenda, the Committee rose at 6.30 p.m.

The Rapporteur:

The Chairman:

M. CHEF.

R. MOUCHEZ.





### Conférence internationale administrative des Radiocommunications aéronautiques 2e Session

Aér/2 Document No.124-F 5 octobre 1949

Genève 1949

Le secrétaire appelle l'attention de MM. les Délégués sur la communication ci-dessous qu'il a reçue de la Délégation de Suède:

"Monsieur,

Voulez-vous avoir l'obligeance de noter que durant les absences de la Délégation de la Suède des séances de la C.I.A.R.A., ce pays sera représenté par la Délégation du Canada qui est autorisée à discuter et à voter en son nom.

T. OVERGAARD Délégué de la Suède"

International Administrative Aeronautical Radio Conference 2nd Session

Aer/2 Document No.124-E 5 October 1949

Geneva 1949

The secretary wishes to draw the attention of Delegates to the following communication received from the Delegation of the Swedish Delegation:

"Sir,

Will you please note that during the absence of the Swedish Delegate from the meetings of the I.A.A.R.C., the Swedish interests will be represented by the Delegation of Canada, which is authorized to speak and vote in its behalf.

T. OVERGAARD Delegate of Sweden"

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas 2a Reunión Aer/2 Documento Núm.124-S 5 de Octubre de 1949

TO 1100111011

Ginebra 1949

El Secretario llama la ettención de los Señores Delegados sobre la siguiente comunicación remitida por el Delegado de Suecia:

"Muy Sr. mio:

Ruego al Señor Secretario se sirva tomar nota de que la Delegación de Suecia estará representada con voz y voto por la Delegación de Canada, cuando no le sea posible asistir a las sesiones de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas.

T. OVERGAARD Delegado de Suecia

U.I.T. GENÈVE Genève 1949

Le secrétaire appelle l'attention de MM. les Délégués sur la communication ci-dessous qu'il a reçue de la Délégation de la Norvège :

"Monsieur,

Voulez-vous avoir l'obligeance de noter que durant les absences de la Délégation de la Norvège des séances de la C.I.A.R.A., ce pays sera représenté par la Délégation des Colonies du Royaume-Uni de la Grande-Bretagne et d'Irlande du Nord qui est autorisée à discuter et à voter en son nom."

ODD SANDVEI

Délégué de la Norvège

International Administrative
Aeronautical Radio Conference
2nd Session

Aer/2 Document No. 125-E 5 October 1949

Geneva 1949

. The secretary wishes to draw the attention of Delegates to the foll wing communication received from the Delegation of the Norwegian Delegation:

"Sir,

Will you please note that during the absence of the Norwegian Delegate from the meetings of the I.A.A.R.C., the Norwegian interests will be represented by the Delegation of the Colonies of the United Kingdom, which is authorized to speak and vote on its behalf."

ODD SANDVEI

Delegate of Norway

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas 2a Reunión Documento Núm.125 Aer/2-S 5 de octubre de 1949

Ginebra 1949

El secretario llama la attenciónde los senores Delegados sobre la siguiente comunicación remitida por el Delegado de Noruega:

"Muy Sr. mio:

Ruego al senor secretario se sirva tomar nota de que la Delegación de Noruega estará representada con voz y voto por la Delegación de las Colonias del Reino Unido de la Gran Bretaña e Irlanda del Norte cuando no le sea posible asistir à las sesiones de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas."

ODD SANDVEI

Delegado de Noruega



Geneva 1949

#### REPORT OF WORKING GROUP D

(Revision of document No. 92)

The Working Group submits the following revision of the proposal embodied in Doc. Aer/2 No. 92.

It should be noted that considerations 4,5 and 6 as well as recommendation b) have been deleted as being a duplication of material contained in in Document 105.

The IAARC considering :

- 1st: that the number of HF channels available for the aeronautical mobile (R) service is very limited; and,
- 2nd: that the number of aircraft now in operation is not only large but increasing; and,
- 3rd: that a natural corollary of limited frequency spectrum is the need for rigid circuit discipline, maximum efficiency, and the application of uniform procedures; and,
- 4th: that it is essential that frequencies allotted be made available to all users of the aeronautical mobile (R) service without discrimination; and, without detriment to the services to which these frequencies are allotted; and,
- 5th: that satisfactory communication may be unobtainable if implementation of radio frequencies is carried out by independent and uncoordinated means which do not allow for the most efficient and economical use of the radio frequency spectrum,

#### Recommends:

that the various nations individually and in collaboration take the necessary steps to ensure

- a) the satisfactory utilization of frequency channels and efficiency of service so that the aeronautical mobile (R) frequencies channels be made available without discrimination to all users, and, at all times the frequencies should be used as specified in the Geneva plan,
- that as far as possible service should be provided by a single aeronautical communications organism at any one location. Where this is not possible coordination between agencies should be effected in either case the disciplinary and regulatory aspect should be the responsibility of the administration authorising the operation of the aforementioned agency or agencies.

Aér/2 Document No.127 4 octobre 1949

2e. Session Genève 1949

#### ORDRE DU JOUR

de la 29e séance plénière jeudi, 6 octobre 1949, 09.30 h.

Examen du document Aer/2 No. 126 (Aér/2 doc. 92 revisé par le Groupe de travail D).

Projet de recommandation présentée par la Délégation du Brésil 2. (Doc. Aér/2 No. 105).

Recommandation présentée par la Délégation de la Suède. 34

Recommandation de la Commission de rédaction (Aér/2 doc. No. 121). 40

Recommandation de la Commission de rédaction (Aér/2 doc. No. 122).

Divers.

International Administrative Aeronautical Radio Conference 2nd Session Geneva 1949

Aer/2 Document No. 127 4 October 1949

#### AGENDA

for the 29th Plenary Meeting Thursday, 6 October 1949, 09.30 h.

Consideration of document Aer/2 No. 126 (Aer/2 doc. 92 revised by 1. Working Group D).

Draft Recommendation presented by the Delegation of Brazil (doc. 2. Aer/2 No. 105).

3\* Recommendation submitted by the Delegation of Sweden.

Recommendation submitted by the Drafting Committee (Aer/2 doc. 121) Recommendation submitted by the Drafting Committee (Aer/2 doc. 122) 4'\*

5.

Any other business.

Aer/2 Documento núm. 127 4 de octubre de 1949

Conferencia- Administrativa Internacional de Radiocomunicaciones Aeronáuticas <u>2a. Reunión</u>

Ginebra 1949

ORDEN DEL DIA de la 29a. Sesión Plenaria jueves, 6 de octubre de 1949, 09.30 h.

Examen del documento Núm 126 Aer/2 (doc. 92 Aer/2 revisado por el 1. Grupo de trabajo D).

2: Proyecto de recomendación presentada por la Delegación del Brasil (doc. núm 105 Aer/2).

Recomendación presentada por la Delegación de Suecia. 3.

Recomendación de la Comisión de redacción (doc. núm. 121 Aer/2). Recomendación de la Comisión de redacción (doc. núm. 122). 40

5.

Asuntos varios.

ARCHIVES U.I.T. GENEVE

Aer/2 Document No.128-E 4 October 1949

GENEVA 1949

Final Formula for the Documents of the Conference

The Steering Committee submits the following text for the final formula to be inserted immediately before the signatures in the final document of the Conference.

"The delegates to the International Administrative Aeronautical Radio Conference state that it is their understanding that, in accepting this Final Agreement and Plan, they bind their administrations only to the extent of the jurisdiction of the abovenamed Conference. They further state that it is their understanding that they do not thereby bind, or in any other way limit the freedom of action of their respective administrations at subsequent conferences of the International Telecommunication Union having jurisdiction in the matter.

"In witness whereof the delegates to the International Administrative Aeronautical Radio Conference, Geneva (1949), have signed in the names of their respective administrations the present Final Agreement and Plan in a single copy which will remain in the archives of the Bureau of the International Telecommunication Union, and of which a certified copy will be sent to every country Member of the Union.

Done at Geneva, the' of October, 1949."



Geneva 1949

#### REPORT OF THE STEERING COMMITTEE

(Committee 1)

36th Session

4 October, 1949

1. The meeting was opened at 12.15 by the Chairman, Mr. A.L. Lebel.

The following were present:

Mr. Rowland, Chairman of Working Group B.

Mr. White, Chairman of Working Group C.

Mr. Mouchez, Chairman of Committee 3.

Mr. Souto Cruz, Chairman of Committee 2.

Mr. Shores.

- 2. Mr. Lebel announced that the main purpose of the meeting was the setting of a date of the next Plenary Meeting.
- The Chairman considered that, before dealing with this question, the Committee might examine the progress made in the work of the Conference. With regard to the Final Document, this would comprise 4 sections, which were described in Document No.121.
- 4. Mr. White considered that, since the propagation curves would be included in the Final Document, they should be mentioned in the section relating to technical principles.
- 5. Mr. Shores informed the Committee that the MWARA and RDARA maps would be completed by the following day. He proposed that these be posted for examination for half a day in one of the rooms, after which it would be possible to have them printed (see Note No.9 to Delegates).
- 6. It was decided that the maps, to be numbered 1 and 2, would be annexed, along with the curves, to the Final Document, and placed in a folder at the end of this Document.
- 7. The Chairman asked for the views of Members of the Committee on the desirability of reprinting the frequency repetition tables as working documents. As the Committee was unanimously of the opinion that reprinting was desirable, it was agreed that this should be done.
- 8. The Committee scheduled the next Plenary Session for 6th October, at 0930 hrs, and drew up the agenda (Aer/2 Doc.No.127).
- 9. Mr. Souto Cruz asked to what extent signature of the final agreement would bind Administrations. The Chairman replied that, in his opinion, signature by any delegate would bind his Administration to the extent indicated by the terms of reference of the Conference. He thought that this point might be covered by the insertion of an appropriate text before the list of signatures.
- 10. It was decided that this text would be drafted by a small group within the Steering Committee, and submitted to the Plenary Assembly (see Aer/2 Doc.No.128).
- 11. The meeting rose at 13.20 hrs.

Secretary:

Chairman:

A.L. Lebel

J.Kunz

Geneva 1949

#### Page 24- Sub-Aera 7B:

Change last sentence of written text to read: "Thence southward along the Eastern and southern border of Belgian Congo including the territories of Ruanda Urundi, and along the eastern and southern border of Angola to the coast of the south Atlantic."

#### Page 24- Sub-Area 7C:

Change first sentence to read: "From the junction of Uganda, Belgian Congo and Anglo-Egyptian Sudan, along the western border of Uganda and Tanganyika and then along the southern border of Tanganyika to the coast."



Geneva 1949

#### CORRIGENDUM TO APPENDIX TO

#### DOCUMENT 104-E

#### 1. Page 6 - MWARA NSA-1

Between the words "Along the border of the EU MWARA" and the coordinate "37 N 14 E" insert the coordinate "43 N 15 E".

#### 2. Page 16- Sub-Area 1D:

In the sentence reading "Then along the North African coast, Tunis, Tripoli, Benghazi, to the coastal border between Libya and Egypt" insert the word "including" between "coast" and "Tunis".

Change next sentence to read: "Thence along the coast to Alexandria and then to Cairo, and along the Cairo parallel to the 40°E meridian."

Change last sentence to read: "Along the 30°E meridian to the border of Rumania and the Ukraine, thence along this border to the junction of the borders of Czechoslovakia, Hungary and Rumania.

#### 3. Page 17- RDARA 2:

Change third sentence of text to read: "Thence along the border between the U.S.S.R. and the following countries: Poland, Czechoslovakia, Hungary and Rumania, to the Black sea coast at the intersection of the 30 E meridian and along this meridian to the Black sea coast of Turkey, along this coast line to the junction of the borders of Turkey and the U.S.S.R. Thence along this common border and the IRAN-U.S.S.R. border to the Caspian sea, then along the Iran coast of the Caspian sea. Then along the southern border of the U.S.S.R. to the intersection of the Mongolia-China-U.S.S.R. borders at approximately 49 N 88 E. Then along the 88 E meridian to 55 N. Then along the 55 N parallel to 60 E. Thence to the North pole.

#### 4. Page 17- Sub-Area 2B:

Correct first coordinate to read "55°N 88°E".

#### 5. Page 18- Sub-Area 2B:

Change coordinate "52°N 90°E" to read "49°N 88°E".

Change last line to read "Thence along the 88°E meridian to 55°N"

#### 6. Page 18- Sub-Area 2C :

Change last part of Sub-Area description to read: "Along this coast line to the junction of the borders of Turkey and the U.S.S.R. Thence along this common border and the Iran-U.S.S.R. border to the Caspian sea then along the Iran coast of the Caspian sea to the U.S.S.R. border.



Thence northward along the East Caspian sea coast to -

47°N 53°E to 55°N 60°E

#### 7. Page 18- RDARA 3 :

Correct third line to read: "Thence along the 55°N parallel to 88°E".....

Correct coordinate "52°N 90°E" to read "49°N 88°E"

Correct coordinate "50°N 165°E" to read "50°N 164°E"

#### 8. Page 18- Sub-Area 3A:

Change third line to read: "Along the 55°N parallel to 88°E"

Change coordinate "60°N 90°E" to read "60°N 88°E"

#### 9. Page 19- Sub-Area 3B:

Change coordinate "50°N 165°E" to read "50°N 164°E"

#### 10. Page 19- Sub-Area 3C:

Change first coordinate to read "60°N 88°E" In text change "52°N 90°E"
to read "49°N 88°E"
Change last coordinate to read "60°N 88°E"

#### 11. Page 20- Sub-Area 4B:

Change coordinate "12° 22°E" to read "12°N 22°E"

Second word in next to last sentence should be corrected to read "west" -

After coordinate "37°N 73°E" change text to read "east work along the Afghanistan border, thence west along the southern boundary of the U.S.S.R. to the Caspian sea. Then along the northern border of Iran and Turkey to close the Area at 41°N 40°E"

#### 12. Page 21- Sub-Area 5B:

After coordinate "24°N 60°E" insert "to Bombay."

Delete coordinate "20°N 73°E".

Change coordinate "36°N 73°E" to read "37°N 73°E"

Change remainder of Sub-Area description to read "eastward along the Afghanistan-Pakistan border and west along the southern boundary of the U.S.S.R. to the Caspian sea. Then along the northern border of Iran and Turkey to close the Area at 41 N 40 E".

# 13. Page 21- Sub-Area 5C:

After coordinate "02°S 73°E" insert "to Bombay".

Delete coordinate "20°N 73°E"

# 14. Page 21- <u>Sub-Area 5D</u>:

Change coordinate "02°S 41°E" to read "02°S 42°E"

After coordinate "13°N 54°E" 12°N 49°E"

Change coordinate "12°N 43°E" to read "12°N 44°E"

### 15. Page 22- RDARA 6:

Change first and last coordinates from "52°N 90°E" to read "49°N 88°E"

Change coordinate "50N 165°E" to read "50°N 164°E"

### 16. Page 22- Sub-Area 6A:

In sentence beginning "Thence along the coast of Burma..." insert "Pakistan and" between "coast of" and "Burma".

### 17. Pages 22 and 23 - Sub-Area 6B:

Change first and last coordinate to read "49°N 88°E"

Change coordinate "50°N 165°E"

to read "50°N 164°E"

### 18. Page 23- Sub-Area fo :

Change third coordinate "O4"N 117 E" to read "O4"N 118 E"

# 19. Page 23- Sub-Area 6D:

Change first sentence of Sub-Area description to read: "From the junction of the borders of China, India and Burma, south along the India-Burma and Pakistan-Burma borders to the Bay of Bengal."

# 20. Page 23- Sub-Area 6E:

Change coordinate "23°N 80°E" to read "24°N 80°E"

# 21. Pages 24 and 25- Sub-Area 7C:

After coordinate "02°S 60°E" add coordinate "02°S 41°E"

# Page 26- RDARA 9:

Change last coordinate to read "05°S 120°W".

## Page 26- Sub-Area 9C:

Change coordinate "10<sup>6</sup>N 120<sup>6</sup>W" to read "05<sup>o</sup>S 120<sup>o</sup>W"

Before the words "the eastern coast of Africa" insert the words "Thence to".

# 22. Page 29- Sub-Area 12A :

Correct Sub-Area designator to read "12B".

# 23. Page 30- <u>Sub-Area 12B</u>;

Correct Sub-Area designator to read "12A"

# 24. Page 32- <u>Sub-Area 12J</u>:

Change coordinate "18°N 60°W" to read "18°N 59°W"

Change coordinate "08°N 60°W" to read "08°N 59°W"

## 25. Page 32 - Sub-Area 130:

Change coordinate "05°S 81°W" to read "04°S 82°W"

After the words "Peru and Colombia" add "and along the border between Colombia and Brazil".

Conférence internationale administrative des Radiocommunications aéronautiques

Aér/2 Document No.131-F 5 octobre 1949

<u>Ze Session</u> Genève 1949

Le Secrétaire appelle l'attention de MM. les délégués sur la communication reproduite ci-dessous qu'il a reçue du délégué de la République Socialiste Soviétique de l'Ukraine:

Genève le 5 octobre 1949

Au Secrétaire de la Conférence internationale administrative des radiocommunications aéronautiques.

Je vous prie de prendre note et d'en informer les délégués de la 2ème Session de la Conférence que, pendant mon absence à la Conférence, les intérêts de la République Socialiste Soviétique de l'Ukraine seront représentés par la Délégation de la République Socialiste Soviétique de Biélorussie.

### Arii VOROBIEV

International Administrative Aeronautical Radio Conference

2nd Session
Geneva 1949

Aer/2 Document No. 131-E 5 October 1949

The Secretary draws the attention of Delegates to the following communication which he has received from the Delegate of the Ukrainian Soviet Socialist Republic:

Geneva, 5 October 1949

The Secretary of the International Administrative Aeronautical Radio Conference,

Please note and inform the delegates attending the 2nd Session of the Conference, that during my absence from the Conference, the interests of the Ukrainian Soviet Socialist Republic will be represented by the Delegation of the Bielorussian Soviet Socialist Republic.

### Arii VOROBIEV

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas

2a. Reunión
Ginebra 1949

Documento núm 131-Aer/2-S 5 de octubre de 1949

El Secretario llama la atención de los señores Delegados sobre la siguiente comunicación que le ha remitido el Delegado de la República Socialista Soviética de Ucrania:

Ginebra el 5 de octubre de 1949

Señor Secretario de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas.

Le ruego se sirva tomar nota e informar a los delegados presenten a la 2a. Reunión de la Conferencia de que, durante mi ausencia de la Conferencia, los intereses de la República Socialista Soviética de Ucrania estarán representados por la Delegación de la República Socialista Soviética de Bielorrusia.

Arii VOROBIEV

International Administrative Aeronautical Radio Conference
2nd Session
Geneva 1949

# FINAL REPORT OF WORKING GROUP C

In preparing the attached material the Working Group has taken note of the recommendations of ICAO and Region 2 with respect to boundary changes. These and the changes specifically adopted at this Session are included in the description c) below. The Working Group has also verified the other portions of the description to insure accuracy.

The Working Group has also noted and included, where appropriate, the recommendations of the First Session and ICAO on other matters, notably with respect to the use of the common and meteorological broadcast frequencies.

There are attached the following:

- a) a list of frequencies in numerical order showing for each frequency the areas of authorized use, the purpose for which allotted and the necessary restrictions.
- b) A list of MWARA, RDARA and Sub-RDARA showing the frequencies allotted to each.
- c) A description of MWARA, RDARA and Sub-RDARA boundaries.

These documents, together with the following maps still in preparation comprise the substance of the recommendations of this Working Group.

- d) Map of the world showing MWARA boundaries.
- e) Map of the world showing RDARA and Sub-RDARA boundaries.

The Working Group recommends their inclusion in the Final Report of the Conference.

A pictural presentation of the R band frequency allotments and a statement of band edge allotments external to the "R" bands have also been prepared. These are for the information of the delegates and are not intended for inclusion in the Final Report.

The Working Group has prepared seven transparencies designed for use with either map d) or e) above which show the expected interference range of each order of frequencies. The Working Group believes that these transparencies will have continuing value and therefore recommends that they be reproduced and included in the Final Report of the Conference.

E, L. White Chairman Working Group C



# IAARC FREQUENCY PLAN Band Edge Allotments and Areas of Interference

R band	Band Edge	Allotted to	Frequency adjacent to R	Areas of Interference
I	II	III	IV	v
2850 to	2850	a) Fixed Region 2&3 b) Mobile Region 2&3 a) Fixed Region 1 b) Mobile except Aer Mob.		unknown
3025	3025	OR	3023,5 common R-OR	NIL
3400 to 3500	3400	a)Broadcasting b)Fixed c)Mobile (except AeM.)	unknown	unknown
	3500	a)Amateur b)Fixed c)Mobile (except Aer M.)	unknown	unknown
4650 to 4700	4650	Fixed Service	unknown	unknown
	4700	OR	4703,5	NSAM1 - Mexico - Brazil (West) - Chili (N.of 33 <sup>0</sup> S)
Reg.1 & 3,5480	5450 (West Hem.)	a)Fixed ) Region 2 b)land mobile) only	unknown	unknown
to 450 Reg.2, 5450 to 5680	5480 (East Hem.)	a)Aer (OR) Region b)Fixed 1 & 3 c)land Mobile only	unknown	unknown
	5680	OR	5680 common R-OR	NIL
6525 to 6685	6525	Maritime (W.T.)	6519.5	9B - Port Moresby - Madang - Kavieng 1C - Norway - Finland 1D - Yugoslavia 6E - Ceylon

4 I	II	III	IV	V
	6685	OR	6685 6687 <b>.</b> 5	SA - Portugal
8815 to	88 <b>1</b> 5	Maritime (R/T)	8804 <b>.</b> 5 8811.5	NSAM1 - Nicaragua - Argentine - Bahamas (Nassau) NSA1 (Ext)-Rugby (15 kw) -Durban
8965			8967	NSA2 - Great Britain - S. Africa - Saudi Arabia - Cyprus - (Germany (British Zone)
	8965	OR		- Kenya - Libya - Malta - Somaliland (British) - Sudan
				- Suez (British) 6B - Hong Kong 13J- Brazil 13K- Brazil All OR allotments on channel 8967 kc/s
10005 to	10.005	World Wide Standard Frequency	10.000	Unknown
10100	10.100	Fixed	unknown	Unknown
11275 to	11.275	OR	11.266	11B - West Coast U.S.A.
11400	11,400	Fixed Service	unknown	Unknown

I	II	III	· IV	V
13.260 to	13.260	OR	13.255.5	NA - Portugal - Norway - Netherlands - Azores - Canada
13.360	13.360	Fixed Service	unknown	unknown
17900 to	17.900	Broadcasting	17895	EU - Portugal - W. Africa - India NSAM1 ) - Uruguay NSAM2 ) - Venezuela - U.S.A. ME - India - Pakistan - Australia - China
17970	17.970	OR	17975 17983.5	NA - Azores - Fr. Morocco - U.S.A Newfoundland - Labrador - Groenland FE1- Portuguese India - Portuguese Timor FE2- Portuguese Timor NA - Great Britain - Gibraltar FE1- Ceylon - Malaya - Australia - Pakistan FE2- Hong Kong - Malaya - Australia - Pakistan - Pakistan - Pakistan

# International administrative aeronautical radio Conference 2nd session

Geneva 1949

# REPORT OF WORKING GROUP C

(Seventh Meeting)

1. The meeting was opened at 2.55 p.m. on 29 September by the Chairman, Mr. White (USA).

Commander Hansen (Argentine) was appointed Rapporteur.

2. The following countries were represented:

Albania, Argentina, Belgium, Bielorussia, Brazil, Bulgaria, Colombia, Canada, Cuba, United Kingdom, Czechoslovakia, Chile, Egypt, United States of America, the Philippines, France, Hungary, India, Indonesia, Ireland, Mexico, Norway, New Zealand, Netherlands, Pakistan, Paraguay, Poland, Portugal, French Protectorates of Morocco and Tunisia, Roumania, Sweden, Territories of the United States of America, French Overseas Territories, Ukraine, Union of Soviet Socialist Republics, Union of South Africa, Uruguay, Venezuela, Yugoslavia, I.A.T.A., I.F.R.B., I.C.A.O.

- Document No 96 was then considered and, at the request of the Delegate of Ireland, the name of this country was added to the list of countries represented at the meeting concerned.
- The definition of "day sharing" was then considered, and after a lengthy discussion arising out of a proposal by Mr. Harvey (South Africa), in which took part the delegates of Bielorussia, Canada, U.S.A., Morocco and Tunisia, South Africa, Sweden, Bulgaria, the United Kingdom, I.A.T.A., the Netherlands, I.C.A.O. and New Zealand, a vote was taken with the following results:

The following definition was therefore adopted:

"Day sharing": "A channel allocated for daytime use may be used, on a secondary basis, in the period between 1 hour before sunrise and 1 hour after sunset, when the same channel is allocated primarily to the MWARA's, RDARA's and sub-areas, i.e. it is fully protected throughout the 24 hours. The use of this channel shall be subject to the reservation that there shall be no harmful interference to the primary allocation".

The delegation of Bielorussia, supported by the following delegations, opposed the adoption of a definition:

Ukraine, U.S.S.R., Bulgaria, Roumania, Albania, Yugoslavia, Poland, Czechoslovakia and Hungary.

ARCHIVES U.I.T. GENEVE Document No 100 was then considered.

After a short discussion in which took part the following delegations: Morocco and Tunisia (which had submitted the document), Netherlands, I.F.R.B., Canada and I.C.A.O., the document was unanimously approved with the following amendments:

- 1) In paragraph 3 b): Delete, in the last line, the word "recomendación" (Spanish text).
- 2) In paragraph 3 c): Delete, in the second last line, the words "Para. 7, Section III".
- 3) In paragraph 3 e): In the third line, after "same date" add: "of Registration in the International Frequency List."

Document No 109 was then considered.

A lengthy discussion ensued between the delegations of Argentina, Canada, Bulgaria, Bielorussia, U.S.A., Cuba, I.A.T.A., the Netherlands, South Africa and Columbia.

It was then decided:

- 1) On a proposal by the delegate of Canada, to delete the paragraph beginning "The Working Group recommends.....etc. etc."
  - 2) After a vote with the following result:

Against ..... 4
Abstentions ... 6

to adopt the proposal by the USA to eliminate the maps mentioned in f), g) and h).

Consideration of Document No 109 was continued. The delegate of Bielorussia did not consider that the document in question was actually the Final Report of the Working Group, and asked for classification. After a lengthy discussion between the delegates of: Bielorussia, Canada, Roumania, Colombia, Bulgaria, Netherlands, U.S.A., Ukraine, an amended title to the document, suggested by the delegation of Colombia was adopted as follows:

"Proposed form for the Final Report of Working Group C".

The introduction should read: "This Report will be composed of the following documents:"

The delegation of Canada made the following statement:

"Mr. Chairman, the Delegate of Canada wisher to state that when it votes on Document 109 (as amended) it shall be voting only on the text contained on the one page of Doc. 109 and in no way are we signifying our acceptance or otherwise of the material referred to in Doc. 109 but not contained therein."

5.

6.

7.

## \_ 3 \_ (Aer/2-133-E)

Put to the vote the document concerned was approved by :

8. Although it had been decided to continue the meeting until the agenda had been exhausted, it was deemed necessary to suspend the meeting until September 30 at 9.30 a.m. The meeting was therefore suspended at 6 p.m.

The meeting was resumed at 9.45 a.m. on September 30, the same delegates being present.

9. Document No 104 revised was considered.

On a proposal by the delegate of the United Kingdom, the asterisk (1\*) in Table 4/1 (2), frequency 5649 kc/s in column (3) was replaced by a cross.

- During a short discussion between the delegates of Bulgaria, South Africa and New Zealand, it was explained that the decision to delete Column 4) of the document had been taken in Group C4 in order to avoid confusion and that in any case the conflict shown therein still existed.
- 11. On the proposal of the Delegate of Morocco and Tunisia, speaking on behalf of the Belgian Congo, the following amendments were approved without observation:
  - a) In the table of frequency allotments:

Table Nº 2 in sub-area 7B Change the frequency B 11 to B 14

Table N° 5 in sub-area 7B

Change the frequency E 11 to E 6

Change the frequency E 15 to E 16

b) In Document Nº 104

In Table 2/1

For the frequency B 11 delete the allotment to 7 B For the frequency B 14 add the allotment to 7 B

In Table 2/2

For the area 7 B replace Channel B 11 and 3488.5 kc/s by: B 14 and 3474.5 kc/s.

In Table 5/1

In Channel 16 add the allocation to 7 B
In Channel 15 delete the allocation to 7 B
In Channel 11 delete the allocation to 7 B
In Channel 6 add the allocation to 7 B

# In Table 5/2

In area 7 B replace Channels E 11 and E 15 by Channels E 6 and E 16, and the frequencies 6604.5 and 6544.5 by 6664.5 and 6529.5 kc/s.

- Following a request for information by the Delegate of Bielorussia, who asked when it has been decided that MWARA NSAM-2 (Table 8 of the allocations) would have 2 frequencies and why SA appeared with (E), in spite of the decision at the first meeting that the SA would not be extended to the European area on 9 Mc/s, a short discussion ensued from which it was decided that:
  - a) Region II of the ITU had allotted 2 frequencies to the NSAM-2;
  - b) the SA should not be extended.
- 13. The Delegate of Pakistan made the following statement:

"Mr. Chairman. I am taking this opportunity to invite the attention of this meeting to the proceedings which lead to the adoption of Doc. 104 in full, in the plenary meeting of Working Group C 4 which took place on the 29th Sept. 49. The only course which the Delegate of Pakistan could follow under the circumstances was to vote against the Doc. 104 in so far as allotment for 6.6 Mc/s is concerned and reserved his right to open up the question on the appropriate occasion. The delegate of India also, voted against the Doc. 104. I may add, Sir, that we do not have with us in this Conference persons representing all the countries which cover the areas Five and Six and I feel that were they with us here, they would have expressed themselves in the like manner; the reasons being obvious in that, that the allotments of frequencies, specially in 6.6 Mc/s for these areas are not very adequate. For example in the areas 5 and 5 B there is only one frequency each, available for use. My own country finds itself completely overlapped in the West, with areas 5 B and 6 A; and, it would indeed be very difficult for us to accept a greater proportion of adjacent channels for areas 5, 5 B, 6 and 6 A in the face of limited number of overall allotment; however, the Delegation of Pakistan does not for a single moment wish to be wholly selfish in this matter; on the contrary, we are very much desirous to see the best possible solution be adopted which will give maximum degree of satisfaction to all of us and that would of necessary mean that some sacrifices will have to be made by all of us in order to accommodate others and the Delegation of Pakistan will not be found wanting in that.

In the plenary of C 4, held on the 28th September 1949, it was decided that the meeting will adopt the Doc. 104 with the exception of allotments made in that Document for 6.6 Mc/s. An ad hoc Group was appointed calling upon Mr. Brand, the leader of the Sub-Group of C 4 which worked out the allocation in the first instance and Mr. Weaver, one of the delegates of U.S.A. and Col. Greven of I.C.A.O., to take part in working out an alternative plan which will eliminate some of the conflicts which were viewed seriously. No invitation was made to ne to take part in the working of that ad hoc Group but after the meeting, I asked Mr. Weaver if I could be of assitance. I shall not go into the details of the after events.

On the morning of the 29th September 1949 we received in the plenary of Working Group C a Doc. 118; Doc. 115 having been circulated on the previous day. The manner of presentation of the two Documents named to the plenary of Working Group C 4 made the real issue a bit confused. Most of the delegates here today, were present on that occasion and they know the position.

For Pakistan I may say, Sir, that we are guided by the principle of accommodating each other as I said earlier, and I would not show special preference to Doc. 115 over Doc. 118 or vice versa; on the other hand it had been expressed that the plan for 6.6 Mc/s in Doc. 104 is by no means a good plan; on the contrary, Sir, the Doc. 115 and Doc. 118 have certain greater advantageous features when compared to the plan in Doc. 104. I, therefore, submit, Sir, that the decision taken in the plenary of subworking Group C 4 duly be reviewed here in the plenary of Working Group C, in so far as plan for 6.6 Mc/s is concerned and either the plan presented in Doc. 115 or Doc. 118 be adopted in preference to the plan in the Document No 104. I thank you, Sir."

14. The Delegate for the Netherlands submitted a formal motion that Group C should decide as to the document it preferred: 104, 115 or 118. He was supported by Indonesia, I.A.T.A. and other delegations.

A vote was taken, with the following result:

In favour of Document 104 .... 4 In favour of Document 115 .... 3 In favour of Document 118 .... 22

Doc. No. 118 was therefore substituted for 104 in the Table for 6.6 Mc/s.

The Delegate for I.A.T.A. pointed out that in the corrigendum to Document No. 104 it should be added that the maps of the Atlantic should bear the designation EU, and those of the Pacific ME, and that the allocation tables should also be altered.

At the suggestion of the Chairman, the Group decided to set up an ad hoc Group composed of the delegates of I.C.A.O., Belgium and I.A.T.A., under the Chairmanship of Mr. Harvey (South Africa), whose task it would be to correct the allocation tables and submit a new document, provided that the Steering Committee was in agreement.

- The Delegate for Bielorussia asked the Delegate for Morocco and Tunisia whether the reduction in frequencies made in the European area had been restored. Mr. Jouk replied that the reduction had resulted from the fact that the frequencies allocated to the MWARA's had not been reduced and he repeated that he was opposed to the differential treatment accorded to these areas.
- During examination of Document No. 104, the Canadian Delegation made the following statement:

Document 104 tables 1 to 10 which we now base before us is the basic plan and it will be remembered that at the Region 2 Conference the Canadian Delegation accepted the basic plan under certain conditions.

Since that time we have followed the principle of co-operation with the majority. However as the position regarding frequency allotments remains unchanged the Delegation of Canada is prepared to accept Document 104 tables 1 to 10 upon the same conditions, that is, that the additional frequencies required will be made available before or during implementation. The Canadian Delegation therefore wishes to present the following declaration for inclusion in the Conference records, for transmittal to the Plenary Assembly and for inclusion in the final reports

The Canadian Administration,

# considering

- a) that the Aeronautical Mobile "R" Service frequency allotment plan formulated by the Aeronautical Radio Administrative Conference provides the basic minimum requirements for the Major World Air Route Areas;
- b) that the plan does not provide sufficient frequencies for Canadian domestic operations in Sub-areas 10B, 10C, 10D and 10E;
- c) that adjacent channel assignments limit the use of certain frequencies;
- d) that certain additional sharing possibilities are available in accordance with the sharing rules and technical principles adopted by the Conference;
- e) that there are certain other sharing possibilities, such as the use of lower power and more restricted area of use (than is provided for in the basic plan) which will provide the protection ratios adopted by the Conference;
- f) that secondary sharing possibilities may be made available during joint consultation in implementation planning with other administrations concerned;
- g) that some of the above possibilities are not under the control of the Canadian Administration;

### reserves the right

In the event that the Aeronautical Mobile (R) Service frequency needs of Canada are in the opinion of the Canadian Telecommunication Administration not fully provided for at implementation meetings, following the Second Session of the Aeronautical Administrative Radio Conference at Geneva, to take whatever steps may be necessary with respect to the use of such additional frequencies as may be deemed essential to provide a reasonably satisfactory service in the interest of safety of life in the air.

The Delegates for the U.S.S.R. and Bulgaria opposed the adoption of Document No. 104, and they were supported by the Representative of Yugoslavia, who accused the majority of deliberately imposing a plan which did not allow for the actual requirements of all countries. It was a cowardly procedure, which demonstrated the falseness of the document.

# -7 - (Aer/2-133-E)

Commander Hansen (Argentina), in reply to the accusations made by the above mentioned delegates, made the following statement:

"Mr. Chairman, Gentlemen:

As this conference enters its final and most important phase, and before the Assembly considers the plan for high frequency allocations to the Aeronautical Mobile R Service, prepared by this group in accordance with the actual and - in the majority of cases - proven requirements, the Argentine Delegation wishes to express its opinion on the problem before us.

I must start by thanking Mr. White and the members of the group who took part in the actual work, for the efforts they have made and their willingness to meet and overcome the many difficulties. I must also express my thanks and satisfaction that the similar plan prepared for Region II at the recent Washington Conference has been respected.

The fact that my country is more favoured - only because, I would say, its geographical situation offers fewer difficulties in satisfying its requirements - cannot prevent me from cooperating with other countries for our common ends.

Gentlemen, under its terms of reference this Conference has to allocate radio frequencies, which are indispensable for safety in aerial operation. Aerial operations, regardless of nationality, should benefit equally by such security. But as other spheres of human activity have similar needs, exclusive frequencies for the aeronautical services must necessary be limited.

If that interpretation of the problem is correct, and I think it is, it would mean that this conference, taken only as a comparison, should act as the high authority over administrations, granting to each area, or rather distributing among them, the means required for their scheduled aerial operations. It must be remembered that it is not the administrations which need frequencies, but aircraft, their crews and passengers - the safety of human life.

It is not difficult to deduce that it is this security - and not other factors, whether they be concerned with politics, international prestige, greater or lesser power, economics, etc. etc. - which governs the technical principles adopted in the preparation of plans of this kind; regardless of personal opinion, the value and the margin of safety rest directly on those technical principles, and on this value, this margin, opinion cannot be otherwise than unanimous.

I repeat once more that safety in the air has nothing to do with the language we speak or our colour neither has it anything to do with the number of square kilometres and inhabitants in the territory over which we fly. The safety is in the aircraft itself and is in inverse proportion to the number of these in flight; it is independent α? the factors I have already mentioned.

But it is also certain that this number can increase while the frequencies available cannot change. We are all aware that progress in aeronautics and telecommunications is leading to a reduction in frequency

requirements. A clear example is shown by the reduction in requirements which the United States Delegation was able to make, bearing these facts in mind.

However, it may be that certain areas will reach saturation, or have already done so. There will be no other solution than to envisage a recoganization of aerial transport, e.g., aerial trains, or to impose limits on operations. The same happens with railway systems: the number of trains which can run is not infinite but quite limited. A distribution cannot be equitable if it temporarily prevents saturation at the expense of development in other areas which, for various reasons, have a lower level of aerial operations. I mean that if we think realistically we must recognize that high frequency requirements have to diminish, either directly or indirectly. Firstly, as already stated and secondly because when the plan comes into force several further possibilities of repetition will be found when allocations to different stations are made.

On the other hand, let us think of the present disorder in distribution and the number of frequencies that the aeronautical services are using and we shall see that the balance is obviously favourable.

My Delegation is of the opinion that this plan is not and cannot be provisional, despite the fact that it will have to be considered by the extraordinary conference which will be meeting in September, 1950. As we see it the conference must limit itself to approval of the plan, giving it legal force, but must avoid revision, for which no argument can exist.

Gentlemen, I wish to invite all delegations without exception, in considering the plan we have before us, to manifest their will to have a plan, setting aside intransigence and the natural desire to impose their own standards, in the interests of our common aim - safety in the air. "Where there's a will there's a way", says a proverb, and to accept principles or solutions apparently in conflict with our desires, but which do not conflict with the fundamental need, is an honourable quality which shows a spirit of collaboration and the respect of one human being for another.

The Argentine Delegation supports the plan and formally invites other delegations to do the same, in the conviction that there can be no objections to a plan which has cost so much, for which the time has run out and which, above all, fulfils without exception the conditions I have mentioned in my statement.

Thank you, Mr. Chairman."

19.

The Delegate for the Ukraine opposed the plan, and said that the Argentine Delegate could not assert that nations not satisfied with the plan would accept it, because Argentina's requirements were fulfilled.

The following delegations also opposed the plan : Roumania, Albania, Czechoslovakia, Poland, Hungary and Bielorussia.

Document  $N^{\circ}$  104 was adopted by a majority vote. The voting was as follows:

20. The Delegate for Indonesia said that although, with its geographical situation, his country had no difficulties this was no obstacle to approving the plan adopted by the majority of Group C.

The United States Delegate made the following statement:

"The US Delegation also accepts the allotment plan prepared by this Working Group, as is now stands. It has listened carefully to the statement of the Canadian Delegation and feels that it contains a useful advance view of the volume of work to be done in the period of implementation, particularly that part there of which will deal with specific station assignment planning. We are fully confident that during that process substantial improvements will be made in the direction of further sharing possibilities. That however we feel is a phase of the work which will come after this Conference whose long and arduous task ends with the adoption of a reasonably satisfactory basic allotment plan.

21. The allocation tables 1 to 10 were adopted by a majority vote. The voting was as follows:

The delegates of the U.S.S.R., Bielorussia, Ukraine, Roumania, Albania, Yugoslavia, Czechoslovakia, Hungary, Poland and Bulgaria stated that they had voted against the adoption of the allocation tables.

- The document containing the description of the MWARA boundaries was put to the vote and approved by 30 votes to 9, with no abstentions. The Delegates of the U.S.S.R., Bielorussia, Roumania, Albania, Yugoslavia, Czechoslovakia, Hungary, Poland and Bulgaria stated that they had voted against the adoption of the document.
- 23. As it was then 1.40 p.m. the Chairman closed the meeting.

Rapporteur :

Chairman:

A.N.V. Hansen

E.L. White

GENEVE

# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

### REPORT OF WORKING GROUP C

(Frequency sharing)

8th Meeting

4 October 1949

The meeting opened at 9.40 a.m. with Mr. White in the Chair.

The following countries and organizations were represented:

P.R. of Albania; Commonwealth of Australia; Belgium; Bielorussian S.S.R.; P.R. of Bulgaria; Canada; United Kingdom Colonies; Egypt; United States of America; France; India; Indonesia; Pakistan; Netherlands, Curacao and Surinam; Republic of the Philippines; French Protectorates of Morocco and Tunisia; Republic of Poland; Ukrainian S.S.R.; United Kingdom of Great Britain and Northern Ireland; Republic of Czechoslovakia; U.S. Territories; Union of South Africa; U.S.S.R.; F.P.R. of Yugoslavia; I.F.R.B.; I.C.A.O.; I.A.T.A.

ernational Administrative anov (P.R. of Bulgaria) was appointed Rapporteur 49.

the meeting should examine the Appendix to Aer/2 Doc. No. 104, giving the boundaries of the R.D.A.R.A. and sub-R.D.A.R.A. He asked the delegates present whether they had any amendments to submit.

- 2.1 After a discussion in which Mr. I. Jouk (Bielorussian S.S.R.) and Mr. L.M. Layzell (I.A.T.A.) took part, the meeting approved a proposal by Mr. E.V. Shores (United States of America) to make the following amendments:
- 2.1.1 Replace the coordinates 52 N-90 E by 49 N-88 E for the areas and sub-areas 2B, 3, 3C, 6 and 6B on pages 18, 19, 22 and 23.
- 2.1.2 Mr. Shores announced some additional amendments to appear in a separate corrigendum.
- 2.2. Mr. Barajas (Mexico) suggested the interchange of the coordinates of sub-areas 12A and 12B (pages 12 and 13). Approved.
- 2.3. At the request of Mr. P.J. Greven (I.C.A.O.), the Group agreed to add 43 N-15 E before 37 N-14 E in the coordinates for the EU M.W.A.R.A. On page 6.
- 2.4. and TenItiwas also decided to add to the Appendix an explanation of the various abbreviations used in defining the MeW.A.R.A. acceptance :
- 2.5. U.S. As there were no further amendments, the description of the R.D.A.R.A. and sub-R.D.A.R.A. boundaries was approved.
- After a discussion in which Mr. M. Shores (United States of America),
  Mr. Leunis (Indonesia), Mr. Beaufol (France), Mr. Chef (Morocco and Tunisia),
  Mr. Rowland (United Kingdom) and Mr. Greven (I.C.A.O.) took part, the Group
  adopted the following text, proposed by Mr. Layzell (I.A.T.A.), for the use
  of the common frequencies 2973 kc/s and 3495.5 kc/s:

### 2 -(Aer/2-134-E)

Authorized for use in Regional and Domestic Air Route Areas 1, 2, 3, 4, 5, 6, 7, 8, 9 and the respective Sub-Regional and Domestic Air Route Areas as follows:

- 1) aboard aircraft for:
  - a) communications with approach and aerodrome control,
- 2) at aeronautical stations for aerodrome and approach control under the following conditions:
  - a) for approach control with power limited to a value that will produce 20 uv/m at 100 km and in any case no more than 20 watts in the antenna circuit,
  - b) for aerodrome control with the power limited to a value that will produce 20 uv/m at 40 km and in any case no more than 20 watts in the antenna circuit,
  - c) the power of aeronautical stations which use this frequency under the conditions prescribed above may be increased through ITU and/or ICAO regional agreements to the extent necessary to meet special operational difficulties such as those introduced by high atmospheric noise level;
- 3) for any other aeronautical mobile R function on the condition that no harmful interference be caused thereby to stations employing it for aerodrome and approach control purposes;
- 4) the specific application of this frequency for the above purposes may be decided at ITU and/or ICAO regional aeronautical conferences.
- 4. Mr. Lebel (United States of America) proposed that the 24-hour rule for documents to be studied at meetings should be ignored in order to save time.
  - 4.1. Mr. Chef (Morocco and Tunisia) proposed that documents published in the three working languages twelve hours before a meeting should be examined. The proposal was adopted.
- 5. It was decided that the next meeting of Working Group C would be called as soon as the minutes of the previous meetings had been published,

The meeting rose at 12 o'clock.

Rapporteur:

Chairman:

V. HARIZANOV

E.L. WHITE

Geneva 1949

# RECOMMENDATION

# SUBMITTED BY THE EGYPTIAN DELEGATION

The IAARC, considering,

- 1. That the next step following the adoption of an aeronautical mobile frequency allotment plan by this Conference is the assignment of frequencies to stations on the basis of that plan,
- 2. That it is essential, in view of the nature of the international aeronautical operations involved, that those frequency assignments be coordinated between the countries interested in each area as a whole, both for the MWARA's and for the RDADA's,
- 3. That the United Nations has recognized the ICAO as the specialized international agency for the coordination of international aeronautical operations,
- 4. That in the case of a large number of RDARA's and in the majority of MWARA's the interested administrations will find it convenient to invite the ICAO to convene regional or special meetings, as appropriate and necessary, if possible before the Extraordinary Administrative Conference to be held in September 1950, in order that the administrations concerned may develop their frequency assignment plans as referred to in (1) above and notify the PFB accordingly,
- 5. That, however, a different situation exists in other areas among which RDARA 1, as a consequence of the fact that not all countries interested in those areas are members of ICAO.

### Recommends,

- a) That in RDARA's and MWARA's comprising only countries which are members of ICAO the administrations consider the possibility of requesting ICAO to hold regional or special meetings, for the purpose contemplated in (4) above;
- b) That in RDARA's and MWARA's where the interested countries are not all members of ICAO but where nevertheless the interested administrations will find it possible to convene ICAO meetings for the purpose of preparing their station frequency assignments, that course be followed:
- c) That in RDARA 1 those station frequency assignments be prepared by a meeting of ITU member states comprised in that area.



# Conférence internationale administrative des Radiocommunications aéronautiques 2e session

Aér/2 Document No. 136-F 5 octobre 1949

Genève 1949

Le Secrétaire a l'honneur d'informer MM. les délégués de l'intention du délégué du Royaume-Uni d'annuler la procuration donnée à la délégation des Colonies du Royaume-Uni de le représenter en son absence aux séances de la Conférence. En conséquence, le document Aér/2 No. 58 doit être considéré comme annulé.

International Administrative Aeronautical Radio Conference 2nd Session

Aer/2 Document No. 136-E 5 October 1949

Geneva 1949

The Secretary announces that the Delegate of the United Kingdom wishes to withdraw the proxy given by the United Kingdom Delegation to the Delegation of the U.K. Colonies. Doc. Aer/2 No. 58 is, therefore, cancelled.

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronáuticas

<u>2a Reunión</u>

Documento Núm.136 Aer/2-S 5 de octubre de 1949

Ginebra 1949

El Secretario tiene el honor de informar a los señores delegados sobre la intención del delegado del Reino Unido de anular la procuración dada a la Delegación de las Colonias del Reino Unido para representarle en las sesiones de la Conferencia. Por lo tanto il documento Núm. 58 Aer/2 debe considerarse anulado.

### Aer/2 Document No. 137-E 5 October 1949

# International Administrative Aeronautical Radio Conference <u>2nd Session</u>

Geneva 1949

### REPORT OF SUB-WORKING GROUP C1

6th and Final Meeting

5 October 1949

- 1. The Chairman opened the meeting at 14.30 hrs.
- 2. Following countries and organizations were represented:

Australia; Belgium; Colonies of United Kingdom; Belgian Congo; United States of America; France; Indonesia; Italy; New Zealand; Netherlands; French Protectorates of Morocco and Tunisia; U.S. Territories; South Africa; I.G.A.O.; I.A.T.A.

- 3. Aer/2 Doc. 74 was adopted unanimously and the meeting agreed that the Chairman should go ahead and write the minutes of the Final meeting without further reference to the Committee.
- 4. The Committee C1 was disbanded and the meeting closed at 14.40 hrs.

The Rapporteur:

The Chairman:

F. Andrews

G.A. Harvey



Aer/2 Document No.138-E 5 October 1949

Geneva 1949

### REPORT OF SUB-WORKING GROUP C4

3rd and final meeting

5 October, 1949

- 1. The final meeting of sub-working Group C4 was opened by the Chairman, Mr. F.R.W. Andrews (New Zealand) at 1445 hours.
- 2. The following countries and organizations were represented:

Australia, Belgium, U.K. Colonies, Belgian Congo, United States of America, France, Indonesia, Italy, New Zealand, Netherlands, French Protectorates of Morocco and Tunisia, Territories of the United States of America, Union of South Africa, I.C.A.O., I.A.T.A.

- Document 119 was adopted with minor amendments and it was agreed that the minutes of the final meeting should be approved by the Chairman without approval at a further meeting.
- 4. The sub-working Group C4 was disbanded, and the meeting closed at 1455 hours.

G.A. Harvey

F.R.W. Andrews

Rapporteur

Chairman



# International Administrative Aeronautical Radio Conference 2nd Session

# Aer/2 Document No. 139-E 7 October 1949

Geneva 1949

## REPORT OF THE CREDENTIALS COMMITTEE

(Committee 2)

7th meeting

7 October 1949

- 1. The meeting was opened at 9.30 a.m. under the chairmanship of Mr. Souto Cruz (Portugal).
- 2. No observations were made on the report of the 6th meeting (doc. 107), which was approved as such.
- 3. The Committee considered the credentials of the new delegate of Ireland, Mr. D.P.R. O' Beirne.

In consequence, the following information should be added to Document 32:

No. of Annex 1 to the Atlantic	Member of the Union	Name of delegate	
City Convention (1)	(2)	(3)	
42	Ireland	D.P.R. O'BEIRNE	

4. The meeting was adjourned at 9.40 a.m.

Chairman:

SOUTO CRUZ

(16)



INTERNATIONAL ADMINISTRATIVE AERONAUTICAL RADIO CONFERENCE

Aer/2 - Document No. 140-E

SECOND SESSION

ij

GENEVA 1949

7 october 1949

#### Section I

#### **DEFINITIONS**

- 1. The words "Radio Regulations" mean the Radio Regulations annexed to the International Telecommunication Convention signed at Atlantic City in 1947 or any revision which may replace them, once it has become effective.
- 2. The words "Interim Report" mean all the documents prepared by the First Session of the Conference, either in conclusion of its work, or to prepare for the Second Session. These documents form four volumes:
  - Volume I: Report prepared at the First Session together with Annex I—Minimum and Maximum Range Charts for use as a Guide to the Allotment of Frequencies.
  - Volume II: Final Report on the Plan for the Allotment of Frequencies for the Aeronautical Mobile OR Service.
  - Volume III: Interim Report on the Establishment of the Plan for the Allotment of Frequencies for the Aeronautical Mobile R Service.
  - Volume IV: Recommendations and Resolutions.
- 3. The word "Plan" means "The Geneva Plan" for the Aeronautical Mobile Service, as given in this document.

## 4. Terminology:

(a) The Conference has observed that certain doubts might arise in regard to the terms used for the frequency distribution, and that such doubts are apt to lead to confusion.

The terms used by the Conference are therefore given below:

Distribution to	French	English	Spanish
Services	Allocation (allouer)	Allocation (to allocate)	Distribucion (Distribuir)
Areas, Regions	Attribution (attribuer)	Allotment (to allot)	Distribution (Distribuir)
Stations	Assignation (assigner)	Assignment (to assign)	Asignacion (Asignar)

(b) For technical words or expressions the Conference has taken the definitions given in Articles 1 and 2 of the Radio Regulations.



**5.** The definitions of the categories R and OR in the Aeronautical Mobile Service are given in Nos. 256 and 257 of the Radio Regulations, as follows:

Category R applies to communications between any aircraft and those aeronautical stations primarily concerned with the safety and regularity of flight along national or international civil air routes.

Category OR applies to communications between any aircraft and aeronautical stations other than those primarily concerned with flight along national or international civil air routes.

- **6.** To simplify this document, the Conference has used the expressions "Western Hemisphere" and "Eastern Hemisphere".
  - (a) The Western Hemisphere is Region 2 of the ITU, whose boundaries are defined in Chapter III, Article 5 of the Radio Regulations.
  - (b) The Eastern Hemisphere is the whole of Regions 1 and 3 of the ITU whose boundaries are defined in Chapter III, Article 5 of the Radio Regulations.

The areas and sub-areas are based on the frontiers of the Western and Eastern Hemispheres (lines B and C defined in Nos. 105 and 106 of the Regulations).

A map showing the outlines of ITU Regions 1, 2 and 3 is shown on page 286 of the Radio Regulations.

- 7. 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.
- **8.** A Major World Air Route Area (MWARA) 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.
- **9.** 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 7 above.
- 10. A Regional and Domestic Air Route Area (RDARA) is one embracing a certain number of the air routes defined in the foregoing paragraph.

# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

### REPORT OF THE DRAFTING COMMITTEE

(Committee 3)

### Seventh Meeting

7 October 1949

- 1. The meeting was opened at 9.30 a.m. by the Chairman, Mr. Mouchez (France).
- 2. Delegations of the following countries were represented at the meeting:

Argentine, United States of America, France, Morocco and Tunisia.

The Committee first studied the three recommendations adopted at the 29th Plenary, Meeting with their modifications (Doc. Aer/2-No. 105, 126, 135).

The texts were adapted in accordance with the amendments made by the Plenary Assembly and it was decided to arrange them as follows in Part I, Section III:

Article 1: Doc. 135

Article 2: Docs. 105 and 126.

- 4. It recorded the Plenary Assembly's decision to transfer Recommendation No. 3 from Article 1 to Article 2
- 5. and to adopt the following title for the final document:

FREQUENCY ALLOCATION PLAN

for the

AERONAUTICAL MOBILE SERVICE

and

### FINAL AGREEMENT

6. There being no other business on the agenda, the meeting rose at 11 a.m.

Rapporteur:

Chairman:

M. CHEF

R. MOUCHEZ



# Conférence internationale administrative des Radiocommunications aéronautiques 2e session

Genève 1949

Le Secrétaire appelle l'attention de MM. les Délégués sur la communication ci-dessous qu'il a reçue de la Délégation de l'Italie:

"Monsieur,

Voulez-vous avoir l'obligeance de noter que durant les absences de la Délégation de l'Italie des séances de la C.I.A.R.A., ce pays sera représenté par la Délégation des Etats-Unis d'Amérique qui est autorisée à discuter et à voter en son nom."

A.C. DE VINCENTI Délégué de l'Italie

International Administrative Aeronautical Radio Conference

Aer/2 Document No. 142-E
7 October 1949

2nd Session

Geneva 1949

The secretary wishes to draw the attention of Delegates to the following communication received from the Delegation of the Italian Delegation:

"Sir.

Will you please note that during the absence of the Italian Delegate from the meetings of the I.A.A.R.C., the Italian interests will be represented by the Delegation of the United States, which is authorized to speak and vote on its behalf."

A.C. DE VINCENTI Delegate of Italy

Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas

Documento Num. 142-Aer/2-S 7 de Octubre de 1949

2a Reunidn

Ginebra 1949

El secretario llama la attención de los señores Delegados sobre la siguiente comunicación remitida por el Delegado de Italia:

"Muy Sr. mio:

Ruego al señor Secretario se sirva tomar nota de que la Delegación de Italia estará representada con voz y voto por la Delegación de los Estatos Unidos de America, cuando no le sea posible asistir a las sesiones de la Conferencia Administrativa Internacional de Radiocomunicaciones Aeronauticas." INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/2 Document No. 143-E

7 October 1949

### PART II

# PLAN FOR THE ALLOTMENT OF FREQUENCIES FOR THE AERONAUTICAL MOBILE "R" SERVICE

#### Section I

DESCRIPTION OF THE MWARA, RDARA AND SUB-RDARA BOUNDARIES

#### ARTICLE 1

DESCRIPTION OF THE MAJOR WORLD AIR ROUTE AREA (MWARA) BOUNDARIES

- 1. The boundary descriptions which follow cover the areas to which frequencies are allotted under the frequency allotment plan of the conference.
- 2. These areas are also shown graphically on maps included with this document.

  If there is any difference between the area as shown on the maps and as described, the written description is to be considered correct.
- 3. National boundaries used in the written descriptions are those of September, 1949.
- 4. In the description of the Major World Air Route Areas (MWARA's) all lines between points not otherwise specified are defined as great circles.

In the descriptions of the Regional and Domestic Air Route Areas (RDARA's) and Sub-Areas lines not otherwise specified are defined as straight lines on a Mercator Projection Map.

# Major World Air Route Area — CENTRAL EAST PACIFIC (MWARA-CEP)

From the coordinate 32°N-117°W through the coordinates 16°N-159°W, 22°N-159°W, 50°N-122°W, 38°N-120°W, to the coordinate 32°N-117°W.

# Major World Air Route Area — CENTRAL WEST PACIFIC (MWARA-CWP)

From the coordinate  $17^{\circ}N-155^{\circ}W$  through the coordinates  $10^{\circ}N-160^{\circ}E$ ,  $10^{\circ}N-117^{\circ}E$ ,  $23^{\circ}N-114^{\circ}E$ ,  $40^{\circ}N-117^{\circ}E$ ,  $25^{\circ}N-155^{\circ}W$ , to the coordinate  $17^{\circ}N-155^{\circ}W$ .



# Major World Air Route Area — EUROPE (MWARA-EU)

From the coordinate 33°N-12°W through the coordinates 32°N-13°E, 29°N-35.5°E, 40°N-34°E, 42°N-30°E, then along borders between following countries: Bulgaria and Turkey, Greece and Bulgaria, Greece and Yugoslavia, Greece and Albania to the coordinate 40°N-19°E, through the coordinate 45°N-13°E; then along the borders between Yugoslavia and Italy, Yugoslavia and Austria, Hungary and Austria, Hungary and Czechoslovakia, U.S.S.R. and Czechoslovakia, Poland and Czechoslovakia, Poland and Germany then through the coordinates 55°N-14°E, 60°N-20°E, 60°N-27°E, excluding all U.S.S.R. and Republic of Poland Territories, thence along border between U.S.S.R. and Finland and through the coordinates 72°N-30°E, 70°N-00°, 54°N-12°W, to the coordinate 34°N-12°W.

# Major World Air Route Area — FAR EAST - 1 (MWARA-FE-1)

From the coordinate 40°S-145°E, through the coordinates 10°S-106°E, 05°N-77°E, 15°N-77°E, 24°N-92°E, 11°N-107°E, 18°S-147°E, 23°S-154°E, 40°S-154°E, to the coordinate 40°S-145°E.

# Major World Air Route Area — FAR EAST - 2 (MWARA-FE-2)

From the coordinate 12°N-124°E, through the coordinates 33°N-133°E, 35°N-132°E, 24°N-88°E, 08°S-105°E, 15°S-130°E, 15°S-158°E, 00°-168°E, 00°-135°E, to the coordinate 12°N-124°E.

# Major World Air Route Area — MIDDLE EAST(MWARA-ME)

From the coordinate 05°N-80°E, through the coordinates 17°N-70°E, 28°N-30°E, 37°N-10°W, 60°N-10°W and 60°N-20°E, then along the border of the EU MWARA to a point 45°N-13°E then through the coordinates 40°N-14°E, 37°N-51°E, 24°N-93°E, to the coordinate 05°N-80°E.

Note: Only one family of frequencies to enter the EUROPEAN Area beyond a line connecting the following terminals: Sollum, Alexandria, Cyprus, Ankara.

# Major World Air Route Area — NORTH ATLANTIC (MWARA-NA)

From the coordinate  $39^{\circ}N-78^{\circ}W$ , through the coordinates  $47^{\circ}N-75^{\circ}W$ ,  $68^{\circ}N-20^{\circ}W$ ,  $60^{\circ}N-20^{\circ}E$ , then South along the border of the EU MWARA and the Northern border of Czechoslovakia to the coordinate  $50.5^{\circ}N-12.5^{\circ}E$ ; then through the coordinates  $45^{\circ}N-10^{\circ}E$ ,  $32^{\circ}N-07^{\circ}W$ ,  $35^{\circ}N-25^{\circ}W$ ,  $30^{\circ}N-62^{\circ}W$ ,  $16^{\circ}N-78^{\circ}W$ ,  $21^{\circ}N-86^{\circ}W$ , to the coordinate  $39^{\circ}N-78^{\circ}W$ .

- Note 1: Only one family of frequencies allotted to this area is available for use S. and W. of a line extending from  $39^{\circ}N-78^{\circ}W$  to  $30^{\circ}N-62^{\circ}W$ .
- Note 2: Only one family of frequencies is extended into the European Area beyond a line connecting the following terminals: Stavanger, Amsterdam, Brussels, Paris, Madrid, Lisbon, Casablanca.

# Major World Air Route Area — NORTH PACIFIC (MWARA-NP)

From the coordinate 46°N-122°W, through the coordinates 50°N-170°W, 33°N-138°E, 38°N-138°E, 50°N-166°E, 62°N-150°W, 55°N-110°W, to the coordinate 46°N-122°W.

# Major World Air Route Area — NORTH-SOUTH AFRICA - 1 (MWARA-NSA - 1)

From the coordinate 31°S-35°E, through the coordinates 31°S-24°E, 16°N-26°W, 40°N-12°W, 52°N-06°W, 60°N-10°E, 60°N-20°E then along the border of the EU MWARA to the coordinate 43°N-15°E; then through the coordinates 37°N-14°E, 00°-28°E, 11°S-28°E, 20°S-35°E, to the coordinate 31°S-35°E.

### Major World Air Route Area — NORTH-SOUTH AFRICA - 2 (MWARA-NSA - 2)

From the coordinate  $30^{\circ}\text{S}-34^{\circ}\text{E}$ , through the coordinates  $22^{\circ}\text{S}-60^{\circ}\text{E}$ ,  $10^{\circ}\text{N}-52^{\circ}\text{E}$ ,  $30^{\circ}\text{N}-35^{\circ}\text{E}$ , to the coordinate  $40^{\circ}\text{N}-19^{\circ}\text{E}$ ; then along the border EU MWARA to the coordinate  $60^{\circ}\text{N}-20^{\circ}\text{E}$ , thencethrough the coordinates  $60^{\circ}\text{N}-10^{\circ}\text{W}$ ,  $48^{\circ}\text{N}-05^{\circ}\text{W}$ ,  $37^{\circ}\text{N}-07^{\circ}\text{E}$ ,  $00^{\circ}-24^{\circ}\text{E}$ ,  $30^{\circ}\text{S}-24^{\circ}\text{E}$ , to the coordinate  $30^{\circ}\text{S}-34^{\circ}\text{E}$ .

# Major World Air Route Area — NORTH-SOUTH AMERICA - 1 (MWARA-NSAM - 1)

From the coordinate  $36^{\circ}\text{S}-73^{\circ}\text{W}$ , through the coordinates  $36^{\circ}\text{S}-52^{\circ}\text{W}$ ,  $26^{\circ}\text{S}-63^{\circ}\text{W}$ ,  $05^{\circ}\text{S}-63^{\circ}\text{W}$ ,  $05^{\circ}\text{N}-75^{\circ}\text{W}$ ,  $27^{\circ}\text{N}-75^{\circ}\text{W}$ ,  $35^{\circ}\text{N}-107^{\circ}\text{W}$ ,  $40^{\circ}\text{N}-128^{\circ}\text{W}$ ,  $20^{\circ}\text{N}-114^{\circ}\text{W}$ ,  $00^{\circ}-93^{\circ}\text{W}$ , to the coordinate  $36^{\circ}\text{S}-73^{\circ}\text{W}$ .

# Major World Air Route Area — NORTH-SOUTH AMERICA - 2 (MWARA-NSAM - 2)

From the coordinate  $34^{\circ}\text{S}-74^{\circ}\text{W}$ , through the coordinates  $36^{\circ}\text{S}-52^{\circ}\text{W}$ ,  $05^{\circ}\text{S}-30^{\circ}\text{W}$ ,  $10^{\circ}\text{N}-60^{\circ}\text{W}$ ,  $34^{\circ}\text{N}-60^{\circ}\text{W}$ ,  $48^{\circ}\text{N}-75^{\circ}\text{W}$ ,  $40^{\circ}\text{N}-77^{\circ}\text{W}$ ,  $23^{\circ}\text{N}-86^{\circ}\text{W}$ ,  $02^{\circ}\text{N}-79^{\circ}\text{W}$ ,  $20^{\circ}\text{S}-50^{\circ}\text{W}$ , to the coordinate  $34^{\circ}\text{S}-74^{\circ}\text{W}$ .

# Major World Air Route Area — SOUTH ATLANTIC (MWARA-SA)

From the coordinate  $34^{\circ}\text{S}-74^{\circ}\text{W}$ , through the coordinates  $36^{\circ}\text{S}-52^{\circ}\text{W}$ ,  $13^{\circ}\text{N}-14^{\circ}\text{W}$ ,  $40^{\circ}\text{N}-13^{\circ}\text{E}$ ,  $48^{\circ}\text{N}-13^{\circ}\text{E}$ ,  $51^{\circ}\text{N}-16^{\circ}\text{E}$ , thence along the border of the EU MWARA to  $60^{\circ}\text{N}-20^{\circ}\text{E}$ ; then through the coordinates  $61^{\circ}\text{N}-05^{\circ}\text{E}$ ,  $47^{\circ}\text{N}-17^{\circ}\text{W}$ ,  $25^{\circ}\text{N}-25^{\circ}\text{W}$ ,  $03^{\circ}\text{S}-40^{\circ}\text{W}$ , to the coordinate  $34^{\circ}\text{S}-74^{\circ}\text{W}$ .

Note: Only one family of frequencies extended into the European Area beyond a line connecting the following terminals: Algiers, Madrid, Lisbon.

# Major World Air Route Area — SOUTH PACIFIC (MWARA-SP)

From the coordinate  $22^{\circ}$ N-158°W, through the coordinates  $22^{\circ}$ N-156°W,  $20^{\circ}$ S-145°W,  $50^{\circ}$ S-170°W,  $50^{\circ}$ S-145°E,  $38^{\circ}$ S-145°E,  $28^{\circ}$ S-152°E,  $00^{\circ}$ -167°E,  $00^{\circ}$ -175°W, to the coordinate  $22^{\circ}$ N-158°W.

INTERNATIONAL ADMINISTRATIVE AERONAUTICAL RADIO CONFERENCE

Aer/2 - Document No. 144-E

SECOND SESSION
GENEVA, 1949

8 October 1949

### PART II

### Section II

DESCRIPTION OF THE REGIONAL AND DOMESTIC AIR ROUTE AREAS

### ARTICLE 2

Regional and Domestic Air Route Area no. 1
(RDARA - 1)

From the North Pole along the 15°W meridian to the coordinate 72°N-15°W, then through the coordinates 40°N-50°W, 30°N-39°W, 30°N-10°W, 31°N-10°W, to the coordinate 31°N-10°E. Then along the Libya-Tunisia border to the Mediterranean, thence along the coastal border of Libya and Egypt, thence to Cairo, and eastward along the parallel to intersect the 40°E meridian, and north along the 40°E meridian to the South Coast of the Black Sea, thence west along the Black Sea coast of Turkey to intersect the 30°E meridian, then along the 30°E meridian to the border of Rumania and the U.S.S.R., thence along the border between the U.S.S.R. and the following countries: Rumania, Hungary, Czechoslovakia, Poland, along the U.S.S.R. Baltic Sea Coast, to the border between Finland and the U.S.S.R. Then to the coordinate 70°N-32°E, and along the 32°E meridian to the North Pole.

Sub-Area 1A.

From the coordinate 65°N-26°W, and through the coordinates 40°N-50°W, 40°N-13°W, 60°N-13°W, 60°N-26°W, to the coordinate 65°N-26°W.

Sub-Area 1B.

From North Pole along the 15°W meridian to the coordinate 72°N-15°W; then through the coordinates 65°N-26°W, 60°N-26°W, 60°N-13°W, to the coordinate 50°N-13°W; thence east along the waters between the Channel Islands and French Coastline. Thence following the northeastern boundary of France, touching the following countries: Belgium, Luxemburg and Germany. Thence along the border between Switzerland and Germany, and along the border between Austria and Germany. Then following the boundary between the Eastern and Western Occupied Zones of Germany, touching the Western border of Czechoslovakia to the Baltic Sea. Then west along the German coast line to the boundary between Germany and Denmark. Along this boundary to the North Sea. Thence along the 55°N parallel to a point 55°N-4°E. Thence along the 40°E meridian to the North Pole.



Sub-Area 1C.

From the North Pole along the meridian 04°E to the 55°N parallel. Thence east along the 55°N parallel and the border between Denmark and Germany to the Baltic Sea. Then along the German Baltic Sea coast to the boundary between Eastern and Western Occupied Germany. Along this boundary touching the Western borders of Czechoslovakia and Austria. Thence eastward along the southern borders of Austria and Hungary and thence to the junction of the borders of Czechoslovakia, Hungary and Roumania, thence along the border between the U.S.S.R. and the following countries: Czechoslovakia, Poland. Along the U.S.S.R. Baltic Sea coast, to the boundary between Finland and the U.S.S.R. at 70°N-32°E, then along the 32°E meridian to the North Pole.

#### Sub-Area 1D.

From the junction of the borders of Czechoslovakia, Hungary and Roumania, westward along the southern borders of Hungary and Austria to the border between Switzerland and Italy and the border between France and Italy to the Mediterranean Sea. Thence to 43°N-10°E to 41°N-10°E, 41°N-07°E thence along the 07°E meridian to the North African coast. Then along the North African coast including Tunis, Tripoli, Benghazi, to the coastal border between Libya and Egypt. Thence along the coast to Alexandria, then to Cairo, and along the Cairo parallel to the 40°E meridian. North along the 40°E meridian to the South Coast of the Black Sea. Thence west along the Black Sea coast of Turkey to intersect the 30°E meridian. Along the 30°E meridian to the border of Roumania and the Ukraine, thence along this border to the junction of the borders of Czechoslovakia, Hungary and Roumania.

### Sub-Area 1E.

From the coordinate 50°N-13°W, and through the coordinates 40°N-13°W, 40°N-50°W, 30°N-39°W, 30°N-10°W, 31°N-10°W, to the coordinate 31°N-10°E. Then along the Libya-Tunisia border to the Mediterranean thence along the Tunisian coast to intersect the 10°E meridian. Thence to the coordinate 43°N-10°E; thence to the border between Italy and France and between Italy and Switzerland, Switzerland and Austria, Switzerland and Germany, and between France and Germany, France and Luxembourg, and France and Belgium to the Channel coast. Thence west through the territorial waters between the Channel Islands and the French coast to the coordinate 50°N-13°W.

Regional and Domestic Air Route Area no. 2

(RDARA - 2)

From the North Pole along the 32°E meridian to the 70°N parallel. Then along the border between Finland and the U.S.S.R. to the Baltic coast. Along the territorial waters of the U.S.S.R. Baltic coast to the boundary between the U.S.S.R. and Poland. Thence along the border between the U.S.S.R. and the following countries: Poland,

Czechoslovakia, Hungary, and Roumania, to the Black Sea coast at the intersection of the 30°E meridian. Then along the 30°E meridian to the Black Sea coast of Turkey. Along the Black Sea coast of Turkey to the junction of the borders of Turkey and the U.S.S.R. Thence along this common border and the Iran-U.S.S.R. border to the Caspian Sea. Then along the Iran Caspian Sea coast and the southern border of the U.S.S.R. to the intersection of the Mongolia-China-U.S.S.R. borders at approximately 49°N-88°E. Then along the 88°E meridian to 55°N. Then along the 55°N parallel to 60°E, and along the 60°E meridian to the North Pole.

#### Sub-Area 2A.

From the North Pole along the 32°E meridian to 70°N. Then along the border between Finland and the U.S.S.R. to the Baltic coast, and along the territorial waters of the U.S.S.R. Baltic coast, to the coordinate 55°N-20°E, and thence to Moscow. Then to 55°N-60°E, and along the 60°E meridian to the North Pole.

#### Sub-Aéra 2B.

From the coordinate 55°N-88°E and through the coordinate 55°N-60°E, to the coordinate 47°N-53°E. Thence along the East coast of the Caspian Sea to the Iran coast. Thence east along the southern border of the U.S.S.R. to the intersection of the Mongolia-China U.S.S.R. borders at approximately 49°N-88°E; thence along the 88°E meridian to 55°N.

#### Sub-Area 2C.

From the coordinate 55°N-60°E, to Moscow, to 55°N-20°E. Thence south along the boundary between the U.S.S.R. and Poland. Thence along the border between the U.S.S.R. and the following countries: Poland, Czechoslovakia, Hungary and Roumania, to the Black Sea coast at the meridian 30°E. Along the meridian 30°E to the Black Sea coast of Turkey. Along this coast-line to the junction of the borders of Turkey and the U.S.S.R. Thence along this common border and the Iran-U.S.S.R. border to the Caspian sea then along the Iran coast of the Caspian sea to the U.S.S.R. border. Thence north along the East Caspian sea coast and through the coordinate 47°N-53°E; to 55°N-60°E.

### Regional and Domestic Air Route Area no. 3

## (RDARA - 3)

From the North Pole to the coordinate 55°N-60°E, thence along the 55°N parallel to 88°E. Thence to the intersection of the Mongolia-China-U.S.S.R. borders at approximately 49°N-88°E. Then along the border between Mongolia and China, and U.S.S.R. and China, to the coast. Between the territorial watersof U.S.S. R. and Japan to the the coordinate 43°N-147°E and through the coordinate 50°N-164°E, to 65°N-170°W. Then along the 170°W meridian to the North Pole.

#### Sub-Area 3A.

From the North Pole along the 60°E meridian to 55°N. Then along the 55°N parallel to 88°E. Then through the coordinate 60°N-88°E to 60°N-110°E, and along the 110°E meridian to the North Pole.

### Sub-Area 3B.

From the North Pole along the 110°E meridian to 60°N-110°E, and through the coordinates 60°N-147°E, 43°N-147°E, 50°N-164°E, to 65°N-170°W. Then along the 170°W meridian to the North Pole.

### Sub-Area 3C.

From the coordinate  $60^{\circ}\text{N-88}^{\circ}\text{E}$  to the intersection of Mongolia-China-U.S.R.R. border at approximately  $49^{\circ}\text{N-88}^{\circ}\text{E}$ . Along the border between Mongolia and China, and U.S.S.R. and China, to the Coast. Between the territorial waters of U.S.S.R. and Japan to the coordinate of  $43^{\circ}\text{N-147}^{\circ}\text{E}$ . Then through the coordinate of  $60^{\circ}\text{N-147}^{\circ}\text{E}$  to the coordinate  $60^{\circ}\text{N-88}^{\circ}\text{E}$ .

### Regional and Domestic Air Route Area no. 4

### (RDARA - 4)

From the coordinate 30°N-39°W, and through the coordinates 10°N-20°W, 05°S-20°W, to the coordinate 05°S-12°E. Thence along the northern border of the Belgian Congo, excluding Cabinda territory, to the border between Anglo-Egyptian Sudan and French Equatorial Africa. Thence north along the western border of Anglo-Egyptian Sudan. Along the western border of Egypt, northwards to the Mediterranean and along the North African Mediterranean coast and Atlantic coast to a point 30°N-10°W. West along the 30°N parallel to close the area at 30°N 39°W.

#### Sub-Area 4A.

From the coordinate 30°N-39°W to 21°N-31°W. Thence to Gao and to Zinder. From Zinder, along the northern border of Nigeria, to a point West of Fort Lamy. Then along the Fort Lamy parallel to 12°N-22°E. Thence north along the western border of Anglo-Egyptian Sudan, and along the western border of Egypt, to the Mediterranean. Along the North African Mediterranean coast and Atlantic coast to a point 30°N-10°W. Thence along the 30°N parallel to close the area at 30°N-39°W.

#### Sub-Area 4B.

From the coordinate 21°N-31°W through the coordinates 10°N-20°W, 05°S-20°W, to 05°S-12°E. Thence along the northern border of Belgian Congo excluding Cabinda territory, to the junction between Belgian Congo, Anglo-Egyptian Sudan and French Equatorial Africa. Along the western border of Anglo-Egyptian Sudan to the coordinate 12°N-22°E. Thence along the Fort Lamy parallel to the Nigerian border. Then west along this border to Zinder. From Zinder to close the area at 21°N-31°W.

# Regional and Domestic Air Route Area no. 5

### (RDARA - 5)

From the coordinate 41°N-40°E to the coordinate 37°N-40°E. Then along the border between Turkey and Syria to the Mediterranean Coast. Thence to the common border of Libya and Egypt on the North African coast excluding Cyprus. Southwards along the western boundary of Egypt, and Anglo-Egyptian Sudan to the border of the Belgian Congo. Thence east along the borders of the following countries: Uganda, Anglo-Egyptian Sudan, Kenya, and Abyssinia. South between the borders of Kenya and Somaliland, to the East African coast at 02°S-41°E. Then through the coordinate 02°S-73°E to 37°N-73°E. Then east along the Afghanistan border, and west along the southern boundary of the U.S.S.R. to the Caspian Sea. Then along the northern border of Iran and Turkey to close the area at 41°N-40°E.

### Sub-Area 5A.

From the coordinate 37°N-40°E, along the border between Turkey and Syria to the Mediterranean coast. Thence to the common border of Libya and Egypt on the North African coast, excluding Cyprus. Southward, along the western boundary of Egypt and east along the common border of Egypt and Anglo-Egyptian Sudan to 24°N-37°E. Then through the coordinates 12°N-44°E, 12°N-49°E, to the coordinate 30°N-49°E. Thence along the border between Iran and Irak, and the border between Irak and Turkey to 37°N-40°E.

### Sub-Area 5B.

From the coordinate 41°N-40°E to 37°N-40°E. Thence east along the border between Turkey, Syria and Irak, and along the border between Irak and Iran to a point 30°N-49°E. Thence along the middle of the Persian Gulf to a point 24°N-60°E, to Bombay. Then to 37°N-73°E. Then east along the Afghanistan-Pakistan border and west along the southern boundary of the U.S.S.R. to the Caspian Sea. Then along the northern border of Iran and Turkey to close the area at 41°N-40°E.

# Sub-Area 5C.

From the coordinate 30°N-49°E, and through the coordinates of 12°N-49°E, 13°N-54°E, 02°S-54°E, 02°S-73°E, to Bombay. Then to 24°N-60°E. Then along the middle of the Persian Gulf to 30°N-49°E.

### Sub-Area 5D.

From the junction point of Egypt, Libya and Anglo-Egyptian Sudan southwards along the western border of the Anglo-Egyptian Sudan to the border of the Belgian Congo. East, along the borders of the following countries: Uganda, Anglo-Egyptian Sudan, Kenya, Abyssinia. South between the border of Kenya and Somaliland to the east African coast, at a point 02°S-42°E. Then through the coordinates of 02°S-54°E,

13°N-54°E, 12°N-49°E to the coordinate of 12°N-44°E. Thence northwest along the middle of the Red Sea to 24°N-37°E. Thence along the southern border of Egypt to close the area.

### Regional and Domestic Air Route Area No. 6

### (RDARA - 6)

From the coordinate 49°N-88°E, along the border between China and the U.S.S.R. and between Afghanistan and Pakistan, and Iran and Pakistan to a point 23°N-61°E. Thence to Bombay. Then along the 73°E meridian to the coordinate of 02°S-73°E, and through the coordinates of 02°S-92°E, 10°S-92°E, 10°S-141°E, 00°-141°E, 00°-170°W, 10°N-170°W, 50°N-164°E, to the coordinate 43°N-147°E. Thence east between the territorial waters of Japan and the U.S.S.R. and along the northeastern and northern boundary of China, to the coordinate of 49°N-88°E.

### Sub-Area 6A.

From the coordinate of 37°N-75°E, along the border between Pakistan and Afghanistan, and Iran and Pakistan to a point 23°N-61°E. Thence to Bombay. From Bombay to 24°N-80°E. Thence to Calcutta. Thence along the coast of Pakistan and Burma to reach the border between Burma and Thailand. North along this border and along the border between China and the following countries: Burma, Bhutan, Nepal, India to the coordinate of 37°N-75°E.

#### Sub-Area 6B.

From the coordinate 49°N-88°E, along the common border between China and the U.S.S.R. to the coordinate 37°N-75°E. Thence along the border between China and the following countries: India, Nepal, Bhutan, India, Burma, French Indo-China to the coast of the South China Sea. Thence along the south territorial waters of Hainan Island to the coordinate 20°N-113°E, and through the coordinates 20°N-176°W, 50°N-164°E, to 43°N-147°E. Thence east between the territorial waters of Japan and the U.S.S.R. and then along the border between China and the U.S.S.R., and along the border between China and Mongolia to the coordinate 49°N-88°E.

#### Sub-Area 6C.

From the coordinate of 20°N-130°E, through the coordinate 04°N-130°E, to 04°N-118°E. Thence along the border between Northern Borneo and Indonesian Borneo to the coordinate 03°N-109°E, and through the coordinates 03°N-106°E, 10°S-106°E, 10°S-141°E, 00°-141°E, 00°-170°W, 10°N-170°W, 20°N-176°W, to 20°N-130°E.

#### Sub-Area 6D.

From the junction of the border of China, India and Burma, south along the India-Burma and Pakistan-Burma borders to the Bay of Bengal. Along the coast of Burma to its southernmost point. Then to the coordinate of 02°S-92°E, and through the coordinate 10°S-92°E, to 10°S-113°E. Then along the 113°E meridian to the border between Northern Borneo and Indonesian Borneo. Thence east along this border to a point

04°N-118°E, and through the coordinates of 04°N-130°E, 20°N-130°E, to 20°N-113°E. Thence south around the island of Hainan, and along the border between China and Indo-China, and China and Burma to close the area at the junction of China, India and Burma.

#### Sub-Area 6E.

From the coordinate of  $20^{\circ}\text{N-}73^{\circ}\text{E}$ , and through the coordinates of  $02^{\circ}\text{S-}73^{\circ}\text{E}$ ,  $02^{\circ}\text{S-}92^{\circ}\text{E}$ , to  $10^{\circ}\text{N-}97^{\circ}\text{E}$ . Thence along the coast of Burma, Pakistan and India to Calcutta. Then through the coordinate  $24^{\circ}\text{N-}80^{\circ}\text{E}$  to  $20^{\circ}\text{N-}73^{\circ}\text{E}$ .

## Sub-Area 6F.

From the junction of the China-India-Burma borders northeast to the 100°E meridian. North on this meridian to the northern boundary of Sub-Area 6B. Eastward along this boundary to 130°E. Thence south along the 130°E meridian to 04°N. Then westward along the boundary of Sub-Area 6D to the junction of the China-India-Burma borders.

## Regional and Domestic Air Route Area No. 7

## (RDARA - 7)

From the South Pole along the 20°W meridian to 05°S. Then along the 05°S parallel to 12°E. Thence along the northern border of the Belgian Congo, including Cabinda Territory, along the border between Uganda, and Anglo-Egyptian Sudan, and between Kenya and the following countries: Anglo-Egyptian Sudan, Abyssinia, Somaliland to the coordinate of 02°S-42°E. Then to 02°S-60°E, and along the 60°E meridian to the South Pole.

## Sub-Area 7A.

From the South Pole along the 20°W meridian to 05°S. Then through the coordinates of 05°S-10°E, 40°S-10°E, to 40°S-60°E. Then along the 60°E meridian to the South Pole.

## Sub-Area 7B.

From the coordinate 05°S-10°E to 05°S-12°E. Thence along the northern border of the Belgian Congo, including Cabinda territory, to the junction of Uganda, Belgian Congo and Anglo-Egyptian Sudan. Thence south along the eastern and southern border of Belgian Congo (including the Territories of Ruanda Urundi) and along the southern and eastern border of Angola to the coast of the South Atlantic. Thence to the coordinate of 17°S-10°E, and then to close the area at 05°S-10°E.

## Sub-Area 7C.

From the junction of Uganda, Belgian Congo and Anglo-Egyptian Sudan along the western border of Uganda and Tanganyika and then along the southern border of Tanganyika to the coast. Thence through the coordinates of 11°S-41°E, 11°S-60°E,

02°S-60°E, to 02°S-41°E. Thence to the east coast of Africa. Then north along the border between Kenya and the following countries: Somaliland, Abyssinia and Anglo-Egyptian Sudan to close the sub-area.

#### Sub-Area 7D.

From the border of Tanganyika and Mozambique on the Lake Nyasa South, along the west border of Mozambique to the African East coast. Then through the coordinates 27°S-33°E, 40°S-60°E, 11°S-60°E, to 11°S-41°E. Thence along the northern border of Mozambique to Lake Nyasa.

## Sub-Area 7E.

From the coordinate 17°S-10°E, and through the coordinates 40°S-10°E, 40°S-33°E, to 27°S-33°E. Thence along the west border of Mozambique to Lake Nyasa. Thence along the border between Rhodesia and Tanganyika and along the border between Belgian Congo and Rhodesia and between Angola and Rhodesia and Angola and South-West Africa to the coordinate 17°S-10°E.

# Regional and Domestic Air Route Area No. 8 (RDARA - 8)

From the South Pole along the 60°E meridian to 02°S. Then through the coordinates 02°S-92°E, 10°S-92°E, to 10°S-110°E. Then along the 110°E meridian to the South Pole.

#### Sub-Area 8A.

From the South Pole along the 60°E meridian to 02°S. Then through the coordinates 02°S-60°E, 02°S-92°E, 10°S-92°E, to 10°S-110°E. Then along the 110°E meridian to the South Pole.

# Regional and Domestic Air Route Area No. 9 (RDARA - 9)

From the South Pole along the 110°E meridian to 10°S. Then through the coordinates of 10°S-141°E, 00°-141°E, 00°-170°W, 10°N-170°W, to 05°S-120°W. Then along the 120°W meridian to the South Pole.

#### Sub-Area 9A.

From the coordinate  $10^{\circ}$ S- $110^{\circ}$ E, and through the coordinates  $24^{\circ}$ S- $110^{\circ}$ E,  $24^{\circ}$ S- $141^{\circ}$ E,  $10^{\circ}$ S- $141^{\circ}$ E, to  $10^{\circ}$ S- $110^{\circ}$ E.

## Sub-Area 9B.

From the coordinate  $00^{\circ}$ -141°E, and through the coordinates  $24^{\circ}$ S-141°E,  $24^{\circ}$ S-170°W,  $00^{\circ}$ -170°W, to  $00^{\circ}$ -141°E.

#### Sub-Area 9C.

From the South Pole along the 170°W meridian to 10°N. Then through 05°S-120°W, and along the 120°W meridian to the South Pole.

## Sub-Area 9D.

From the South Pole along the 139°E meridian to 24°S. Then through the coordinate 24°S-170°W, and along the 170°W meridian to the South Pole.

#### Sub-Area 9E.

From the South Pole along the 110°E meridian to 24°S. Then along the 24°S parallel to 139°E, and along the 139°E meridian to the South Pole.

## Regional and Domestic Air Route Area No. 10

(RDARA - 10)

## Sub-Area 10A.

From the coordinate  $50^{\circ}\text{N-}164^{\circ}\text{E}$  to  $66^{\circ}\text{N-}169^{\circ}\text{W}$ . Then along the  $169^{\circ}\text{W}$  meridian to the North Pole. Then along the  $130^{\circ}\text{W}$  meridian to  $57^{\circ}\text{N}$ . Thence through the coordinates of  $57^{\circ}\text{N-}150^{\circ}\text{W}$ ,  $50^{\circ}\text{N-}175^{\circ}\text{W}$ , to close the sub-area at  $50^{\circ}\text{N-}164^{\circ}\text{E}$ .

#### Sub-Area 10B.

From the coordinate 57°N-140°W, along the 140°W meridian to the North Pole. Then along the 91°W meridian to 48°N. Thence through the coordinates 48°N-127°W, 57°N-139°W, to 57°N-140°W.

## Sub-Area 10C.

From the coordinate of  $57^{\circ}N-140^{\circ}W$ , and through the coordinates  $60^{\circ}N-140^{\circ}W$ ,  $60^{\circ}N-91^{\circ}W$ ,  $48^{\circ}N-91^{\circ}W$ ,  $48^{\circ}N-127^{\circ}W$ ,  $57^{\circ}N-139^{\circ}W$ , to  $57^{\circ}N-140^{\circ}W$ .

#### Sub-Area 10D.

From the coordinate 48°N-98°W, along the 98°W meridian to the North Pole. Then along the 45°W meridian to 69°N. Then through the coordinates 61°N-70°W, 45°N-72°W, 41°N-81°W, 41°N-88°W, 48°N-91°W, to 48°N-98°W.

## Sub-Area 10E.

From the coordinate of 45°N-74°W, and through the coordinate 61°N-72°W to 69°N-47°W. Then along the 47°W meridian to the North Pole. Then along the 15°W meridian to 72°N. Then through the coordinates 40°N-50°W, 40°N-65°W, to close the sub-area at 45°N-74°W.

## Regional and Domestic Air Route Area No. 11

(RDARA - 11)

#### Sub-Area 11A.

From the coordinate 29°N-180°W, along the ITU boundary between Regions 2 and 3, to 50°N-164°E. Then through the coordinates 50°N-150°W, 57°N-139°W,

 $50^{\circ}$ N-127°W,  $33^{\circ}$ N-127°W,  $33^{\circ}$ N-153°W,  $29^{\circ}$ N-153°W, to close the sub-area  $29^{\circ}$ N-180°W.

## Sub-Area 11B.

From the coordinate 33°N-127°W, and through the coordinates 50°N-127°W, 50°N-104°W, 27°N-104°W, 33°N-119°W, to close the sub-area at 33°N-127°W.

#### Sub-Area 11C.

From the coordinate  $29^{\circ}$ N- $106^{\circ}$ W, and through the coordinates  $50.5^{\circ}$ N- $106^{\circ}$ W,  $50.5^{\circ}$ N- $92^{\circ}$ W,  $47^{\circ}$ N- $72^{\circ}$ W,  $45^{\circ}$ N- $72^{\circ}$ W,  $40^{\circ}$ N- $81^{\circ}$ W,  $40^{\circ}$ N- $85^{\circ}$ W,  $30^{\circ}$ N- $85^{\circ}$ W,  $25^{\circ}$ N- $96^{\circ}$ W, to close the sub-area at  $29^{\circ}$ N- $106^{\circ}$ W.

#### Sub-Area 11D.

From the coordinate 29°N-90°W, and through the coordinates 50°N-90°W, 47°N-64°W, 23°N-78°W, 23°N-83°W, to close the sub-area at 29°N-90°W.

#### Sub-Area 11E.

From the coordinate of  $39^{\circ}N-125^{\circ}W$ , and through the coordinates  $50^{\circ}N-125^{\circ}W$ ,  $50^{\circ}N-93^{\circ}W$ ,  $46^{\circ}N-93^{\circ}W$ ,  $42^{\circ}N-86^{\circ}W$ ,  $36^{\circ}N-86^{\circ}W$ ,  $36^{\circ}N-121^{\circ}W$ , to close the sub-area at  $39^{\circ}N-125^{\circ}W$ .

#### Sub-Area 11F.

From the coordinate 46°N-94°W, and through the coordinates 49°N-94°W, 47°N-65°W, 36°N-74°W, 36°N-88°W, 42°N-88°W, to close the sub-area at 46°N-94°W.

## Sub-Area 11G.

From the coordinate 29°N-95°W, and through the coordinates 39°N-95°W, 44°N-66°W, 23°N-77°W, 23°N-83°W, 23°N-91°W, to close the sub-area at 29°N-95°W.

## Sub-Area 11H.

From the coordinate 33°N-127°W, and through the coordinates 40°N-127°W, 40°N-89°W, 29°N-89°W, 25°N-98°W, 33°N-119°W. to close the sub-area at 33°N-127°W.

#### Sub-Area 111.

From the coordinate  $25^{\circ}N-77^{\circ}W$ , and through the coordinates  $42^{\circ}N-68^{\circ}W$ ,  $40^{\circ}N-65^{\circ}W$ , to  $40^{\circ}N-50^{\circ}W$ . Then along the I.T.U. boundary between Regions 1 and 2 to  $25^{\circ}N-35^{\circ}W$ . Then to close the sub-area at  $25^{\circ}N-77^{\circ}W$ .

## Regional and Domestic Air Route Area No. 12

## (RDARA - 12)

## Sub-Area 12A.

From the coordinate of 10°N-170°W, along the I.T.U. boundary between Regions 2 and 3 to 29°N-180°W. Thence through the coordinates 29°N-153°W, 10°N-153°W, to close the sub-area at 10°N-170°W.

#### Sub-Area 12B.

From the coordinate of 10°N-170°W, along the I.T.U. boundary between Regions 2 and 3, to 29°N-180°W. Then through the coordinates 29°N-153°W, 33°N-153°W, 33°N-120°W, 17°N-115°W, 14°N-93°W, 02°N-86°W, 02°N-93°W, 05°S-93°W, to 05°S-120°W. Then along the ITU boundary between Regions 2 and 3 to close the sub-area at 10°N-170°W.

#### Sub-Area 12C.

From the coordinate 33°N-120°W, through the coordinates 35°N-120°W, 32°N-104°W, 25°N-91°W, 23°N-83°W, 12°N-90°W, 16°N-116°W, to close the sub-area at 33°N-120°W.

### Sub-Area 12D.

From the coordinate 20°N-91°W, and through the coordinates 26°N-91°W, 26°N-79°W, 27°N-79°W, 27°N-76°30′W, 26°N-73°W, 17°N-58°W, to 10°N-58°W. Thence through Balboa, C.Z., Swan Island, and Belize to close the sub-area at 20°N-91°W.

## Sub-Area 12E.

From the coordinate 15°N-95°W, and through the coordinates of 23°N-92°W, 23°N-85°W, 19°N-85°W, 09°N-77°W, 02°N-79°W, 02°N-86°W, 14°N-93°W, to close the sub-area at 15°N-95°W.

#### Sub-Area 12F.

From the coordinate of  $04^{\circ}\text{S}-93^{\circ}\text{W}$ , and through the coordinates of  $02^{\circ}\text{N}-93^{\circ}\text{W}$ , and  $02^{\circ}\text{N}-79^{\circ}\text{W}$ , to Balboa, C.Z. Then to  $13^{\circ}\text{N}-77^{\circ}\text{W}$ , and through the coordinates of  $13^{\circ}\text{N}-70^{\circ}\text{W}$ ,  $08^{\circ}\text{N}-70^{\circ}\text{W}$ ,  $06^{\circ}\text{N}-67^{\circ}\text{W}$ ,  $01^{\circ}\text{N}-66^{\circ}\text{W}$ , to  $04^{\circ}\text{S}-70^{\circ}\text{W}$ . Then along the frontier between Colombia and Peru to the junction of the borders of Colombia, Peru and Ecuador. Then along the frontier between Peru and Ecuador through  $04^{\circ}\text{S}-81^{\circ}\text{W}$  to close the sub-area at  $04^{\circ}\text{S}-93^{\circ}\text{W}$ .

## Sub-Area 12G.

From the coordinate of 07°N-73°W, and through the coordinates of 14°N-73°W, 14°N-58°W, 01°N-58°W, 01°N-68°W, 05°N-69°W, to close the sub-area at 07°N-73°W.

## Sub-Area 12H.

From the coordinate of  $04^\circ\text{S}-70^\circ\text{W}$ , and through the coordinates of  $05^\circ\text{N}-70^\circ\text{W}$ ,  $05^\circ\text{N}-61^\circ15'\text{W}$ ,  $08^\circ45'\text{N}-60^\circ\text{W}$ ,  $08^\circ\text{N}-58^\circ\text{W}$ ,  $08^\circ\text{N}-54^\circ\text{W}$ ,  $00^\circ-44^\circ\text{W}$ ,  $04^\circ\text{S}-44^\circ\text{W}$ , to close the sub-area at  $04^\circ\text{S}-70^\circ\text{W}$ .

## Sub-Area 12I.

From the coordinate of 25°N-70°W, through the coordinate of 25°N-35°W and along the I.T.U. boundary between Regions 1 and 2, to 00°-20°W. Thence through the coordinates 00°-44°W, 08°N-54°W, 08°N-58°W, 17°N-58°W, to close the sub-area at 25°N-70°W.

#### Sub-Area 12J.

From the coordinate of 31°N-117°W, and through the coordinates 33°N-107°W, 33°N-96°W, 31°N-81°W, 33°N-64°W, 18°N-59°W, 08°N-59°W, 08°N-85°W, 18°N-102°W, to close the sub-area at 31°N-117°W.

## Regional and Domestic Air Route Area No. 13 (RDARA - 13)

#### Sub-Area 13A.

From the coordinate  $05^{\circ}\text{S}-120^{\circ}\text{W}$ , and through the coordinates of  $05^{\circ}\text{S}-81^{\circ}\text{W}$ ,  $19^{\circ}\text{S}-81^{\circ}\text{W}$ ,  $19^{\circ}\text{S}-73^{\circ}\text{W}$ ,  $25^{\circ}\text{S}-73^{\circ}\text{W}$ ,  $25^{\circ}\text{S}-81^{\circ}\text{W}$ ,  $57^{\circ}\text{S}-81^{\circ}\text{W}$ , to  $57^{\circ}\text{S}-90^{\circ}\text{W}$ . Thence along the  $90^{\circ}\text{W}$  meridian to the South Pole. Thence along the  $120^{\circ}\text{W}$  meridian to close the sub-area at  $05^{\circ}\text{S}-120^{\circ}\text{W}$ .

#### Sub-area 13B.

From the coordinate of 29°S-111°W, and through the coordinates of 24°S-111°W, 24°S-104°W, 29°S-104°W, to close the sub-area at 29°S 111°W.

#### Sub-Area 13C.

From the coordinate 19°S-81°W, and through the coordinates 04°S-82°W, 03°S-80°W, and along the northern frontier between Peru and Ecuador to 00°-75°W. Then along the northern frontier between Peru and Colombia and along the border between Colombia and Brazil to 00°-69°W. Then through the coordinates 11°S-69°W, 11°S-67°W, 19°S-67°W, to close the sub-area at 19°S-81°W.

## Sub-Area 13D.

From the coordinate of 19°S-73°W, and through the coordinates 15°S-73°W, 15°S-70°W, 09°S-70°W, 09°S-65°W, 18°S-56°W, 21°S-56°W, 24°S-61°W, 24°S-69°W, 19°S-69°W, to close the sub-area at 19°S-73°W.

## Sub-Area 13E.

From the coordinate of 57°S-81°W, and through the coordinates of 25°S-81°W, 25°S-73°W, 16°S-73°W, 16°S-68°W, to 22°S-67°W. Then along the Eastern boundary of the frontier between Chile and Argentina to 52°S-67°W. Then through the coordinates of 57°S-67°W, 57°S-40°W, and along the 40°W meridian to the South Pole. Thence along the 90°W meridian through the coordinate 57°S-90°W to close the sub-area at 57°S-81°W.

#### Sub-Area 13F.

From the coordinate of  $57^{\circ}\text{S-}81^{\circ}\text{W}$ , and through the coordinate of  $32^{\circ}\text{S-}81^{\circ}\text{W}$ , to  $32^{\circ}\text{S-}69^{\circ}\text{W}$ . Then along the eastern side of the frontier between Chile and Argentina to  $52^{\circ}\text{S-}67^{\circ}\text{W}$ . Then through the coordinates of  $57^{\circ}\text{S-}67^{\circ}\text{W}$ ,  $57^{\circ}\text{S-}40^{\circ}\text{W}$ , and along the  $40^{\circ}\text{W}$  meridian to the South Pole. Then along the  $90^{\circ}\text{W}$  meridian through the coordinate  $57^{\circ}\text{S-}90^{\circ}\text{W}$  to close the sub-area at  $57^{\circ}\text{S-}81^{\circ}\text{W}$ .

#### ·Sub-Area 13G.

From the coordinate of 57°S-90°W, and through the coordinate of 57°S-70°W, to 52°S-70°W. Then along the western side of the frontier between Argentina and Chile to 21°S-68°W. Then through the coordinates of 21°S-62°W, 25°S-56°W, 25°S-56°W, 57°S-56°W, to 57°S-40°W. Then along the 40°W meridian to the South Pole. Then along the 90°W meridian to close the sub-area at 57°S-90°W.

## Sub-Area 13H.

From the coordinate of  $57^{\circ}\text{S-}90^{\circ}\text{W}$ , and through the coordinate of  $57^{\circ}\text{S-}70^{\circ}\text{W}$ , to  $52^{\circ}\text{S-}70^{\circ}\text{W}$ . Then along the western side of the frontier between Argentina and Chile to  $32^{\circ}\text{S-}70^{\circ}\text{W}$ , and through the coordinates of  $34^{\circ}\text{S-}56^{\circ}\text{W}$ ,  $57^{\circ}\text{S-}56^{\circ}\text{W}$ , to  $57^{\circ}\text{S-}40^{\circ}\text{W}$ . Then along the  $40^{\circ}\text{W}$  meridian to the South Pole. Then along the  $90^{\circ}\text{W}$  meridian to close the sub-area at  $57^{\circ}\text{S-}90^{\circ}\text{W}$ .

## Sub-Area 131.

24°S-63°W, 18°S-63°W, 18°S-56°W, 22°S-56°W, 22°S-53°W, 29°S-53°W, 29°S-47°W, 37°S-56°W, 37°S-59°W, 25°S-59°W, close the sub-area at 24°S-63°W.

#### Sub-Area 13J.

From the coordinate  $01^\circ\text{S}-70^\circ\text{W}$ , and through the coordinates of  $01^\circ\text{S}-63^\circ\text{W}$ ,  $03^\circ\text{N}-63^\circ\text{W}$ ,  $03^\circ\text{N}-60^\circ\text{W}$ ,  $01^\circ\text{S}-60^\circ\text{W}$ ,  $01^\circ\text{S}-48^\circ\text{W}$ ,  $03^\circ\text{S}-48^\circ\text{W}$ ,  $03^\circ\text{S}-50^\circ\text{W}$ ,  $16^\circ\text{S}-50^\circ\text{W}$ ,  $16^\circ\text{S}-48^\circ\text{W}$ ,  $20^\circ\text{S}-39^\circ\text{W}$ ,  $32^\circ\text{S}-50^\circ\text{W}$ ,  $20^\circ\text{S}-58^\circ\text{W}$ , to  $10^\circ\text{S}-66^\circ43^\prime\text{W}$ . Then along the border between Brazil, Bolivia and Peru to  $07^\circ33^\prime\text{S}-74^\circ\text{W}$ . Then through the coordinate of  $04^\circ\text{S}-74^\circ\text{W}$ , to close the sub-area at  $01^\circ\text{S}-70^\circ\text{W}$ .

## Sub-Area 13K.

From the coordinate of 04°30′N-52°W, and through the coordinates of 04°30′N-51°W, 00°-48°W, 03°S-38°W, 03°S-32°W, 05°S-32°W, 20°S-39°W, 27°S-45°W, 20°S-50°W, 03°S-50°W, 03°S-52°W, to close the sub-area at 04°30′N-52°W.

## Sub-Area 13L.

From the coordinate of  $20^{\circ}\text{S}-58^{\circ}\text{W}$ , and through the coordinates of  $20^{\circ}\text{S}-53^{\circ}\text{W}$ ,  $16^{\circ}\text{S}-53^{\circ}\text{W}$ ,  $16^{\circ}\text{S}-48^{\circ}\text{W}$ ,  $20^{\circ}\text{S}-39^{\circ}\text{W}$ ,  $34^{\circ}30'\text{S}-52^{\circ}40'\text{W}$ ,  $30^{\circ}\text{S}-58^{\circ}\text{W}$ , to close the sub-area at  $20^{\circ}\text{S}-58^{\circ}\text{W}$ .

## Sub-Area 13M.

From the coordinate of  $00^{\circ}-32^{\circ}W$ , to  $00^{\circ}-20^{\circ}W$ . Thence along the  $20^{\circ}W$  meridian to the South Pole. Thence along the  $40^{\circ}W$  meridian to the coordinate  $57^{\circ}S-40^{\circ}W$ . Thence through the coordinates  $57^{\circ}S-56^{\circ}W$ ,  $37^{\circ}S-56^{\circ}W$ ,  $20^{\circ}S-38^{\circ}W$ ,  $40^{\circ}S-32^{\circ}W$ , to close the sub-area at  $00^{\circ}-32^{\circ}W$ .

INTERNATIONAL ADMINISTRATIVE,
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/ 2 - Document No. 145-E

8 October 1949.

## Section III

## RECOMMENDATIONS AND RESOLUTIONS

#### ARTICLE 1

#### PROVISIONS OF A SPECIAL OR TEMPORARY NATURE

#### Recommendation No. 1

to the Provisional Frequency Board concerning the Protection of Radiocommunications at the Edges of the Frequency Bands of the Aeronautical Mobile Service

The International Administrative Aeronautical Radio Conference,

#### **CONSIDERING:**

that, between  $2850~\rm kc/s$  and  $27\,000~\rm kc/s$ , the frequency bands allocated to the aeronautical mobile service and those allocated to the services under the jurisdiction of the Provisional Frequency Board have common dividing points;

## RECOMMENDS:

that every appropriate step be taken by the Provisional Frequency Board in order that aeronautical radiocommunications, as provided for by the International Administrative Aeronautical Radio Conference <sup>1)</sup>, will be protected at common dividing points against possible radiation from stations of other services outside the bandwidth that will be defined by the Provisional Frequency Board for each of these stations.

## Recommendation No. 2

to the High Frequency Broadcasting Conference 2), concerning the Protection of Aeronautical Radiocommunications at the Edges of the Frequency Bands of the Aeronautical Mobile Service

The International Administrative Aeronautical Radio Conference,

## CONSIDERING:

that, between  $2850~\rm kc/s$  and  $27~000~\rm kc/s$ , the frequency bands allocated to the aeronautical mobile service and those allocated to the broadcasting service have common dividing points;

For the precautions taken by the Conference, see Part 1, Section II Article 1, § 1.

This recommendation was addressed to the High Frequency Broadcasting Conference held at Mexico City, 1948.



#### RECOMMENDS:

that every appropriate step be taken by the High Frequency Broadcasting Conference, Mexico City, 1948, in order that aeronautical radiocommunications, as provided for by the International Administrative Aeronautical Radio Conference, Geneva, 1948 <sup>1)</sup>, will be protected at common dividing points against possible radiation from broadcasting stations outside the 10 kc/s bandwith as recommended for each of these stations by the High Frequency Broadcasting Conference, Atlantic City 1947.

#### Recommendation No. 3

to the P.F.B. relating to Frequency Assignments to Stations in the Aeronautical Fixed Service

The International Administrative Aeronautical Radio Conference, Geneva,

#### **CONSIDERING:**

that it is necessary to avoid the possibility of mutual interference between emissions of stations in the aeronautical mobile R service and those in the aeronautical fixed service, especially in the frequent cases where an aeronautical station is located at the same place as an aeronautical fixed station;

#### RECOMMENDS:

that, when assigning to a station of the aeronautical fixed service a frequency in a fixed service band contiguous with an aeronautical mobile R service band, the P.F.B. take care, to the greatest possible extent, to select a frequency which will allow a sufficient separation (approximately 15 kc/s if possible) between that frequency and the junction of the bands, to avoid mutual interference.

## Recommendation No. 4

concerning the organization of the meetings to prepare the station frequency assignments for the Aeronautical Mobile R Service

The International Administrative Aeronautical Radio Conference

#### CONSIDERING:

- 1. that the next step following the adoption of an Aeronautical Mobile "R" Service frequency allotment plan by this Conference is the assignment of frequencies to stations on the basis of that plan,
- 2. that it is essential, in view of the nature of the international aeronautical operations involved, that those frequency assignments be coordinated between the countries interested in each area as a whole, both for the MWARA's and for the RDARA's,
- 3. that the United Nations has recognized the I.C.A.O. as the specialized international agency for the coordination of questions concerning international civil aviation,
- 4. that in the case of a large number of RDARA's and in the majority of MWARA's the interested administrations deem it convenient to invite the I.C.A.O. to convene regional
  - 1) For the precautions taken by Conference (I.A.A.R.C.), see Part I, Section II, Article 1 § 1.

or special meetings, as appropriate and necessary, if possible before the Extraordinary Administrative Conference to be held in September 1950, in order that the administrations concerned may develop their frequency assignment plans as referred to in (1) above and notify the P.F.B. accordingly,

5. that, however, a different situation exists in other areas among which RDARA 1, as a consequence of the fact that not all countries in those areas are members of I.C.A.O.,

#### **RECOMMENDS:**

- (a) that for RDARA's and MWARA's comprising only countries which are members of I.C.A.O., this organization should take the measures necessary to hold regional or special meetings, for the purpose contemplated in (4) above;
- (b) that in RDARA's and MWARA's where the interested countries are not all members of I.C.A.O. but where nevertheless the interested administrations will find it possible to convene I.C.A.O. meetings for the purpose of establishing their station frequency assignments, that course be followed;
- (c) that in RDARA 1 those station frequency assignments be established by means of regional agreements or special arrangements concluded by I.T.U. member states comprised in that area;
- (d) that in the sub-areas including countries which are members neither of I.C.A.O.
  nor of I.T.U. the frequencies allotted to the said sub-areas be assigned to stations
  by regional agreements or special arrangements.

## ARTICLE 2

## PROVISIONS OF A GENERAL OR PERMANENT NATURE

### Resolution No. 5

concerning the Handling of Public Correspondence aboard Aircraft

The International Administrative Aeronautical Radio Conference,

## CONSIDERING:

that paragraph 255 of the Radio Regulations provides: "Administrations shall not permit public correspondence in the frequency bands allocated exclusively to the Aeronautical Mobile Service, unless allowed by special aeronautical regulations adopted by an Aeronautical Administrative Conference to which all interested members of the Union have been invited. Such regulations must recognize the absolute priority of safety and control messages";

that aircraft stations are permitted to communicate with stations in the maritime mobile service and may transmit to such stations public correspondence on frequencies allocated to that service provided that the I.C.A.O. A.T.C. regulations are adhered to (Radio Regulations, 1947, pars. 569 to 572, 668, 761, 771, 779 and 792).

#### RESOLVES:

that the transmission of public correspondence be not permitted on the frequencies allocated exclusively to the aeronautical mobile service;

that in those cases where provision for the handling of public correspondence is deemed necessary, aircraft stations be authorized by the various administrations to employ frequencies of the maritime mobile service for handling of public correspondence with stations in that service, provided that such handling of public correspondence will in no case interfere with the transmission or reception of messages relating to the safety or control of the aircraft and that for these cases special arrangements be made in accordance with Article 40 of the International Telecommunication Convention, 1947, and,

that in the case when messages of public correspondence are handled on frequencies of the maritime mobile service, aircraft be required to be in a position to observe simultaneous and continuous watch on the frequencies used for aeronautical mobile communications.

#### Resolution No., 6

concerning the Form of the Frequency List Established by the International Administrative Aeronautical Radio Conference for Bands Allocated to the Aeronautical Mobile R Service

The International Administrative Aeronautical Radio Conference,

#### CONSIDERING:

- 1. that it was the task of the Conference to prepare a list of frequencies of stations in the aeronautical mobile service for submission to the P.F.B. for incorporation into the draft new International Frequency List which is being prepared by the P.F.B. and will subsequently be considered by the Extraordinary Administrative Conference;
- 2. that one of the objects of a frequency list is to establish a basis on which an administration may make a choice of a frequency for notification to the I.F.R.B. which, in accordance with its rules, will include the frequency in the Master Frequency Register;
- 3. that in the special case of the aeronautical mobile R service a list showing only the different aeronautical stations using a particular frequency would not serve the purpose. The more important information is, in effect, an indication of the area in which the use of each particular frequency is authorised;
- 4. that, with the exception of the aeronautical mobile OR service, the information submitted on Form 2 by the various administrations, in accordance with the decisions of the International Administrative Radio Conference, 1947, is not an adequate guide in the consideration of the problem of the allotment of frequencies to the aeronautical mobile R service, for the reasons that:
  - (a) the information contained thereon was prepared on the basis of an uncoordinated system of frequency assignments and its use would require a greater number of frequencies than is available;
  - (b) it does not indicate the areas of aircraft operations served by the various aeronautical stations; and
  - (c) it was prepared on the basis of systems of aircraft operations which in many respects are out-of-date;
- 5. that as a result of the wartime development of new methods of aircraft manufacture and operations and in view of the increasing interest shown in air transport, both for passengers and freight, the civil air transport system is undergoing rapid expansion and, in addition, its methods of operation and its organization are changing rapidly;

- 6. that it is the role of the I.T.U. to ensure that the most equitable distribution of frequencies is made among the various branches of the aeronautical communication service; and
- 7. that the aeronautical mobile service should have the maximum freedom to adopt that method of frequency employment considered best suited to its operational requirements;

#### DECIDES:

- 1. that the frequencies of the aeronautical mobile R service shall appear in the frequency list established by this Conference without reference to specific stations, as follows:
  - (a) Frequency
  - (b) Area, Region or Country to which the frequency is allotted
  - (c) Purpose for which authorized
  - (d) Any restriction is respect of (b) or (c) above, for example, maximum authorized power;
- 2. that the frequency notified for an aeronautical station may be registered on the condition that the administration concerned indicates that the station is established in accordance with the provisions of the frequency list established by this Conference;
- 3. that the various administrations shall make special arrangements with respect to the use of those frequencies allotted either to the Major World Air Route Areas, or to Regional and Domestic Air Route Areas which comprise several countries, and they will then notify their frequencies accordingly; and
  - 4. that subsequent service documents referring to the aeronautical mobile service will later be published by the I.T.U. in the form laid down by the Radio Regulations. In particular nothing in the preceding provisions exempts the administrations from notifying their frequency assignments in accordance with paragraphs 309 and 318 of the Radio Regulations. These assignments will appear in the International Frequency List as laid down in paragraphs 447 and 448 of the Radio Regulations.

## Recommendation No. 7

concerning Coordination of Telecommunications between the Aviation and Maritime Services for the Requirements of Rescue Work at Sea

The International Administrative Aeronautical Radio Conference,

## CONSIDERING:

- 1. that the Preparatory Committee to the International Administrative aeronautical Radio Conference recommended that the subject of frequencies for distress and scene of action purposes should be considered by the Conference and, in order to assist in such consideration, sent a letter to the Safety of Life at Sea and in the Air Conference (London) to request comments on the matter. Copies of the letter and of the reply are attached hereto as Appendices 1 and 2 respectively;
- 2. that the Radio Regulations provide for the use of a number of frequencies available jointly to the Maritime and Aviation Services for use in the interest of safety, distress,

and search and rescue. Appendix 3 attached hereto lists the paragraphs of the Radio Regulations, 1947, which outline the purposes for which the frequencies are to be used and the restrictions placed on such use;

- 3. that, while it is agreed that much is yet to be done to ensure to the greatest extent the most effective use of telecommunications for the safety of life at sea and in the air, the Conference and the I.T.U. in general have gone as far as their fields of activity permit, considering the information available;
- 4. that the problems of safety of life at sea differ in major respects from those concerning the safety of life in the air. In the case of an aircraft, the time between imminence of distress and complete disaster may be very short. Therefore, aircraft place primary reliance on their ground operational organization to initiate and direct search and rescue operations. As aircraft normally fly the air path shortest in time between the point of origin and destination, they do not necessarily operate over the lanes used by ships. Moreover, weight and bulk limitations restrict the capability of airborne survival craft communication equipment and make it unsafe to rely solely on 500 kc/s as a means of initiation of search by surface vessels. For this reason, the International Administrative Radio Conference, 1947, has provided (paragraph 180 of the Radio Regulations, 1947) for the use of 8364 kc/s for aircraft survival equipment which, by reason of the long range characteristics of such a wave, ensures additional protection. Thus coastal stations are capable of intercepting distress signals and of informing the authorities participating in the operation of rescue facilities (paragraph 916 of the Radio Regulations);
- 5. that the foregoing considerations led to the creation of a Search and Rescue Organization within the framework of I.C.A.O., which organization calls upon many agencies, civil and government, surface and air, for assistance in case of distress (Appendix 4 hereto contains a detailed description of typical cases of distress, followed by search and rescue);
- 6. that communications with respect to distress of aircraft over the sea comprise three phases:—first the period of distress, next the period of search, and finally the rescue. In the first phase the aircraft places primary reliance on the aeronautical working frequencies and on organizations for the distress call and for the planning and execution of relief measures, and in the second phase various agencies join in the search for the distressed aircraft or its survivors. Similarly, aircraft can and frequently do join in the search for the distressed surface ships and survivors. If survivors, either of air or surface craft, are observed by air search, surface agencies must be directed to the location so that the final stage (i.e. rescue) may be completed. In the three phases of aeronautical operation (distress, search and rescue) the equipment and the means of communication at present used by the various agencies concerned are believed to be inadequate. The distress frequency of 500 kc/s is available as a means of communication but this is neither satisfactory nor appropriate for the reasons that
  - a) 500 kc/s equipment with adequate power is too heavy and bulky for modern high speed aircraft;

- b) antenna drag is excessive;
- c) a long trailing antenna increases fire hazard due to lightning;
- d) radiation efficiency of fixed antenna is low.

The use of the frequency of 8364 kc/s, while partly solving the problem of long range distress communication, is unsuitable for scene of action short range communication and is useful only for communication with stations of the maritime mobile service (paragraph 571 of the Radio Regulations);

- 7. that there is required, therefore, for distress, search and rescue functions, scene of action frequencies of the order of 3 and 6 Mc/s which would be employed by those agencies joining in the search task and would be used for coordination of the efforts in conducting an efficient and thorough search. It should be noted that since the use of these frequencies would only occur in connection with coordinated operations which would of necessity have to be prearranged, there is no need for a watch to be maintained on these frequencies except by those actively participating in a search operation. Therefore consideration might be given to permitting the use of the frequencies 3023.5 kc/s and 5680 kc/s, allotted by the Conference for this and other purposes; and
- 8. that the Preparatory Committee of Experts, London 1948, which was charged with the study of the method of coordination of aviation, maritime and telecommunication interests on matters of safety at sea and in the air, and in which experts of the I.T.U. participated, in its Report of February 6, 1948 (see paragraph 21 of the Report, subparagraph F and paragraph 5 of the Annex) recommended coordination between the I.T.U., I.C.A.O. and Intergovernmental Maritime Consultative Organization on matters of distress, search and rescue operations;

## RECOMMENDS:

- 1. that, in accordance with Article 27 of the International Telecommunication Convention, 1947, and the Report of the Preparatory Committee of Experts, London, 1948, the Administrative Council of the I.T.U. suggest to I.C.A.O. and to the Intergovernmental Maritime Consultative Organization the creation of a small working group composed of experts of the three organizations to study this subject with a view to the formulation of a coordinated plan of action which will ensure, in cases of distress, the maximum benefit from telecommunication facilities; and
- 2. that, in the meantime, on the basis of the provisions of the Radio Regulations cited in Appendix 3 hereof, and with the help of the frequencies set aside for the purpose, the I.C.A.O. take the necessary steps within its organization towards formulation of a plan of coordination of distress, search and rescue operations.

#### APPENDIX I

COPY

14 May, 1948

Secretary General,
International Conference of Safety of Life at Sea and in the Air,
c/o General Post Office,
LONDON

Dear Sir,

I am directed by the plenary assembly of the Preparatory Committee for the International Administrative Radio Aeronautical Conference, meeting here in Geneva, to call your attention to the following suggestion approved by that Conference:

"In connection with the allocation of special frequencies for distress and scene of action purposes, it is suggested that the Safety of Life at Sea and in the Air Conference now meeting in London make a recommendation to the World Aeronautical Radio Conference concerning suitable frequencies for such purposes".

It will be very much appreciated if any recommendations you may have on this subject be referred to the undersigned at your earliest convenience.

Sincerely yours,

Gerald C. Gross

Assistant Secretary General

#### APPENDIX 2

COPY

59662 London 133/8 252 8 1614 Etat

To: Palais Wilson,

The Preparatory Committee for the International Administrative Radio Aeronautical Conference,

GENEVA,

The International Conference on Safety of Life at Sea have received your telegram concerning the allocation of special frequencies for distress and scene of action purposes which might be used jointly for aviation and marine purposes STOP The Preparatory Committee of experts on the coordination of Safety at Sea and in the Air who recently met in London recognized that communications played an important part both in precautionary measures as well as in actual distress incidents and considered that it would be useful if the matter was examined by representatives of the three agencies concerned namely the International Civil Aviation Organization, the Intergovernmental Maritime Consultative Organization, and the International Telecommunication Union and the necessary coordination secured between them STOP The Committee further suggested that the International Civil Aviation Organization after further consideration of the matter should if it deems this desirable raise the matter of frequencies other than 500 kc/s with the other agencies named above STOP The International Conference on Safety of Life at Sea feels that having regard to the fact that the allocation of frequencies falls within the field of the International Telecommunication Union and that representatives technically instructed on this matter by the three organizations are not in attendance at this Conference the best course would be for the matter to be dealt with as suggested by the Preparatory Committee of experts and recommends accordingly STOP Secretary-General International Conference on Safety of Life at Sea — London.

#### APPENDIX 3

Provisions of the Radio Regulations, governing joint use of frequencies by the aeronautical and maritime services

The following paragraphs of the Radio Regulations, 1947, relate to the use of frequencies available for distress purposes either to the maritime mobile service, or to the aeronautical mobile service, or to both:

General Provisions

$$239 - 271 - 378/79 - 570 - 571 - 598 - 599 - 761 - 762 - 775 - 779 - 780 - 805 - 861 \\ 862 - 865 - 871 - 891$$

Provisions relating to 500 kc/s

$$714 - 718 - 720 - 721 - 722 - 733 - 600 - 601$$

Provisions relating to 2182 kc/s

$$813 - 814 - 815 - 819 - 826 - 827 *)$$

Provisions relating to 156.80 Mc/s

$$198 - 830 - 832$$

Provisions relating to 8364 kc/s

$$277 - 600 - 601$$

## APPENDIX 4

## Example of operation of air sea rescue services

Standard aeronautical procedures generally specify that an aircraft in distress or anticipating such circumstances will first attempt to contact the ground communication station having the receiving guard for this aircraft on the route frequency normally in use, for example 6577 kc/s. The ground station upon receipt of such advice immediately notifies the Air Traffic Control Center which has the responsibility for further advice to the coordinated Air-Sea Rescue Service.

The ground communication station then immediately clears all other aircraft from 6577 kc/s, transferring them to the remaining channels of the frequency family authorized for this route, which, in this example, consists of 3395, 8577, and 11369, to permit of the exclusive use of 6577 kc/s for additional emergency communications. The ground station at this time also notifies via the remaining air ground channels, and available point-to-point circuits all other aircraft and ground stations in the area concerned to permit them to render any assistance possible.

In the ocean areas, all Government and Civil facilities available for life saving services, are coordinated as a combined unit under the Air-Sea Rescue Service Center. This Center is tied closely by telephone and teletype lines with all agencies concerned and with the direction finding networks, and those agencies are alerted for immediate action by the Air-Sea Rescue Center upon advice from the Air Traffic Control Center of aircraft emergencies.

Multi-motored aircraft capable of long distance overseas flights and fully equipped with modern life saving apparatus are available to the Air-Sea Rescue Service for aeronautical and marine rescue, and, upon advice from the Air-Sea Rescue Center, that there is emergency, they proceed immediately to the location where the aircraft has been reported to be in distress, followed, if advisable, by any available surface vessels. The Coastal Stations through the marine communication system also notify all vessels in the area concerned, for such assistance as they may be able to render.

\*) Relate to Region 1 only.

Should the distressed aircraft prove difficult to locate, and the search become extensive, it is probable that a large number of air and marine craft may assemble in a given area, thereby complicating the problem of efficient scene of action search control. No general radio frequency channels are presently authorized for such control service although in certain areas common frequency channels have been designated by the Military services to expedite their own activities at joint "Scene of Action" operations. Consequently, a great deal of communication is carried on between individual units engaged in the search and their respective home bases, to obtain the necessary coordination required for efficient search organization. Much of this communication is carried on the frequencies authorized for use of the air routes traversing the search area resulting in serious disruption to all other normal air-ground-air communications in this area.

Use of available Air-Sea Rescue Services is by no means restricted solely to the benefit of distressed aircraft but is utilized to a considerable extent in connection with life saving services rendered to marine craft. As an example of such aid to the marine services one of the most extensive aerial searches ever organized was recently conducted over a period of several weeks in the Central Pacific area to locate a barge carrying a small group of men, which had been cut loose from a towing tug in the vicinity of Palmyra Island due to lack of fuel. The towing vessel after refueling at Palmyra Island was unable to locate the barge. The Palmyra Island Aeronautical Communication station was notified by the tug of its difficulties and this advice was forwarded to the U.S. Coast Guard Headquarters at Honolulu. Air and marine craft of the Air-Sea Rescue Service then engaged in the search for the barge without success. During the succeeding days, as no trace of the barge was found, additional military and civil aircraft were pressed into service and the search area widened. Due to the long distance at which the aircraft were operating from their home base, it became necessary to establish temporary search control headquarters at Palmyra Island as well as additional temporary facilities for servicing such aircraft and subsistence for their crews. A Naval Aircraft Carrier was dispatched to the search area and aircraft from this vessel with the others surveyed large areas of the Pacific before finally locating the barge, which due to the strong ocean currents prevailing in this area, had drifted a considerable distance from its original location.

Communication between the temporary search headquarters at Palmyra Island and craft engaged in the search was carried on by the Palmyra Island aeronautical communication station on the frequencies utilized by the military services for their joint "Scene of Action" operations. The heavy communication load between Palmyra Island and the home bases of the search units at Honolulu was carried by the aeronautical point-to-point communication circuits between these points thereby leaving the air-route frequencies free for other essential communications.

#### Recommendation No. 8

concerning the Publication by the International Telecommunications Union of Certain Service Documents

The International Administrative Aeronautical Radio Conference, in response to a communication from the Secretary General of the International Telecommunication Union dated April 26, 1948 (a copy of which is appended hereto) requesting the advice of the Conference regarding the publication of certain service documents,

RECOMMENDS, with regard to

1. List of Aeronautical and Aircraft Stations,

that the Secretary General of the Union take all appropriate measures regarding the publication of this document which should include both new information reaching the Secretariat and any requirements submitted by the Administrations.

RECOMMENDS, with regard to the publication of the:

- 2. Map of Land Stations Open to Public Correspondence with Aircraft Stations.
  - (a) that the map should be published in accordance with the Radio Regulations and should contain all land stations providing an international public correspondence service to aircraft stations only; and

(b) that the Secretary General use his discretion regarding the areas, scale, projection, etc. . . . bearing in mind that this map will be utilized solely for identifying the location of such stations; and

with regard to the publication of the:

## 3. Map of Radionavigation Land Stations

#### CONSIDERING:

- (a) that for the aeronautical service, the publication of such a map presents a particularly intricate problem, because
  - such a map is of interest to airmen only if it is possible to use it for navigation purposes as well, a requirement which involves the use of special types of projection,
  - radionavigation land stations undergo constant revision in meeting the expanding and changing needs of aviation;
- (b) that meeting these requirements would involve the establishment of extensive cartographic services, supported by a rapid means of revision to keep abreast of new developments and installations. Such an undertaking would involve heavy expenditure for the International Telecommunication Union;
- (c) that the International Civil Aviation Organization (I.C.A.O.), which is a specialized agency of the United Nations, through its Member States, has established standards for and has arranged for the publication of charts and maps, which contain all pertinent information on aeronautical radionavigation stations. These charts and maps undergo constant revision through an accepted I.C.A.O. procedure, namely, Notice to Airmen (N.O.T.A.M.) messages to all interested operating agencies;
- (d) that the "Recommendations of the United Nations", contained in Annex 5 (Article IV, Paragraph I) to the International Telecommunication Convention, 1947, stresses the need "for the coordination of policies and activities of specialized agencies";
- (e) that the publication of such a map by the I.T.U., in addition to the List of Radio-location Stations, in so far as the aeronautical mobile service is concerned, would be a duplication of a service now being provided by another specialized agency of the United Nations and, in view of the agreement referred to under (4) above, between the I.T.U. and the UN, such duplication cannot be contemplated and, therefore, an adjustment of the Radio Regulations would have to be considered in this respect; and
- (f) that, however, all I.T.U. members are not members of I.C.A.O. and if such a map is not published by the I.T.U., those States which are not members of I.C.A.O. will have to make individual arrangements with the latter organization in order to obtain such charts and maps in case they consider the information contained in the List of Radiolocation Stations published by I.T.U. (paragraph 453 of the Radio Regulations) to be insufficient,

## RECOMMENDS:

that the Administrative Council (third session) instruct the Secretary General not to include aeronautical radionavigation land stations in the "Map of Radionavigation Land Stations" referred to in paragraph 464 of the Radio Regulations.

## APPENDIX

to the Recommendation concerning the Publication by the ITU of Certain Service Documents

COMMUNICATION FROM THE SECRETARY-GENERAL OF THE INTERNATIONAL TELECOMMUNICATIONS
UNION TO THE CHAIRMAN OF THE CONFERENCE

Berne, 26 April, 1948.

INTERNATIONAL TELECOMMUNICATIONS UNION Division of Radiocommunication

To the Chairman of the International Administrative Aeronautical Radio Conference

Sir:

According to the Radio Regulations adopted at Atlantic City, the Secretary-General of the Union is responsible for publishing the following documents:

- 1. (452) Schedule V. List of aeronautical and aircraft stations.
- 2. (463) The Map of land stations open to public correspondence with aircraft.
- 3. (464) The Map of radionavigation land stations.
- 1. It is laid down, with regard to the list of aeronautical and aircraft stations, that only aircraft operating on international routes shall appear on this list.

The information we at present possess on aircraft stations seems to be out of date. Hence it would seem desirable to avoid publishing information of this kind and to publish, in so far as Part C is concerned (Particulars of aircraft stations), only data relative to aircraft operating on international routes.

We would be grateful if you would inform us whether the Conference concurs with this opinion.

- 2. No information is given, either in the Acts of the Atlantic City Conference, or in the documents of that Conference, with regard to the way in which the map of land stations open to public correspondence with aircraft should be published.
  - (i) As provision is made for communication between aircraft operating over the sea and coastal stations, it would seem that these latter should also appear in the map of aeronautical stations. In our opinion, however, such an addition would overload the map to such a point as to make it difficult to use; recourse should rather be had to the map of coastal stations already published by the Bureau in the form of a small 9-page atlas.
  - (ii) What areas should be shown on these maps? We would like to know how the world should be represented on the various maps (alternatively which particular areas and/or particular routes).
  - (iii) What scale should be selected?
  - (iv) Which type of projection would be most suitable, bearing in mind the area to be represented and the specific purposes of the map?

An answer to these questions would enable us to determine the number of sheets in the maps which are to be prepared. In general, we would be extremely grateful for any guidance the Conference could give which would allow us to give satisfaction to all concerned and at the same time to avoid duplication with other maps of similar type.

- 3. The same remarks apply to radionavigation land stations.
  - (i) In view of the fact that there exists a maritime radionavigation service, and an aeronautical radionavigation service, the map should include the stations of both.
  - (ii) Consideration might be given to the question whether a map should be published showing both services, or whether separate sheets should be published for each of the two services.

- (iii) This question having been settled, the areas to be shown on these maps might then be determined.
- (iv) Choice of a scale for these maps.
- (v) The type of projection to be used.
- (vi) How should the stations be shown?
  - (a) in the case of radio-direction-finding stations.
  - (b) in the case of radio-beacons.

In general, the general secretariat of the Union would be glad to know the sense of the Conference on the points mentioned above. It would be grateful if the distinguished specialists represented at the Conference could devote a few moments to their consideration, so that the secretariat might proceed forthwith to publish the documents in question.

We beg to draw your attention to article X of the agreement between the United Nations and the I.T.U., according to which these two organizations will enter into consultation to avoid any possible duplication in their work. In this case, we have in mind the publications issued by I.C.A.O.—another specialized agency of the United Nations. Our own publications must not overlap with those of I.C.A.O.

It may be remembered, in this connection, that the Economic and Social Council of the United Nations, on the 24th February, 1948, adopted a resolution (see annex) on the coordination of cartographic services between specialized agencies and international organizations.

The Secretariat of the Union would be glad if it could be informed when this subject is likely to be discussed, so that the member or members of the General Secretariat entrusted with the publication of these documents may be detached to the Conference.

We thank you in advance for the assistance to be given us in this connection, and send you every good wish for the success of your work.

I am, Sir.....

Your obedient servant,

F. v. Ernst Secretary-General

#### ANNEX

To the Communication of April 26, 1948 from the Secretary General of the I.T.U.

UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL

UNRESTRICTED E/695 24 February, 1948 ORIGINAL: ENGLISH

# COORDINATION OF CARTOGRAPHIC SERVICES BETWEEN SPECIALIZED AGENCIES AND INTERNATIONAL ORGANIZATIONS

Resolution of 19 February, 1948

#### CONSIDERING:

that the full development of the world's resources pre-supposes the existence of accurate maps, as these resources are in many cases to be found in areas of the world comparatively little explored; and

#### CONSIDERING:

that such maps promote internationaltr ade, further the security both of aeronautical and maritime navigation, provide data necessary for the study of such measures of peaceful settlement as are provided for in Chapter VI of the Charter, and for the implementation of the security measures provided for in Chapter VII of this Charter; and

#### CONSIDERING:

that the coordination of the cartographic services of the United Nations and of the specialized agencies, together with those of Member States, would mean a considerable saving in time, money and man-power, and would help to improve the technique and the value of cartography; and

#### CONSIDERING:

that a number of Member States have already announced their interest in the drawing-up of a coordinated programme of international cartography: \*)

The Economic and Social Council therefore RECOMMENDS:

- 1. Member States to promote the carrying out of accurate surveys and the production of accurate maps of their own territory.
- 2. The Secretary-General to take all necessary steps within the limits of the financial resources available to:
  - (a) Support efforts made with this in view, by promoting the exchange of technical data, and by other means; in particular, by preparing a study of modern methods of cartography which would deal at the same time with the establishment of uniform international standards in this respect;
  - (b) Coordinate the plans and programmes drawn up by the United Nations and the specialized institutions on cartographic matters, taking into account the work done in this field by various inter-governmental and non-governmental organizations, and to report on this matter to the Council at a later session.
  - (c) Cooperate closely with the national cartographic services of the Member States concerned.

#### Recommendation No. 9

concerning the Use of Aeronautical Mobile R-Frequencies for the Aeronautical Fixed Service

The International Administrative Aeronautical Radio Conference, Geneva,

#### CONSIDERING:

- 1. that the spectrum space allocated to the aeronautical mobile R service is inadequate to satisfy all the requirements of that service; and
- 2. that the use of frequencies of the aeronautical mobile R service by the aeronautical fixed service would limit further the number of frequencies available to the aeronautical mobile R services;

#### RECOMMENDS:

that the use of frequencies of the aeronautical mobile R service for aeronautical fixed communications be generally avoided; that such use of the aeronautical mobile R frequencies be made only in exceptional circumstances and be discontinued as soon as possible.

#### Recommendation No. 10

concerning the Repetition of Frequency Assignments for the Aeronautical Mobile R Service

The International Administrative Aeronautical Radio Conference, Geneva, 1948

#### **CONSIDERING:**

- 1. that the frequencies available to the aeronautical mobile R service are insufficient to enable a plan to be assembled which will adequately provide for all the requirements of the service; and
- \*) Documents E/257, E/258, and E/483.

2. that individual requirements will arise from time to time for which no specific provision may be made in the present plan,

#### RECOMMENDS:

that although frequencies have been exclusively allotted for use within the defined Major World Air Route Areas and Regional and Domestic Route Areas boundaries, any administration is nevertheless permitted to utilise frequencies on a secondary basis both inside and outside the area or areas to which they are specifically allotted on condition, however:

- (1) that no harmful interference be caused thereby to the services using them in the areas and for the purposes for which they are primarily allotted, and
- (2) that the provisions of Articles 3 and 11 of the Radio Regulations are met.

#### Recommendation No. 11

on Cooperation between I.T.U. and I.C.A.O.

The International Administrative Aeronautical Radio Conference, Geneva,

#### CONSIDERING:

- 1. that Article 27 of the Telecommunication Convention of Atlantic City, 1947, states: "In furtherance of complete international coordination, on matters affecting telecommunication, the Union will cooperate with international organisations having related interests and activities";
- 2. that there exist in the field of aeronautical telecommunications many matters of common interest to I.C.A.O. and the I.T.U. on which it is highly desirable that the two organisations should act in close cooperation with each other, within the general framework established by the Charter of the United Nations, in order to facilitate the attainment of the purposes for which they were created; and
- 3. that moreover, the Conference has agreed to recognise I.C.A.O. as the specialized agency qualified to carry out the purposes contemplated in paragraph 390 of the Radio Regulations;

#### RECOMMENDS:

that the Administrative Council of the I.T.U. make appropriate arrangements with I.C.A.O. to provide:

- (a) that, subject to Chapter 2 of the General Regulations annexed to the International Telecommunication Convention, 1947, each organisation be automatically invited by the other to those of its conference where matters of common interest will be studied;
- (b) that each organisation include on the agenda of its meetings, after such preliminary consultation as may be necessary, any question submitted by the other organisations;
- (c) that each organisation keep the other fully informed concerning projected activities and programs of work in which there may be a common interest, and that, subject to such arrangements as may be necessary for the safeguarding of confidential material, they

- make a full and prompt exchange of information and documents concerning matters of common interest; and
- (d) that joint committees or other inter-agency machinery or arrangements be established, whenever desirable, to facilitate cooperation in specific matters with which the two organisations may be concerned.

#### Resolution No. 12

concerning the Communication to the International Civil Aviation Organisation of Copies of Complaints and Reports Relating to Interference within the Aeronautical Mobile Service Frequency Bands

The International Administrative Aeronautical Radio Conference,

#### CONSIDERING:

- 1. that paragraph 390 of the Radio Regulations provides as follows: "If there is a specialized international organization for a particular service, complaints and reports of irregularities and of infractions relating to interference caused by the stations in this service may\*) be addressed to such organization at the same time as to the administration or centralising office concerned.";
- 2. that it may serve a useful purpose, with regard to the aeronautical mobile service, to furnish copies of complaints and reports of irregularities and of infractions relating to interference caused by stations in the aeronautical mobile service to an international agency particularly familiar with aeronautical problems; and
- 3. that the United Nations has recognized, for its purposes, the International Civil Aviation Organization as the specialized agency in the aeronautical field;

## RESOLVES:

In conformity with Article 27 of the International Telecommunication Convention, 1947, and insofar as the aeronautical mobile service is concerned, to recognize that the International Civil Aviation Organization is the specialized agency qualified to carry out the purposes contemplated in paragraph 390 of the Radio Regulations, 1947.

Note: The Administrative Council of the Union took up the substance of this Resolution in Resolution 111 of its Third Session (Geneva, September/October 1948).

## Recommendation No. 13

concerning technical measures to facilitate the Aeronautical Mobile R Service on high frequencies

The International Administrative Aeronautical Radio Conference

#### CONSIDERING:

- that the Plan developed for the use of H.F. channels for the Aeronautical Mobile R Service will probably not be implemented prior to 1951;
- \*) The English and Spanish texts of this paragraph in the Radio Regulations, 1947 read ". . . shall be addressed . . .". The French text which is the authentic text reads ". . . peuvent être . . ." which corresponds to the expression " may be addressed . . .".

- 2. that, in the intervening period, and even during and after the implementation period, air traffic operations are subject to continuous changes;
- 3. that those 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 utilisation of those HF- R frequencies as prescribed in the Plan adopted at this Conference;
- 5. that the families of high frequencies alloted 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;

#### RECOMMENDS:

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

- I. to make as great a use as possible of V.H.F. in order to lessen the load on the HF-R bands;
- II. 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;
- III. 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 by an aircraft at a given distance from the aeronautical station providing service over the route segment concerned;
- IV. to improve operating techniques and procedures and to use the best equipment possible in order to attain the highest possible efficiency in handling air-ground H.F. communications;
- V. to collect precise data on the operation of their H.F. 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;
- VI. to establish, through regional agreements, the best method to provide the required communications for any new long distance international or regional air traffic which is not or cannot be accommodated within the system of MWARA and RDARA adopted by the Conference, in such a manner as not to cause any interference to the utilisation of frequencies as prescribed in the R Frequency Plan adopted by this Conference.

#### Recommendation No. 14

## concerning the organisation of the Aeronautical Mobile R Service

The International Administrative Aeronautical Radio Conference, considering:

- 1. that the number of channels available for the Aeronautical Mobile R Service is very limited; and
- 2. that the number of aircraft now in operation is not only large but increasing; and
- 3. that a natural corollary of limited frequency spectrum is the need for rigid circuit discipline, maximum efficiency and the application of uniform procedures; and
- 4. that it is essential that frequencies allotted be made available to all users of the Aeronautical Mobile R Service without discrimination; and without detriment to the services to which these frequencies are allotted;
- 5. that satisfactory communication may be unobtainable if implementation of radio frequencies is carried out by independent and uncoordinated means which do not allow for the most efficient and economical use of the radio frequency spectrum;

#### RECOMMENDS:

that the various nations, individually and in collaboration, take the necessary steps to ensure

- (a) the satisfactory utilization of frequency channels and efficiency of service so that the aeronautical mobile R frequencies be made available without discrimination to all users and without detriment to the services to which these frequencies are allotted;
- (b) that, as far as possible, service should be provided by a single aeronautical communications organism at any one location. Where this is not possible, close coordination between agencies must be made and maintained. In any case, the Administration authorising the operation of the aforementioned agency or agencies should be responsible for discipline and for taking the necessary disciplinary measures.

## Aer/2 Document No. 146-E

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

8 October 1949

#### Section II

TECHNICAL AND OPERATIONAL PRINCIPLES UTILIZED FOR THE ESTABLISHMENT OF THE PLAN OF ALLOTMENT OF FREQUENCIES IN THE AERONAUTICAL MOBILE "R" AND "OR" SERVICES

#### ARTICLE 1

#### DETERMINATION OF CHANNEL WIDTH

## 1. Frequency Separation.

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

Bands	Separation	Band	Separation
2850- 3155 kc/s	7 kc/s	8815- 9040 kc/s	8.5  kc/s
3400- 3500 kc/s	7 kc/s	$10005-10100 \mathrm{kc/s}$	9 kc/s
3900- 3950 kc/s	7  kc/s	11175-11400 kc/s	$9.5 \mathrm{kc/s}$
4650- $4750  kc/s$	7 kc/s	$13200 \text{-} 13360 \mathrm{kc/s}$	10 kc/s
$5480$ - $5730 \mathrm{kc/s}$	$7.5 \mathrm{kc/s}$	15010-15100 kc/s	10 kc/s
6525- 6765 kc/s	7,5 kc/s	$17900-18030 \mathrm{kc/s}$	10 kc/s

- (1) It is assumed that A3 modulations frequencies will be limited to 3 kc/s and that the sideband radiation of A1 emissions will not exceed that of A3 emissions. The use of a receiving set with good selectivity characteristics is assumed.
- (2) The use of channels as derived from the above table, for the various classes of emissions (A1, 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 was recognized that as a practical matter it might be possible for two or more A1 channels to be derived from each of the channels provided under this frequency separation plan and that there is a present requirement for manual telegraph communication in many parts of the world.
- (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 40 of the International Telecommunication Convention and Article 4 of the Radio Regulations.



## 2. Frequencies Allotted.

(0.032%)

(18)

The following is a list of frequencies to be allotted in the exclusive aeronautical mobile bands, on the basis of the frequency separation provided for under paragraph 1 above. At the top and bottom of each column is shown, in percentage, the maximum deviation of the first and last frequency of each band which may be permitted in the direction of the band edge, assuming double sideband modulation with a maximum modulation frequency of 3000 cycles.

	1 3	•		
• 1 .	,			
Band:	2850-3155 kc/s	3400-3500 kc/s	3900 <b>-3</b> 950 kc/s	4650-4750 kc/s
•	(0.035%)	(0.044%)	(0.025%)	(0.032%)
	2854 2861 2868 2875 2882 2889 2896 2903 2910 2917 2924 2931 2938 2945 2952 2959 2966 2973 2980 2987 2994 3001 3008 3015	3404.5 3411.5 3418.5 3425.5 3432.5 3439.5 3446.5 3460.5 3467.5 3474.5 3481.5 3488.5 3495.5 (0.043%)	3904 3911 3918 3925 3932 3939 3946 (7)	4654.5 4661.5 4668.5 4675.5 4682.5 4689.5 4696.5 4703.5 4710.5 4717.5 4724.5 4731.5 4738.5 4745.5 (0.032%)
	3023.5 R + 9 3032 3039 3046 3053 3060 3067 3074 3081 3088 OR	OR		

Band: 5450-5480 kc/s	5480-5730 kc/s	6525-6765 kc/s	8815-9040 kc/s	10 005-10 100 kc/s
	(0.018%)	(0.023%)	(0.022%)	(0.04%)
***5454 ***5461,5 R ***5469 ***5476,5	5484 5491.5 5499 5506.5 5514 5521.5 5529 5536.5 5544 5551.5 5559 5566.5 5574 R 5581.5 (26) 5589 5596.5 5604 5611.5	6529.5 6537 6544.5 6552 6559.5 6567 6574.5 6582 6589.5 6697 6604.5 6612 6619.5 6627 6634.5 6642 6649.5 6657	8820 8828.5 8837 8845.5 8854 8862.5 8871 8879.5 8888 8896.5 8913.5 8922 8930.5 8939 8947.5 8956 */**8961.5	10 012 10 021 10 030 10 039 10 048 10 057 10 066 10 075 10 084 10 093 (0.04%)
	5619 5626.5 5634 5641.5 5649 5656.5 5664 5671.5 5680 R+OI 5688 5695.5 5703 5710.5 5718 5725.5 (0.026%)	6664.5 6672 6679.5 *6685 *6687.5 6693 6700.5 708 66715.5 6730.5 6730.5 6738 6745.5 6753 6760.5 (0.022%)	8967 8975.5 8984 8992.5 9001 9009.5 9018 9026,5 9035 (0.022%)	

<sup>\*</sup> Available for A1 emission only

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

\*\*\* These frequencies are included in the Plan in accordance with a recommendation of Region II I.T.U. (Washington 1949).

Band:	11 175-11 400 kc/s	13 200-13 360 kc/s	15 010-15 100 kc/s	17 900-18 030 kc/s
•	(0.022%)	(0.019%)	(0.02%)	(0.01955%)
	11 180.5 11 190 11 199.5 11 209 11 218.5 11 228 11 237.5 (11)	13 205.5 13 215.5 13 225.5 13 235.5 13 245.5 13 255.5 OR (6)	15 016 15 026 15 036 15 046 15 056 OR 15 066 15 076 (10)	17 906.5 17 916.5 17 926.5 17 936.5 17 946.5 17 956.5 ***17 966.5
	11 247 11 247 11 256.5 11 266 *11 273 11 280.5 11 290 11 299.5 11 309 11 318.5	13 264.5 13 274.5 13 284.5 13 294.5 13 304.5 13 314.5 13 324.5 13 334.5 13 344.5 13 354.5	15 076 15 086 *15 092.5 *15 096.5 (0.02%)	*17 975 ***17 983.5 17 993.5 18 003.5 18 013.5 18 023.5 (0,0194%)
	11 328 11 327 11 347 11 356.5 11 366 11 375.5 11 385 11 394.5	(0.01870/)		
	(0.022 %)			

## 3. Channels Common to R and OR Service.

- (1) The channels common to the R and OR services, centered at 3023.5 and 5680 kc/s are authorized for use world-wide as follows:
  - (a) aboard aircraft for:
    - communications with approach and aerodrome control,
    - communication with an aeronautical station when other frequencies of the station are either unvailable or unknown;
  - (b) at aeronautical stations for aerodrome and approach control under the following conditions:
    - for approach control with power limited to a value that will produce  $20~\mu v/m$  at 100 km and in any case no more than 20 watts in the antenna circuit,
    - for aerodrome control with the power limited to a value that will produce  $20~\mu v/m$  at 40 km and in any case no more than 20 watts in the antenna circuit.

special attention must be given in each case to the type of antenna used in order to avoid harmful interference.

\* Available for A1 emission only.

\*\*\* Although the separation between 17966.5 and 17975 kc/s and between 17975 and 17983.5 kc/s is smaller than the standard separation adopted for this band in paragraph 1 above, the use of the different classes of emission is contemplated on the channel centered at this frequency in the same manner as on the other channels.

- The power of aeronautical stations which use these frequencies and which operate under the conditions presented above may be increased through I.T.U. and/or I.C.A.O. regional agreements to the intent necessary to meet certain operational requirements.
- (c) for intercommunication between mobile stations engaged in coordinated search and rescue operations at the scene of a disaster.
- (2) The specific application of these common channels for these purposes may be decided at regional aeronautical conferences.
- (3) With respect to the use of 5680 kc/s for approach and aerodrome control, it is recognized that this frequency is not appropriate for these purposes and its use should be abandoned as soon as possible. In the meantime should be used with careful regard to its propagation characteristics.
- (4) These channels may be used for A1 or A3 emission, in accordance with special arrangements. They shall not be subdivided.

## 4. Adjacent Channels.

In the interest of the suppression of adjacent channel interference, the Conference in preparing its Plan has endeavoured to avoid, as far as possible, the allotment of adjacent channels million the same areas unless such allotments here specifically requested.

#### ARTICLE 2

#### TECHNICAL PRINCIPLES AND STANDARDS

## 5. Introduction.

In developping the allotment plan, it was necessary, for the Conference, to make a number of assumptions, and to develop a means for the determination of the areas of service and areas of interference for each assignable frequency. To facilitate this work a large number of curves were prepared, and technical standards adopted. These were published together with an explanation of their use as part of Volume I of the Interim Report, specifically Sections II and III and Annex I. A summary of this information follows:

## 6. Radiated powers.

(a) A1 emissions:

Ground station 1.0 kilowatt radiated (peak),

Aircraft 50 watts radiated (peak).

(b) A3 emissions:

Groundstation 4.0 kilowatts radiated (peak), 100% modulated,

Aircraft 200 watts radiated (peak), 100% modulated.

## 7. Bandwidths.

See Art. 1 para. 1. (1).

#### 8. Noise levels.

- (a) Local noise level at the aircraft assumed 5  $\mu v/m$ .
- (b) Atmospheric noise level was classified as to noise grade and a series of charts for each grade utilized. This gives the field intensity necessary to provide 90% of the time 15 db signal-to-noise ratio for the reception of A3 with a receiver having a bandwidth of 6 kc/s.

## 9. Acceptable signal-to-noise and signal-to-interference ratios.

(a) A3 15 db signal-to-noise or signal-to-interference ratio.

(b) A1 0 db signal-to-noise or signal-to-interference ratio.

#### 10. Antennas.

(a) Aircraft Effective length assumed 1 m.

(b) Ground station Efficiency of antenna was assumed great enough so that receiver noise is never a controlling factor in limiting the maximum range.

## 11. Required field intensity.

(a) A3 28  $\mu$ c/m for 15 db above 5  $\mu$ v/m. As in the future with new aircraft and with properly serviced used aircraft it will be possible to reduce the noise level below 5  $\mu$ v/m. a value of 20  $\mu$ v/m was therefore accepted.

(b) A1  $5 \mu v/m$ .

## 12. Signal-to-interference (protection) ratios.

(a) A3

30 db at the aircraft at the limit of the service range down-graded to 25 db in individual cases where additional allotment were thereby made possible. This wasfinally reduced to 15 db (See paragraph 16).

(b) A1 20 db and downgraded to 15 db in individual cases for the same reasons as in paragraph 12. (a)

## 13. Propagation characteristics.

Skywave was assumed at all times.

## 14. Channel Loading and Capacity.

The previous paragraphs have outlined the standards which were used by the Conference in determining the order of frequencies which would be required to serve any particular aircraft operation and in determining the extent to which any particular frequency could be repeated throughout the world and used simultaneously to serve different air traffic areas. Certain other assumptions were necessary in order to determine the number of frequencies required to handle the volume of communications which might arise in the conduct of any particular aircraft operation. The determination of this number depended upon two factors: First, the expected peak number of aircraft which would be in the air in any one operation during any hour and, second, the number of aircraft that can be accommodated on any single frequency.

The Conference is unable to develop an exact means of determining the peak number of aircraft which might be expected because of the large number of variables. However, it developed and used an empirical formula based upon the length of the route, the number of weekly flights and the average speed of the aircraft utilised on that route. This formula produces a figure which the Conference believed was sufficiently close to that actually experienced to justify its use in the allotment of frequencies.

In the case of Major World Air Routes, the Conference determined that a family of frequencies could be expected to accommodate a maximum of 12 aircraft in one hour, but that if a route was served by a single frequency, that frequency could accomodate 10 aircraft. Because of the shortage of the number of frequencies available it was impossible to allot sufficient frequencies in the majority of cases to meet these standards. Therefore it is to be expected that under the allotment plan, a greater number of aircraft will frequently have to be accommodated, with the consequent loss of efficiency.

In the regional and domestic air routes it was found impossible to apply a single figure uniformly. In this case, it was assumed that it would be satisfactory to schedule aircraft communications for 40 minutes of each hour for a single frequency and for a somewhat longer time for a family of frequencies. The average time required for an aircraft to conduct its communications was determined for the various areas, and the capacity of a frequency was determined by dividing the useful minutes by the time occupied, the latter figure varying from 2 to 6 minutes.

In adopting the above procedures, the Conference took into account that, in regions where meteorological conditions and density of air traffic so require, it will be necessary to organize the broadcast of meteorological information destined to aircraft in flight on frequencies other than those used for routine air/ground communications. Otherwise requests for special weather information by aircraft in flight may overlead those frequencies.

## 15. Application of Principles.

Based on the assumptions described and using the procedures discussed in detail in Volume I of the Interim Report, frequencies have been allotted for each operation assure that all aircraft in flight will have available frequencies of the proper order considering the time of day, the season of the year and the phase of the sunspot cycle and that

sufficient frequencies of each order are allotted to give a reasonable assurance that all aircraft in flight will be able to handle promptly both routine and emergency communications.

## 16. Inability to meet standards.

The Conference was compelled because of the scarcity of available channels, to reduce the protection ratios mentioned in paragraph 12 above to 15 db for A3 in order to increase the repetition possibilities of frequencies. It nevertheless maintains its view that minimums of 25 and 15 db protection ratio for A3 and A1 respectively as adopted are necessary to provide sound standards for aeronautical mobile communications.

#### ARTICLE 3

#### INTERFERENCE RANGE CONTOURS

## 1. Definition of contours.

The transparencies inserted in the pocket at the end of this Volume 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 volume, depicting RDARA and MWARA boundaries are to the correct 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.

The transparencies were constructed on the basis of sharing conditions agreed at the IAARC, namely:

## MWARA to MWARA:

3.0- 6.6 Mc/s — night

9.0-11.3 Mc/s - day

13.0-18.0 Mc/s — time separation

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

## MWARA to RDARA:

3.0-5.6 Mc/s — night

6.6-11.3 Mc/s - day

13.0-18.0 Mc/s — time separation

## RDARA to RDARA:

3.0- 4.7 Mc/s — night

5.6-11.3 Mc/s - day

13.0-18.0 Mc/s — time separation

The additional contours for day included for 3.0, 3.5 and 4.7 Mc/s day are for determining daylight sharing possibilities.

The data on which the contours are based will be found in tables 1, 2, 5 and 6 of Aer./Doc. 211, which was prepared by the First Session of the Conference and is included among its records.

## 5. Method of Use.

Take the MWARA or the RDARA maps accompanying this Volume and select the transparency for the frequency order and sharing conditions under consideration.

Place the center 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 1 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 areas which involve the transition of the equator.

## 6. Data for tracing interference contours.

# 3.0 Mc/s, NIGHT

Latitude	00°		20°		40°		50°		, 6	0°
Inter- ference Range	N-S 31.5°	E-W 31.5°	N-S 31.5°	E-W 33.6°	N-S 31.5°	E-W 41°	N-S 31.5°	E-W 49°	N-S 31.5°	E-W 64°
Co- ordinates	Long.	Lat.	- Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
for plotting of contours	180°. 155°W 148.5°W 155°W 180°	31.5° 20°N 00° 20°S 31.5°S	180° 160°W 150°W 146°W 146°W 150°W 160°W 170°W	51.5°N 47°N 39°N 30°N 20°N 07°N 05°S 10°S 11.5°S	160°W 140°W 138°W 140°W 143°W 150°W 160°W 169°W 180°	70°N 60°N 50°N 40°N 30°N 22°N 14°N 14°N 08.5N°	127°W 125°W 131°W 138°W 150°W 160°W 167°W 180°	70°N 60°N 50°N 40°N 29°N 23°N 20°N 18,5°N	106° W 115° W 128° W 140° W 150° W 160° W 170° W 180°	70°N 60°N 50°N 40°N 35°N 32°N 29°N 28.5°N
	ATT ATT TO									

## 3.5 Mc/s, NIGHT

Latitude	e 00°		20°		40°		50°		60°	
Inter- ference Range	N-S 36°	E-W 36°	N-S 36°	E-W 38°	N-S 36°	E-W 47°	N-S 36°	E-W 56°	N-S 36°	E-W· 73°
Co- ordinates	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
for plotting of contours	180° 170°W 159°W 150°W 145°W 145°W 150°W 160°W 170°W 180°	36°N 35°N 30°N 21°N 10°N 00°N 10°S 21°S 30°S 35°S 36°S	180° 170°W 160°W 150°W 144°W 140°W 150°W 150°W 170°W 180°	56°N 55°N 53°N 47°N 40°N 20°N 10°N 00° 10°S 14°S 16°S	140°W 133°W 131°W 133°W 140°W 150°W 160°W 170°W 180°	70°N 60°N 50°N 40°N 27°N 16°N 08°N 05°N 04°N	118° W 119° W 124° W 132° W 140° W 150° W 160° W 170° W 180° W	70°N 60°N 50°N 40°N 32°N 24°N 17°N 15°N 14°N	93°W 100°W 110°W 120°W 130°W 140°W 150°W 160°W 170°W 180°	70°N 68°N 58°N 50°N 43°N 35°N 30°N 27°N 25°N 24°N
٠	٠	÷								•

4.7 Mc/s, NIGHT

Latitude 00°		20°		.,40°		50°		60°		
Inter- ference Range	N-S 50°	E-W 50°	N-S 50°	E-W 53°	N-S 50°	E-W . 65°	N-S 50°	E-W 77°	N-S 50°	E-W 100°
Co- ordinate for plotting of contours	Long.  160°W 147°W 138°W 131°W 131°W 131°W 138°W 147°W 160°W 170°W 180°	Lat.  47°N 40°N 30°N 20°N 10°N 00° 10°S 20°S 30°S 40°S 47°S 48°S 50°S	180° W 125° W 127° W 130° W 140° W 150° W 150° W 150° W 150° W 180°	70°N 66°N 50°N 40°N 30°N 20°N 07°N 10°S 20°S 29°S 30°S	Long.  103° W 110° W 115° W 127° W 140° W 150° W 170° W 180°	Tat.  70°N 50°N 40°N 20°N 06°N 02°S 07°S 09°S 10°S	83°W 94°W 103°W 114°W 124°W 134°W 140°W 150°W 160°W	70°N 60°N 50°N 40°N 30°N 21°N 16°N 07°N 05°N	50°W 78°W 98°W 112°W 130°W 140°W 160°W 170°W 180°	Tat.  70°N 60°N 50°N 40°N 28°N 19°N 12°N 10.5°N 10°N

## 5.6 Mc/s and 6.6 Mc/s, NIGHT

Latitude	0	0°	20	)°	4	0°	50	)°	6	0°
Inter- ference Range	N-S 58°	E-W 58°	N-S 58°	E-W 63°	N-S 58°	E-W 76°	N-S 58°	E-W 92°	N-S 58°	E-W 116°
Co- ordinates	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
for plotting of contours	180° 122°W 180°	58°N 00° 58°S	130°W 120°W 118°W 115°W 115°W 117°W 120°W 120°W 130°W 138°W 150°W 180°	70°N 60°N 50°N 40°N 40°N 20°N 10°N 00° 10°S 20°S 30°S 38°	80°W 92°W 98°W 104°W 111°W 118°W 127°W 134°W 150°W	70°N 60°N 50°N 40°N 20°N 10°N 00° 10°S 18°S	48°W 73°W 88°W 99°W 110°W 120°W 130°W 146°W 180°	70°N 60°N 50°N 40°N 30°N 20°N 10°N 00° 08°S	08° W 66° W 88° W 104° W 120° W 125° W 143° W 180°	70°N 60°N 50°N 40°N 25°N 20°N 10°N 02°N

3.0 AND 3.5 Mc/s, DAY

Latitude	00°	20°	. 40°	60°		
Inter- ference Range	N-S E-W 6.3°	N-S E-W 6.7°	N-S E-W 8.5°	N-S E-W 12.6°		

## 4.7 Mc/s, DAY

Latitude	0	0°	2	20°		0°	60°		
Inter- ference Range	N-S 10.8°	E-W 10.8°	N-S 10.8°	E-W 11.5°	N-S 10.8°	E-W 14.0°	N-S 10.8°	E-W 21.6°	

# 5.6 Mc/s, DAY

Latitud	9	00°	. 20°		4	0°	60°		
Inter- ference Range	N-S 13.6°	E-W 13.6°	N-S 13.6°	E-W 14.5°	N-S 13.6°	E-W 17.6°	N-S 13.6°	E-W 27.2°	

# 6.6 Mc/s, DAY

Latitude	0	0°	20°		4	0° .	, 60°		
Inter- ference Range	N-S 17.2°	E-W 17.2°	N-S 17.2°	E-W 18.3°	N-S 17.2 °	E-W 22.4°	N-S 17.2°	E-W 34.4°	

Note: For 3.0, 3.5, 4.7, 5.6 and 6,6 day intermediate plotting points are unnessary as contours approximate the circumference of a circle.

# 9.0 Mc/s, DAY

Latitude	. 00	o .	20	0	40	o .	50	o	60°	
Inter- ference Range	N-S 34.3°	E-W 34.3°	N-S 34.3°	E-W 36.5°	N-S 34.3°	E-W 44.8°	N-S 34.3°	E-W 53.5°	N-S 34.3°	E-W 69.0°
Co- ordinates for	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
plotting of contours	180° 170°W 160°W 150°W 146°W 150°W 160°W 170°W 180°	34°N 33°N 28°N 17°N 00° 17°S 28°S 33°S 34°S	180° 160° W 150° W 145° W 146° W 147° W 160° W 170° W 180°	54°N 50°N 42°N 30°N 20°N 10°N 00° 08°S 13°S 14°S	148° W 135° W 133° W 135° W 140° W 150° W 160° W 170° W 180°	70°N 60°N 50°N 40°N 28°N 17°N 11°N 07°N 06°N	122°W 122°W 127°W 134°W 140°W 150°W 160°W 170°W 180°	70°N 60°N 50°N 40°N 34°N 24°N 20°N 17°N 16°N	100°W 111°W 120°W 130°W 140°W 150°W 160°W 170°W 180°	69°N 60°N 53°N 45°N 37°N 32°N 28.5°N 26°N 25°N

10,0 Mc/s, DAY

Latitude	. 00	)°	. 20	0°	40	)°	. 50	)°	60°		
Inter- ference Range	N-S 49.5°	E-W 49.5°	N-S 49.5°	E-W 53.0°	N-S 49.5°	E-W 64.5°	N-S 49.5°	E-W 78.0°	N-S 49.5°	E-W . 100°	
Co- ordinate	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	
for plotting of contours	180° W 160° W 160° W 140° W 133° W 131° W 130.5° W 131° W 140° W 150° W 160° W 160° W 180° W	49.5°N 49°N 46°N 41°N 32°N 20°N 10°S 20°S 32°S 41°S 46°S 49°S 49.5°S	180° 160°W 140°W 130°W 127°W 130°W 140°W 150W° 160°W 170°W 180°	69.5°N 68°N 62°N 52°N 40°N 30°N 11°N 08°S 18°S 25°S 28°S 29.5°S	102°W 103°W 109°W 115.5W 120°W 130°W 140°W 150°W 160°W 170°W 180°	70°N 60°N 50°N 40°N 31°N 17°N 07°N 00° 06°S 09°S 09.5°S	100°W 90°W 101°W 110°W 120°W 130°W 140°W 150°W 160°W 170°W	70°N 60°N 50°N 40°N 30°N 22°N 12°N 07°N 03°N 01°N	50°W 70°W 80°W 98°W 110°W 120°W 130°W 140°W 150°W 160°W 170°W	70°N 66°N 60°N 50°N 42°N 36°N 30°N 22°N 16°N 13°N 11°N 10.5°N	

# 11,3 Mc/s, DAY

Latitude	00	<b>)°</b>	20	00	4	0,0	50	)°	60	0°
Inter- ference Range	N-S 54°	E-W 54°	N-S 54°	E-W 58°	N-S 54°	E-W 71°	N-S 54°	E-W 85°	N-S 54°	E-W 109°
Co- ordinates	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
for plotting of contours	180° 160°W 150°W 140°W 132°W 128°W 126°W 127°W 128°W 132°W 140°W 150°W 160°W 180°	54°N 52°N 47°N 40°N 30°N 20°N 10°N 00° 10°S 20°S 30°S 40°S 47°S 52°S 54°S	145°W 128°W 123°W 120°W 120°W 122°W 124°W 130°W 140°W 150°W 170°W 180°	70°N 60°N 50°N 40°N 20°N 10°N 04°S 17°S 25°S 33°S 34°S	93°W 98°W 104°W 109°W 120°W 130°W 140°W 150°W 160°W	70°N 60°N 50°N 40°N 24°N 12°N 00° 06°S 10°S 14°S	64°W 80°W 95°W 110°W 120°W 140°W 150°W 170°W 180°	70°N 62°N 50°N 35°N 26°N 08°N 03°N 01°S 03°S 04°S	30°W 71°W 90°W 107°W 120°W 140°W 150°W 160°W 170°W	70°N 60°N 50°N 40°N 32°N 15°N 11°N 08°N 07°N

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO, CONFERENCE
2ND SESSION
GENEVA, 1949

# Aer/2 - Document No. 147-E 8th October 1949

## Section II

## FREQUENCY ALLOTMENT

## ARTICLE 1

# TABLE OF FREQUENCY ALLOTMENTS TO MWARAS, RDARAS AND SUB-RDARAS

- Note: (a) = For exact nature of restriction refer to: col. 3 of IAARC frequency plan (per numerical order of frequencies).
  - (b) The following listing does not include the world common "R" and "OR" frequencies of 3023.5 kc/s and 5680 kc/s.

Band Mc/s	3	3,5	4,7	5,6	6,6	9	10	11,3	13,3	18
Area	-kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
Atlantic-MET	3001 ◆			5559◆		8828,5 +				
CEP		3432,5 3446,5 3467,5 3481,5		5551,5 5604	6612 6679,5	8879,5 8930,5	10 048 10 084	11 299,5 11 318,5	13 304,5 13 334,5	17 926,5
CWP	2966			5506,5		8862,5			13 354,5	17906,5
EU	2889 2910	3467,5 3481,5	4654,5 4689,5	5551,5	6552 6582	8871 8930,5	1	11 299,5		17906,5
EU-MET	2980 •			5574 ◆		8905 +				
FE1	2987			5671,5		8879,5 8930,5			13 324,5	17 966,5
FE2	2868			5611,5	-	8871			13 284,5	17 966,5
ME		3404,5		5604		8845,5				
ME(Ext)		3446,5			6627		10 021		13 334,5	17 926,5
ME-MET	3001 ◆			5559 +		8828,5 •	-			
NA.	2868 2945 2987			5626,5 5641,5 5671,5	,	8862,5 8888 8913,5			13 264,5 13 284,5 13 324,5	
NA(Ext)	2931			5611,5		8947,5			13 354,5	17 966,5
NP	2987			5521,5	-	8939			13 274,5	17906,5
NSA1		3411,5		5521,5	•	8820			13 304,5	17 946,5
NSA2	2966			5506,5		8956			13 334,5	17 926,5
NSAM1	2889		4696,5		6664,5	8820			13 314,5	17 916,5
NSAM2	2910 2966	3404,5		5566,5 5581,5	6567	8845,5 8871		11 290 11 337,5	13 344,5	17 916,5
PacifMET	2980 +			5574 ◆		8905 +		,		
SA	2875				6612 6679,5	8939 8879,5				u.e



Band Mc/s	3	3,5	4,7	5,6	6,6	9	10	11,3	13,3	18
Area	ke/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
SA(Ext)	٠	3432,5	,		6597		10 048		13 274,5	17 946,5
SP	2945			5641,5		8845,5			13 344,5	17 946,5
1	2854 • 2896 • 2917 • 2938 • 2952 • 2959 • 2973 •	3425,5 <b>+</b> 3453,5 <b>+</b> 3495,5 <b>+</b>	4668,5 <b>◆</b> 4675,5 <b>◆</b>	5499 <b>•</b> 5544 <b>•</b> 5589 5649 <b>•</b>	6567	8837 • 8854 • 8961,5 •	10 066 • 10 084 •	11 356,5 •	13 314,5 •	
1B	2903 • 2973 •	3418,5 <b>+</b> 3474,5 <b>+</b> 3495,5 <b>+</b>		5529	6529,5 +	8961,5 +				·
1C	2973 +	3418,5 <b>◆</b> 3495,5 <b>◆</b>			6529,5 ◆	8961,5 •				
1D	2973 <b>•</b> 3015 <b>•</b>	3418,5 <b>+</b> 3495,5 <b>+</b>	4682,5 ♦	5619	6529,5 <b>◆</b> 6544,5	8961,5 •				·
1E	2861 2973 • 3015 •	3418,5 <b>◆</b> 3495,5 <b>◆</b>		5484 ◆ 5656,5 ◆	6604,5 ◆	8961,5 +		•		
2	2882 2924 2973 • 2994 •	3439,5 3460,5 ◆ 3488,5 ◆ 3495,5 ◆	4661,5 <b>◆</b> 4696,5	5536,5 5596,5 ◆ 5664 ◆	6589,5 + 6619,5 + 6642 + 6657 + 6672 +	8922 • 8961,5 •	10 012	11 290 + 11 309 11 347 + 11 366 + 11 375,5 11 394,5 +	13 344,5	17 956,5 +
2A	2973 🔸	3404,5 <b>♦</b> 3495,5 <b>♦</b>		5514 ◆	6559,5 6574,5 6612 +	8961,5 +				
2B	2854 • 2868 • 2938 • 2973 • 2980 •	3495,5 ◆	4654,5 ◆	5484	6597	8961,5 +				
2C	2945 • 2973 • 2987 •	3495,5 ◆		5491,5 5514 ◆ 5634	6612 +	8961,5 +		-		
3	2875 2973 • 2994 • 3008 • 3015 •	3432,5   3446,5   3460,5   3488,5   3495,5	4661,5 <b>◆</b> 4682,5	5581,5 5566,5 5596,5 ◆ 5649 5664 ◆	6552 6589,5 • 6642 • 6657 •	8922 <b>•</b> 8961,5 <b>•</b>	10 012 + 10 030 + 10 039 + 10 075 +	11 328 11 347 11 366	13 264,5	17 956,5 +
3A	2861 2973 •	3481,5 <b>+</b> 3495,5 <b>+</b>	4675,5 +		6544,5 6567	8961,5 +	10 057 • 10 093 •	11 290 <b>•</b> 11 394,5 <b>•</b>		17 916,5 +
3B	2854 2903 • 2938 2952 • 2959 2973 •	3404,5 3495,5 <b>◆</b>	4689,5 ◆	5484 5529 5619	6529,5 6612 6634,5 6649,5 6679,5	8845,5 8947,5 + 8961,5 +				
3C	2896. 2903 • 2917 2952 • 2973 •	3425,5 ◆ 3453,5 ◆ 3495,5 ◆	4668,5 ◆		6604,5 662 <b>7</b>	8913,5 8947,5 + 8961,5 +	10 057 + 10 093 +	11 280,5		17 916,5 +
4	2973 •	3495,5 ◆			6537 +	8896,5 <b>+</b> 8961,5 <b>+</b>		11 385 •	٠	17 936,5 +
4A	2973 •	3495,5 ◆		5664	6574,5	8961,5 ◆				

Band Mc/s	3	3,5	4,7	5,6	6,6	9	10	11,3	13,3	18
Area	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	ke/s	kc/s	kc/s
4B	2924 2973 •	3495,5 ◆		5484 5596,5	6559,5 6589,5 6642 6657 6672	8961,5 +		•,		
5	2973 +	3495,5 +			6537 ◆	8896,5 <b>+</b> 8961,5 <b>+</b>		11 385 •		17 936,5 •
5A	2973 •	3495,5 ◆	4682,5 ♦	5529		8961,5 +				
5B	2903 <b>•</b> 2973 <b>•</b>	3495,5 +		5656,5 ◆	6604,5	8961,5 +				÷
5C	2903 <b>•</b> 2973 <b>•</b>	3495,5 ◆		5656,5 +		8961,5 +	•		,	
5D	2903 <b>•</b> 2973 <b>•</b>	3495,5 ◆		5536,5 5656,5 ◆		8961,5 •				
6	2973 →	3411,5 3495,5 ◆		5491,5 5634	6582	8961,5 +		11 337,5		
6A	2931 • 2945 • 2959 • 2973 •	3432,5 • . 3474,5 3495,5 •		5514 ◆ 5566,5 ◆ 5581,5 ◆	6529,5 <b>+</b> 6544,5 6559,5 <b>+</b> 6567 6634,5 6649,5 6679,5 <b>+</b>	8888 <b>*</b> 8939 8961,5 <b>*</b>	10 048 •			
6B	2889 2910 2973 •	3418,5 3467,5 3495,5 +		5514 <b>•</b> 5544 5589	6559,5 <b>+</b> 6574,5 6664,5	8956 + 8961,5 +				
6C	2882 2924 2973 •	3439,5 3495,5 ◆	4668,5 ◆	5536,5 5656,5	6552 6604,5 6619,5 + 6672 +	8820 <b>•</b> 8961,5 <b>•</b>	10 084 ◆		13 304,5 ◆	•
6D	2973 •	3425,5 3453,5 3481,5 3495,5 ◆	4668,5 ◆ 4689,5	5529 5596,5 5619	6589,5 6619,5 <b>+</b> 6642 6657 6672 <b>+</b>	8820 <b>•</b> 8961,5 <b>•</b>	10 048 •			·
6E	2861 2931 • 2945 • 2973 •	3432,5 <b>+</b> 3495,5 <b>+</b>		5514 <b>•</b> 5566,5 <b>•</b> 5581,5 <b>•</b> 5649	6529,5 <b>+</b> 6559,5 <b>+</b> 6612 6679,5 <b>+</b>	8961,5 +	10 048 •	•		
6F	2945 • 2973 •	3495,5 ◆			6537 <b>•</b> 6597	8837 8854 8888 • 8961,5 •	10 048 • 10 066		13 294,5	
7	2868 2973 3008	3495,5 •		5499 <b>•</b> 5544 5574 5589	6552 6649,5 ◆	8862,5 8947,5 + 8961,5 +		11 318,5 •		17 936,5 •
7A	2973 +	3495,5 ◆				8961,5 +				
7B	2973 • 2987	3474,5 3495,5 ◆	•	5634	6529,5 6597 <b>•</b> 6627 6664,5 6679,5 <b>•</b>	8913,5 8961,5 <b>◆</b>				
7C	2973 •	3495,5 ◆			6597 ◆	8961,5 +				
7D	2854 2938 2973 2994	3439,5 3460,5 3495,5 ◆	4696,5	5484 5649 5664	6567 <b>+</b> 6597 <b>+</b>	8871 8922 8961,5 •		•		

Band Mc/s	3	3,5	4,7	5,6	6,6	9	10	11,3	13,3	18
Area	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
7E	2882 2896 2917 2952 2973 •	3425,5 3432,5 3453,5 3495,5 •	4682,5	5491,5	6567 <b>•</b> 6582 6597 <b>•</b> 6679,5 <b>•</b>	8879,5 8930,5 8961,5 •	10 039 10 075	11 328		
8A.	2973 •	3495,5 ◆	-	5499 ◆	6649,5 +	8947,5 <b>•</b> 8961,5 <b>•</b>		11 318,5 •		
9	2854 2973 •	3404,5 3495,5 •	·	5484 5514 5664	6559,5 6574,5 6627 6679,5	8896,5 8922 8947,5 + 8961,5 +		11 356,5 11 375,5		
9A -	2959 2973 • 3008 •	3488,5 3495,5 <b>*</b>	4654,5 ◆	5589	6612 <b>+</b> 6649,5 <b>+</b> 6664,5 <b>+</b>	8939 8961,5 <b>◆</b>				
9B	2861 2973 3015	3460,5 3495,5 ◆	4654,5 ◆	5499 <b>•</b> 5544 5626,5	6529,5 6612 • 6634,5 6664,5 •	8913,5 8961,5 <b>+</b>	10 093 •	11 309 11 394,5		
9C	2973 •	3495,5 ◆				8961,5 +				
9D	2875 2903 2910 2917 2931 2938 2973 2994 3008	3418,5 3432,5 3446,5 3474,5 3481,5 ◆ 3495,5 ◆	4654,5 ◆ 4661,5 4675,5 4682,5 4696,5	5499 <b>*</b> 5529 5596,5 5619 5656,5	6537 6567 6589,5 6612 + 6642 6657 6664,5 + 6672	8888 8961,5 <b>◆</b>	10 021 10 057 10 093 •	11 280,5 11 290 11 328		•
9E	2889 2896 2952 2966 2973 •	3467,5 3495,5 ◆	4654,5 ◆	5551,5	6544,5 6612	8961,5 +	10 057 • 10 093 •		•	
10A	2931	3411,5	4668,5	5544	6567	8961,5 +		11 328 •	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
10B	2917 2973 •			5461,5 ◆	6597	8896,5 8961,5 ◆		11 375,5 11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •
10C	2952 <b>•</b> 2861 <b>•</b>	3474,5	4689,5	5499 5514	6582 6627	8961,5 +	10 057	11 328 <b>•</b> 11 356,5	13 294,5 ◆	17 936,5 • 17 956,5 •
10D	3008	3439,5 3488,5	4661,5	5536,5 5649 5664	6552 6664,5	8961,5 +	10 039*	11 309 11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •
10E	2882	3460,5 ◆	4682,5	5454 ◆	6612 6679,5	8879,5 8961,5 ◆		11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •
11B	2903 2938 •		4682,5	5634	6537 6619,5 6634,5	8956 8961,5 <b>◆</b>		11 280,5 11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •
11C	2994		4654,5	5589	6529,5	8961,5 +	10 012	11 328 <b>•</b> 11 347	13 294,5 •	17 936,5 • 17 956,5 •
11D	3015		4668,5	5506,5 5529 5544	6559,5 6574,5	8854 8961,5 ◆		11 328 •	13 294,5 +	17 936,5 • 17 956,5 •
11E		3418,5			6589,5 6672	8961,5 +	10 066	11 328 <b>•</b> 11 394,5	13 294,5 ♦	17 936,5 • 17 956,5 •

Band Mc/s	3	3,5	4,7	. 5,6	6,6	9	10	11,3	13,3	18
Area	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
11F	2854	3453,5	•	5476,5 <b>◆</b> 5491,5	6544,5 6604,5 ◆ 6642	8961,5 ◆	10 093	11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •
11G	2896 2924			5596,5 5656,5	6627 6649,5	8961,5 +	10 075	11 328 •	13 294,5 ◆	17 936,5 <b>+</b> 17 956,5 <b>+</b>
11H	2959	3495,5		5469 <b>•</b> 5484	6657	8961,5 +	10 030	11 328 •	13 294,5 +	17 936,5 <b>•</b> 17 956,5 <b>•</b>
12A		3453,5	-		6649,5	8961,5 +		11 328 •		•
12C	2875	3460,5 <b>+</b> 3411,5	4661,5 4675,5	5454 <b>•</b> 5536,5 5649 5664	6544,5 ◆ 6552 6582 6604,5	8922 8961,5 ◆		11 328 <b>+</b> 11 385	13 294,5 ♦	17 936,5 <b>+</b> 17 956,5 <b>+</b>
12D	2861		4689,5	5461,5 ◆ 5499 5514	6537 6597 6619,5 6634,5	8837 8961,5 •		11 328 <b>•</b> 11 366	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
12E	2882 3001			5521,5	6612	8961,5 +		11 328 •	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
12F		3467,5 3446,5		5476,5 ◆ 5589 5634	6529,5 6589,5 6627 66 <b>7</b> 2	8939 8961,5 <b>◆</b>		11 328 •	13 294,5 +	17 936,5 <b>+</b> 17 956,5 <b>+</b>
12G	2980		4682,5	5491,5 5544	6642 6657	8961,5 ◆	10 057	11 328 •	13 294,5 ♦	17 936,5 <b>•</b> 17 956,5 <b>•</b>
12H		3481,5		5529	6574,5	8930,5 8961,5 •		11 328 •	13 294,5 •	17 936,5 <b>•</b> 17 956,5 <b>•</b>
12J	2952 •	3425,5 ◆		5619		8961,5 •	10 021	11 328 •	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
13C	2917	3453,5		5596,5 5656,5	6604,5	8896,5 8961,5 ◆		11 328 •	13 294,5 ◆	17 936,5 <b>+</b> 17 956,5 <b>+</b>
13D	2994	3495,5		5469 •	6619,5	8961,5 +	10 066	11 328 •	13 294,5 ◆	17 936,5 <b>+</b> 17 956,5 <b>+</b>
13E	2924 3015	3439,5	4654,5	5454 <b>•</b> 5664	6627	8913,5 8961,5 •	10 039	11 328 <b>•</b> 11 356,5	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
13F	2861 2938 •	3446,5	4675,5 4689,5		6559,5	8837 8961,5 ◆		11 328 •	13 294,5 ◆	17 936,5 <b>+</b> 17 956,5 <b>+</b>
13G	2868 2952 3008 •	3425,5 ◆	4668,5	5491,5 5544	6552 6642	8862,5 8961,5 <b>+</b>		11 328 <b>•</b> 11 309	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
13H	2938 <b>+</b> 2980 <b>-</b> 3008 <b>+</b>	3481,5	4682,5	5551,5 5604 5619		8947,5 8961,5 <b>+</b>	10 075	11 328 <b>•</b> 11 394,5	13 294,5 +	17 936,5 <b>•</b> 17 956,5 <b>•</b>
131	2987	3411,5 3474,5		5649	6582	8961,5 •	10 030	11 328 •	13 294,5 ◆	17 936,5 <b>•</b> 17 956,5 <b>•</b>
13J	2854 2959	3488,5		5484 5536,5	6544,5 6627 6649,5	8956 <b>+</b> 8961,5 <b>+</b>	10 084	11 299,5 11 318,5 + 11 328 +	13 294,5 +	17 936,5 • 17 956,5 •
13K	2896 2945	3460,5	4661,5	5506,5 5596,5	6589,5 6604,5 6634,5	8854 8956 + 8961,5 +	10 093	11 318,5 <b>+</b> 11 328 <b>+</b> 11 375,5	13 294,5 +	17 936,5 4 17 956,5 4
13L	2882 2931 2973	3418,5		5461,5 <b>•</b> 5656,6 <b>•</b>	6529,5	8888 8922 8961,5 •	10 012	11 280,5 11 328 •	13 294,5 ◆	17 936,5 • 17 956,5 •

#### ARTICLE 2

# FREQUENCY ALLOTMENT PLAN (per numerical order of frequencies)

General Notes: (1) Class of stations: FA

Types of emission: A1, A2, A3, A4 and F1

Power: 4 kW (peak) for aeronautical stations unless otherwise indicated

200 W (peak) for aircraft station unless otherwise indicated

Hours: H 24 unless otherwise indicated.

- (2) A frequency alloted on "day-time basis" may be used on a secondary basis during the period one hour after sunrise to one hour before sunset when the identical channel is allotted on a primary basis to Major World Air Route Areas, Regional and Domestic Air Route Areas, or Sub-Regional and Domestic Air Route Areas which receive full protection during the twenty-four hours. The use of frequencies on a secondary basis is subject to their being no interference with the primary allotment.
- (3) A "shared channel" is a channel allotted to areas within interference range of each other and its use is subject to agreement between the administrations concerned.

Frequency	Authorised area of use	Remarks
ke/s 1	2 .	3
2854	RDARA: 1, 2B, 3B, 7D, 9, 11F, 13J.	1 to be used East of 11° West: 2B on day-time basis.
2861	RDARA: 1E, 3A, 6E, 9B, 10C, 12D, 13F.	10C and 12D night-time protection of 12 db.
2868	MWARA: FE2, NA. RDARA: 2B, 7, 13G.	2B on day-time basis.
2875	MWARA: SA RDARA: 3, 9D, 12C.	
2882	RDARA: 2, 6C, 7E, 10E, 12E, 13L.	
2889	MWARA: EU, NSAM1. RDARA: 6B, 9E.	
2896	RDARA: 1, 3C, 7E, 9E, 11G, 13K.	1 to be used East of 11° West.
2903	RDARA: 1B, 3B, 3C, 5B, 5C, 5D, 9D, 11B, 12D.	3B and 3C shared. 5B, 5C and 5D shared. 12D to be used East of 70° West.
2910	MWARA: EU, NSAM2. RDARA: 6B, 9D.	•
2917	RDARA: 1, 3C, 7E, 9D, 10B, 13C.	1 to be used East of 11° West.
2924	RDARA: 2, 4B, 6C, 11G, 13E.	
2931	MWARA: NA(Ext). RDARA: 6A, 6E, 9D, 10A, 13L.	6A and 6E shared.
2938	RDARA: 1, 2B, 3B, 7D, 9D, 11B, 12D, 13F, 13H.	1 to be used East of 11° West. 2B on day-time basis. 11B and 12D night-time protection of 12 db. 13F and 13H shared.

Frequency kc/s	Authorised area of use	Remarks
1	2	3
2945	MWARA: SP, NA. RDARA: 2C., 6A, 6E, 6F, 13K.	2C on day-time basis. 6A, 6E and 6F shared.
2952	RDARA: 1, 3B, 3C, 7E, 9E, 10C, 12J, 13G.	1 to be used East of 11° West. 3B and 3C shared. 10C and 12J night-time protection 12 db.
2959	RDARA: 1, 3B, 6A, 9A, 11H, 13J.	1 to be used East of 11° West. 6A to be used East of 80° East.
2966	MWARA: CWP, NSA2, NSAM2. RDARA: 9E.	
2973	RDARA: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10B, 12D, 13L.	1 to be used East of 11° West. 10B and 12D night-time protection of 12 db. Authorised for use in Regional and Domestic Air Route Areas 1, 2, 3, 4, 5, 6, 7, 8, 9 and the respective Sub-Regional and Domestic Air Route Areas as follows:
		(1) aboard aircraft for:
		(a) communications with approach and aerodrome control;
	•	(2) at aeronautical stations for aerodrome and approach control under the following conditions:
•		(a) for approach control with power limited to a value that will produce $20 \mu v/m$ at 100 km and in any case no more than 20 watts in the antenna circuit,
		(b) for aerodrome control with the power limited to a value that will produce $20 \mu v/m$ at $40 \text{ km}$ and in any case no more than $20 \text{ watts}$ in the antenna circuit,
		(c) the power of aeronautical stations which use this frequency under the conditions prescribed above may be increased through ITU and/or ICAO regional agreements to the extent necessary to meet special operational difficulties such as those introduced by high atmospheric noise level;
• .		(3) for any other aeronautical mobile communication requirement on the condition that no harmful interference be caused thereby to stations employing it for aerodrome and approach control purposes:
	•	(4) the specific application of this frequency for the above purposes may be decided at ITU and/or ICAO regional aeronautical conferences;
2980	Pacific and EU Meteorological broadcasts. RDARA: 2B, 12G, 13H.	Authorized for ground to air meteorological broadcasts serving the Major World Air Routes traversing the Pacific Ocean Areas and for ground to air meteorological broadcasts in the European Major World Air Route Area. 2B on day-time basis.
2987	MWARA: NP, FE1, NA. RDARA: 2C, 7B, 13I.	2C on day-time basis.
2994	RDARA: 2, 3, 7D, 9D, 11C, 13D.	2 and 3 shared.
3001	Atlantic and ME Meteorological broadcasts. RDARA: 12E.	Authorized for ground to air meteorological broadcasts serving the Major World Air Routes traversing the Atlantic Ocean Areas. Authorized for ground to air meteorological broadcasts in that part of
-		the Middle East Major World Air Route Area East of 25° East Longitude subject to the condition that its night-time use is restricted to that part of the Middle East Major World Air Route Area East of 40° East Longitude.
3008	RDARA: 2, 3, 7, 9A, 9D, 10D, 13G, 13H.	2 and 3 shared. 9A and D shared. 13G and H shared.
3015	RDARA: 1D, 1E, 3, 9B, 11D, 13E.	1E to be used East of 11° West. 1D and 1E shared. 3 to be used East of 80° East.

Frequency kc/s	Authorised area of use	Remarks
1	2	3
3023.5	World-wide "R" and "OR".	Authorized for world-wide use as follows: (1) aboard aircraft for:
		<ul> <li>(a) communications with approach and aerodrome control,</li> <li>(b) communication with an aeronautical station when other frequencies of the station are either unavailable or unknown;</li> </ul>
		(2) at aeronautical stations for aerodrome and approach control under the following conditions:
		<ul> <li>(a) for approach control with power limited to a value that will produce</li> <li>20 μv/m at 100 km and in any case no more than 20 watts in the antenna circuit,</li> </ul>
		(b) for aerodrome control with the power limited to a value that will produce 20 μv/m at 40 km and in any case no more than 20 watts in the antenna circuit,
		(c) special attention must be given in each case to the type of antenna used in order to avoid harmful interference.
-		(d) the power of aeronautical stations which use this frequency and which operate under the conditions prescribed above may be increased through ITU and/or ICAO regional agreements to the extent neces- sary to meet certain operational requirements;
		(3) for intercommunication between mobile stations engaged in coordinated search and rescue operations at the scene of a disaster;
		(4) the specific application of this frequency for the above purposes may be decided at regional aeronautical conferences;
		(5) This channel may be used for A1 or A3 emission in accordance with special arrangements. It shall not be subdivided.
3404.5	MWARA: NSAM2, ME. RDARA: 2A, 3B, 9.	2A on day-time basis.
<b>3411.</b> 5	MWARA: NSA1. RDARA: 6, 10A, 12C, 13I.	·
3418.5	RDARA: 1B, 1C, 1D, 1E, 6B, 9D, 11E, 13L.	1B, C, D and E shared. 1B and E to be used East of 11° West.
3425.5	RDARA: 1, 3C, 6D, 7E, 12J, 13G.	1 to be used East of 11° West. 3C on day-time basis. 12J, 13G: night-time protection of 12 db.
3432.5	MWARA: CEP, SA(Ext). RDARA: 3, 6A, 6E, 7E, 9D.	3 on day-time basis. 6A and 6E shared.
3439.5	RDARA: 2, 6C, 7D, 10D, 13E.	
3446.5	MWARA: CEP, ME(Ext). RDARA: 3, 9D, 12F, 13F.	3 on day-time basis.
3453.5	RDARA: 1, 3C, 6D, 7E, 11F, 12A, 13C.	1 to be used East of 11° West. 3C on day-time basis.
3460.5	RDARA: 2, 3, 7D, 9B, 10E, 12C, 13K.	2 and 3 shared. 10E, 12C: night-time protection of 12 db.
3467.5	MWARA: CEP, EU. RDARA: 6B, 9E, 12F.	
3474.5	RDARA: 1B, 6A, 7B, 9D, 10C, 13I.	1B to be used East of 11° West.
3481.5	MWARA: CEP, EU. RDARA: 3A, 6D, 9D, 12H, 13H.	3A on day-time basis. 9D to be used East of 160° East.
3488.5	RDARA: 2, 3, 9A, 10D, 13J.	2 and 3 shared.

Frequency kc/s	Authorised area of use	Remarks
1	2	, <u>3</u>
3495.5	RDARA: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11H, 13D.	Authorized for use in Regional and Domestic Air Route Areas 1, 2, 3, 4, 5, 6, 7, 8, 9 and the respective Sub-Regional and Domestic Air Route Areas as follows:
	••	(1) aboard aircraft for:
		(a) communications with approach and aerodrome control; (2) at aeronautical stations for aerodrome and approach control under
		the following conditions:
		(a) for approach control with power limited to a value that will produce 20 μv/m at 100 km and in any case no more than 20 watts in the antenna circuit,
	·	(b) for aerodrome control with the power limited to a value that will produce 20 μv/m at 40 km and in any case no more than 20 watts in the antenna circuit,
		(c) the power of aeronautical stations which use this frequency under
		the conditions prescribed above may be increased through ITU and/or ICAO regional agreements to the extent necessary to meet special operational difficulties such as those introduced by high atmospheric noise level;
		(3) for any other aeronautical mobile communication requirement on the condition that no harmful interference be caused thereby to stations employing it for aerodrome and approach control purposes;
,		(4) the specific application of this frequency for the above purposes may be decided at ITU and/or ICAO regional aeronautical conferences.
4654.5	MWARA: EU. RDARA: 2B, 9A, 9B, 9D, 9E, 11C, 13E.	2B on day-time basis. 9A, B, D and E shared.
4661.5	RDARA: 2, 3, 9D, 10D, 12C, 13K.	2 and 3 shared.
4668.5	RDARA: 1, 3C, 6C, 6D, 10A, 11D, 13G.	1 to be used East of 11° West. 3C on day-time basis. 6C and D shared.
4675.5	RDARA: 1, 3A, 9D, 12C, 13F.	1 to be used East of 11° West. 3A on day-time basis.
4682.5	RDARA: 1D, 3, 5A, 7E, 9D, 10E, 11B, 12G, 13H.	1D on day-time basis. 5A for use in Egyptian territory with radiated power not to exceed 100 watts
4689.5	MWARA: EU. RDARA: 3B, 6D, 10C, 12D, 13F.	3B on day-time basis.
4696.5	MWARA: NSAM1. RDARA: 2,7D,9D.	
5454	RDARA: 10E, 12C, 13E.	ITU Region 2 exclusive "R" channel.
5461.5	RDARA: 10B, 12D, 13L.	ITU Region 2 exclusive "R" channel.
5469	RDARA: 11H, 13D.	ITU Region 2 exclusive "R" channel.
5476.5	RDARA: 11F, 12F.	ITU Region 2 exclusive "R" channel.
5484	RDARA: 1E, 2B, 3B, 4B, 7D, 9, 11H, 13J.	1E to be used East of 11° West.
5491.5	RDARA: 2C, 6, 7E, 11F, 12G, 13G.	
5499	RDARA: 1, 7, 8A, 9B, 9D, 10C, 12D.	1 to be used East of 11° West. 7, 8A, 9B and D shared.

Frequency	Authorised area of use	Remarks
kc/s 1	2	3
5506.5	MWARA: CWP, NSA2. RDARA: 11D, 13K.	
5514	RDARA: 2A, 2C, 6A, 6B, 6E, 9, 10C, 12D.	2A and C shared. 6A, B and E shared.
5521.5	MWARA: NP, NSA1. RDARA: 12E.	
5529	RDARA: 1B, 3B, 5A, 6D, 9D, 11D, 12H.	
5536.5	RDARA: 2, 5D, 6C, 10D, 12C, 13J.	
5544	RDARA: 1, 6B, 7, 9B, 10A, 11D, 12G, 13G.	1 to be used East of 11° West.
5551.5	MWARA: CEP, EU. RDARA: 9E, 13H.	
5559	Atlantic and ME Meteorological broadcasts.	Authorized for ground to air meteorological broadcasts serving the Major World Air Routes traversing the Atlantic Ocean Areas.  Authorized on a day-time only basis for ground to air meteorological broadcasts in that part of the Middle East Major World Air Route Area East of 25° East Longitude.
5566.5	MWARA: NSAM2. RDARA: 3, 6A, 6E. €	6A and 6E shared.
5574	Pacific and EU Meteorological broadcasts. RDARA: 7.	Authorized for ground to air meteorological broadcasts serving the Majo World Air Routes traversing the Pacific Ocean Areas and for ground to air meteorological broadcasts in the European Major World Air Rout Area.
5581.5	MWARA: NSAM2. RDARA: 3, 6A, 6E.	6A and E shared.
5589	RDARA: 1, 6B, 7, 9A, 11C, 12F.	
5596.5	RDARA: 2, 3, 4B, 6D, 9D, 11G, 13C, 13K.	2 and 3 shared.
5604	MWARA: CEP, ME. RDARA: 13H.	
5611.5	MWARA: NA(Ext), FE2.	
5619	RDARA: 1D, 3B, 6D, 9D, 12J, 13H.	
5626.5	MWARA: NA. RDARA: 9B.	
5634	RDARA: 2C, 6, 7B, 11B, 12F.	
5641.5	MWARA: NA, SP.	
5649	RDARA: 1, 3, 6E, 7D, 10D, 12C, 13I.	1 to be used East of 11° West.
5656.5	RDARA: 1E, 5B, 5C, 5D, 6C, 9D, 11G, 13C, 13L.	1E to be used East of 11° West. 5B, C and D shared. 13L reduced power nearest boundary 13C.
5664	RDARA: 2, 3, 4A, 7D, 9, 10D, 12C, 13E.	2 and 3 shared.

Frequency	Authorised area of use	Remarks
kc/s 1	2	3
5671.5	MWARA: NA, FE1.	
5680	World-wide "R and OR".	Authorized for world-wide use as follows:
	•	(1) aboard aircraft for:
		<ul> <li>(a) communications with approach and aerodrome control,</li> <li>(b) communication with an aeronautical station when other frequencies of the station are either unavailable or unknown;</li> </ul>
		(2) at aeronautical stations for aerodrome and approach control under the following conditions:
		(a) for approach control with power limited to a value that will produce 20 \(\au\nu/\mathrm{m}\) at 100 km and in any case no more than 20 watts in the antenna circuit,
		(b) for aerodrome control with the power limited to a value that will produce 20 μv/m at 40 km and in any case no more than 20 watts in the antenna circuit.
		(c) special attention must be given in each case to the type of antenna used in order to avoid harmful interference,
	•	(d) the power of aeronautical stations which use this frequency and which operate under the conditions prescribed above may be increased through ITU and/or ICAO regional agreements to the extent necessary to meet certain operational requirements;
•		(3) for intercommunication between mobile stations engaged in coordinated search and rescue operations at the scene of a disaster;
-		(4) the specific application of this frequency for the above purposes may be decided at regional aeronautical conferences;
		(5) this channel may be used for A1 or A3 emission, in accordance with special arrangements. It shall not be subdivided.
6529.5	RDARA: 1B, 1C, 1D, 3B, 6A, 6E, 7B, 9B, 11C, 12F, 13L.	1B to be used East of 11° West. 1B, C and D shared. 6A and E shared.
6537	RDARA: 4, 5, 6F, 9D, 11B, 12D.	4 and 5 shared. 6F to be used East of 95° East.
6544.5	RDARA: 1D, 3A, 6A, 9E, 11F, 12C, 13J.	12C to be used South of 20° North.
6552	MWARA: EU. RDARA: 3,6C,7,10D,12C,13G.	
6559.5	RDARA: 2A, 4B, 6A, 6B, 6E, 9, 11D, 13F.	6A, B and E shared.
6567	MWARA: NSAM2. RDARA: 1, 3A, 6A, 7D, 7E, 9D, 10A.	1 to be used East of 11° West. 7D and E shared.
6574.5	RDARA: 2A, 4A, 6B, 9, 11D, 12H.	
6582	MWARA: EU. RDARA: 6, 7E, 10C, 12C, 13I.	~
6589.5	RDARA: 2, 3, 4B, 6D, 9D, 11E, 12F, 13K.	2 and 3 shared.
6597	MWARA: SA(Ext). RDARA: 2B, 6F, 7B, 7C, 7D, 7E, 10B, 12D.	7B, C, D and E shared.
6604.5	RDARA: 1E, 3C, 5B, 6C, 11F, 12C, 13C, 13K.	1E to be used East of 11° West. 11F to be used North of 40° North.

Frequency kc/s	Authorised area of use	Remarks
1	2	3
6612	MWARA: SA, CEP. RDARA: 2A, 2C, 3B, 6E, 9A, 9B, 9D, 9E, 10E, 12E.	2A and C shared. 9A, B, D and E shared.
6619.5	RDARA: 2, 6C, 6D, 11B, 12D, 13D.	6C and D shared.
6627	MWARA: ME (Ext). RDARA: 3C, 7B, 9, 10C, 11G, 12F, 13E, 13J.	
6634.5	RDARA: 1, 3B, 6A, 9B, 11B, 12D, 13K.	1 to be used Each of 11° West.
6642	RDARA: 2, 3, 4B, 6D, 9D, 11F, 12G, 13G.	2 and 3 shared.
6649.5	RDARA: 1, 3B; 6A, 7, 8A, 9A, 9E, 11G, 12A, 13J.	1 to be used East of 11° West. 7, 8A, 9A and 9E shared.
6657	RDARA: 2, 3, 4B, 6D, 9D, 11H, 12G.	2 and 3 shared.
6664.5	MWARA: NSAM1. RDARA: 1, 6B, 7B, 9A, 9B, 9D, 9E, 10D.	1 to be used East of 11° West. 9A, B, D and E shared.
6672	RDARA: 2, 3, 4B, 6C, 6D, 9D, 11E, 12F.	2 and 3 shared. 6C and D shared.
6679.5	MWARA: SA, CEP. RDARA: 3B, 6A, 6E, 7B, 7E, 9, 10E.	6A and E shared. 7B and E shared.
8820	MWARA: NSAM1, NSA1. RDARA: 6C, 6D.	6C and D shared.
8828.5	Atlantic and ME Meteorological broadcasts.	Authorized for ground to air meteorological broadcasts serving the Major World Air Routes traversing the Atlantic Ocean Areas.  Authorized on a day-time only basis for ground to air meteorological broadcasts in that part of the Middle East Major World Air Route Area East of 25° East Longitude. The use of this frequency in this area East of 65° East Longitude is on a primary basis and West of 65° East Longitude on a secondary basis.
8837	RDARA: 1, 6F, 12D, 13F.	1 to be used East of 11° West.
8845.5	MWARA: NSAM2, SP, ME. RDARA: 3B.	
8854	RDARA: 1, 6F, 11D, 13K.	1 to be used East of 11° West.
8862.5	MWARA: NA, CWP. RDARA: 7, 13G.	
8871	MWARA: FE2, EU, NSAM2. RDARA: 7D.	
8879.5	MWARA: FE1, CEP, SA. RDARA: 7E, 10E.	
8888	MWARA: NA. RDARA: 6A, 6F, 9D, 13L.	6A and F shared.
8896.5	RDARA: 4, 5, 9, 10B, 13C.	4 and 5 shared.
8905	Pacific and EU Meteorological broadcasts.	Authorized for ground to air meteorological broadcasts serving the Major World Air Routes traversing the Pacific Ocean Areas and for ground to air meteorological broadcasts in the European Major World Air Route Area.

Frequency kc/s	Authorised area of use	Remarks
1	2	3
8913.5	MWARA: NA. RDARA: 3C, 7B, 9B, 13E.	
8922	RDARA: 2, 3, 7D, 9, 12C, 13L.	2 and 3 shared.
8930.5	MWARA: FE1, EU, CEP. RDARA: 7E, 12H.	•
8939	MWARA: SA, NP. RDARA: 6A, 9A, 12F.	•
8947.5	MWARA: NA(Ext). RDARA: 3B, 3C, 7, 8A, 9, 13H.	3B and C shared. 7, 8A and 9 shared.
8956	MWARA: NSA2. RDARA: 6B, 11B, 13J, 13K.	6B to be used East of 90° East. 13J and K shared. 13K to be used on a non interference basis.
8961.5	World-Wide for RDARA's and Sub RDARA's (except 12B, 12I, 13A, 13B and 13M).	High stability A1 emission only.
10 012	RDARA: 2, 3, 11C, 13L.	2 and 3 Shared.
10 021	MWARA: ME(Ext). RDARA: 9D, 12J.	
10 030	RDARA: 2, 3, 11H, 13I.	2 and 3 shared.
10 039	RDARA: 2, 3, 7E, 10D, 13E.	2 and 3 shared.
10 048	MWARA: CEP, SA(Ext). RDARA: 6A, 6D, 6E, 6F.	6A, D, E and F shared.
10 057	RDARA: 2, 3A, 3C, 9D, 9E, 10C, 12G.	2, 3A and C shared. 9D and E shared.
10 066	RDARA: 1, 6F, 11E, 13D.	1 to be used East of 11° West.
10 075	RDARA: 2, 3, 7E, 11G, 13H.	2 and 3 shared.
10 084	MWARA: CEP. RDARA: 1, 6C, 13J.	1 to be used East of 11° West. 6C to be used West of 140° East.
10 093	RDARA: 2, 3A, 3C, 9B, 9D, 9E, 11F, 13K.	2, 3A and C shared. 9B, D and E shared.
11 280.5	RDARA: 3C, 9D, 11B, 13L.	,
11 290	MWARA: NSAM2. RDARA: 2,3A,9D.	2 and 3A shared.
11 299.5	MWARA: CEP, EU. RDARA: 13J.	
11 309	RDARA: 2, 9B, 10D, 13G.	:
11 318.5	MWARA: CEP. RDARA: 7, 8A, 13J, 13K.	7 and 8A shared. 7 to be used East of 20° East. 13J and K shared.
11 328	RDARA: 3, 7E, 9D, 10, 11, 12, 13 (except 12 B and 12 I) 13 (except 13 A, 13 B and 13 M)	10, 11, 12 and 13 shared. To be used in 10A, B, C and D on a basis non-interference to area 3.
11 337.5	MWARA: NSAM2. RDARA: 6.	

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Frequency kc/s 1	Authorised area of use	Remarks
11 347	RDARA: 2, 3, 11C.	2 and 3 shared.
11 356.5	RDARA: 1, 9, 10C, 13E.	1 to be used East of 11° West.
11 366	RDARA: 2, 3, 12D.	2 and 3 shared.
11 375.5	RDARA: 2, 9, 10B, 13K.	
11 385	RDARA: 4, 5, 12C.	4 and 5 shared.
11 394.5	RDARA: 2, 3A, 9B, 11E, 13H.	2 and 3A shared.
13 264.5	MWARA: NA. RDARA: 3.	
13 274.5	MWARA: SA(Ext), NP.	
13 284.5	MWARA: NA, FE2.	•
13 294.5	RDARA: 6F, 10, 11, 12C, 12D, 12E, 12F, 12G, 12H, 12J, 13. (except 13 A, 13 B and 13M).	10, 11, 12C, D, E, F, G, H, J and 13 shared.
13 304.5	MWARA: NSA1, CEP. RDARA: 6C.	6C to be used West of 140° East.
13 314.5	MWARA: NSAM1. RDARA: 1.	1 to be used East of 11° West.
13 324.5	MWARA: NA, FE1.	
13 334.5	MWARA: ME(Ext), NSA2, CEP	
13 344.5	MWARA: NSAM2, SP. RDARA: 2.	
13 354.5	MWARA: NA(Ext), CWP.	
17 906.5	MWARA: CWP, NP, EU.	,
17 916.5	MWARA: NSAM1, NSAM2. RDARA: 3A, 3C.	3A and C shared.
17 926.5	MWARA: CEP, ME(Ext), NSA2.	
17 936.5	RDARA: 4, 5, 7, 10, 11, 12C, 12D, 12E, 12F, 12G, 12H, 12J, 13 (except 13A, 13B and 13M).	4, 5 and 7 shared. 10, 11, 12C, D, E, F, G, H, J and 13 shared.
17 946.5	MWARA: SA (Ext), NSA1, SP.	
17 956.5	RDARA: 2, 3, 10,11, 12C, 12D, 12E, 12F, 12G, 12H, 12J, 13 (except 13A, 13B and 13M).	2 and 3 shared. 10, 11, 12C, D, E, F, G, H, J and 13 shared.
17 966.5	MWARA: NA(Ext), FE1, FE2.	

International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### MINUTES OF THE 28th PLENARY SESSION

held on Thursday and Friday
29th and 30th September, 1949

The Meeting was opened at 14.30 hrs. by the Chairman, Mr. Arthur L. Lebel

The following countries and organisations were represented:

People's Republic of Albania: Argentine Republic; Australia (Commonwealth of ); Belgium; Bielorussian S.S.R.; Brazil; Bulgaria; Canada; Chile; Colombia (Republic of); Portuguese Colonies; Colonies, Protectorates, Overseas Territories and Territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland; Overseas Territories of the French Republic and Territories administered as such; Belgian Congo and Territories of Ruanda Urundi; Cuba; Denmark; Dominican Republic; Egypt; United States of America; France; People's Republic of Hungary; India; Indonesia; Ireland; Iceland; Italy: Luxembourg: Mexico: Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curação and Surinam; Philippines (Republic of the); Poland (Republic of); Portugal; French Protectorates of Morocco and Tunisia; People's Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; People's Republic of Roumania; United Kingdom of Great Britain and Northern Ireland; Sweden; Switzerland (Confederation); Czechoslovakia; Territories of the United States of America; Union of South Africa and the mandated territory of South-West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (United States of); I.F.R.B.; I.C.A.O.; I.A.T.A.

The Chairman informed the Plenary Assembly that the Vice-Chairman, the Delegate of Brazil, had unfortunately been obliged to leave the Conference, and expressed his appreciation of Colonel Costa's invaluable objective advice.

The Chairman said that owing to difficulties encountered by Working Group C in drawing up its reports, it would be necessary to postpone consideration of item 2 of the Agenda to a later Plenary Meeting.

Mr. Bolkhovitine (USSR) proposed that, as the Preamble of the Final Document (Aer/2 Doc. 102) contained references to the draft plan being prepared by Working Group C, item 4 also should be deleted from the Agenda, Mr. Jouk (Bielorussia) and Mr. Vorobiev (Ukraine) seconded this proposal, which was put to the vote and rejected by 24 votes to 10, with 4 abstentions.

Item 4 of the Agenda was therefore retained.

- 2. Item 1 of the Agenda: APPROVAL OF THE MINUTES OF THE 26TH AND 27TH PLENARY SESSIONS (Aer/2 Docs. 110 and 111).
- 2.1 The following amendments were made in Aer/2 Doc. 110:

Point 3.16.1, last line, read: "to develop a plan satisfactory to all",

This amendment was made at the request of Mr. Khan (Pakistan).

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Point 3.16.5, third line: replace the words "were insulting" by the refd"/VES

1.2

Point 3.18.2, replace the second sentence by the following: "In the case of the North Atlantic, in addition to the families at present known as "A", "B" and "C", there was already in use a supplementary A3 emission family and an A1 emission family for meteorological broadcasts".

These amendments were made at the request of Mr. Brant (Canada).

Point 3.18.6, read: ".... the figures quoted for the respective MWARAs could not be compared on a mileage basis without correction. He also understood that the African-Indian Ocean meeting of ICAO had recognized that the allotments to NSAl and NSA2 in the 3.0 and 3.5 Mc/s bands were lower than those indicated by the loading calculations. However, that meeting had agreed that those reduced allotments in the lower frequency orders could be accepted. Five MWARS .....".

This amendment was made at the request of Mr. Layzell (IATA).

Point 3.20.3, replace the present text by the following:

Mr. Barajas (Mexico) said that the sovereign right of a country to organise its telecommunications was fully established in the preamble to the Atlantic City Telecommunication Convention. This right was clearly reflected in the Radio Regulations which authorised administrations to use any frequency whatsoever on the sole condition that harmful interference was not caused to existing services (Chapter III, Art. 3, para, 3), and this even if the opinion of the IFRB was contrary (Radio Regulations, Chapter IV, Art. 11, Nos. 338, 339, and 345). He considered that the mere specification, in the Plan, of certain assignments for daytime service would not only be redundant but would also cast doubt upon the validity of the general principle of sovereignty.

Point 3.20.6, replace the present text by the following:

Mr. Barajas (Mexico) referred to Mr. Jouk's statement (No. 3.20.4) and explained that he had not meant that daytime services should be operated on a secondary basis since such operation was exceptional, and was restricted to fixed and land services, and, in very special cases, to Aeronautical Mobile Stations (Radio Regulations, Chapter III, Art. 7, Sections 2 and 5, Nos. 236 a and 239). On the other hand, the right of Sovereignty and the procedure to which he had referred in his previous statement (No. 3.20.3) related to the ordinary aeronautical service.

Point 3.23.8, replace the present text by the following:

Mr. Barajas (Mexico) disagreed with the interpretation, given by the Chairman in his first statement (3.23.2), of the Atlantic City Radio Regulations, and particularly in regard to the emphasis which he seemed to place on paragraph c) of article 6 of the Atlantic City Resolution relating to the preparation of the new International Frequency List. The fact that this paragraph did not specify assignment by country did not imply that the opposite was to be done: it simply left the door open for one or the other procedure according to the peculiarities and necessities of each conference. Confirmation of this fact was to be found in the fact that the recent Mexico City High Frequency Broadcasting Conference, taking as a basis para.b), which was similar to para.c), had elaborated a Draft Plan on the basis of assignment by country. Moreover, the aeronautical Conference, during its First Session, had drafted the "OR" Plan on the basis of assignment by country.

#### → 3 -(Aer/2-148-E)

As regards the Soviet proposal which was under discussion, he had favoured this procedure ever since the First Session of the previous year. However, since then, Mexico had become a single Sub-Area, 12C, and with this arrangement, the same results had been obtained. It was too late to undertake work such as that suggested in the aforesaid resolution, and he would therefore vote against it.

Point 3,23,11, replace the present text by the following:

Mr. Barajas (Mexico) referred to the precarious situation which, according to certain delegates, would arise for them if, on returning to their countries, they stated that they had obtained no frequency assignments for their administrations, but assignments only to areas, which sometimes comprised several countries. This he thought depended on the intentions brought to a Conference. For Mexico, for example, it would be more satisfactory to have less frequencies assigned than at present, or even none, and to have the assurance that its aircraft would fly under better conditions, than to have a large number of frequencies on paper and few practical communication facilities.

These amendments were made at the request of Mr. Barajas (Mexico).

- Point 3,23,9, third sentence, read: "... Report of the First Session containing the Conference decision to allocate frequencies to countries."
- Point 3.23.24, page 24, 2nd paragraph of Mr. Harizanov's statement:insert the word "international" before the word "collaboration".

These amendments were made at the request of Mr. Harizanov (Bulgaria).

## The following amendments apply to the French text only;

On page 2, at the end of point 1.1, insert the following paragraph: "1.2.

Subject to the amendments contained in the corrigendum, Aer/2 Document
No. 60 was approved."

Point 3,23,5,5th line: replace the word "pays" by the word "principe";

Point 3.23.24, page 25, 2nd paragraph of Mr. Kito's statement, 11th line: delete the word "contre";

page 26, 2nd paragraph of Mr. Harizanov's statement, read: "... la délégation bulgare...".

Thus amended, Aer/2 Document 110 was approved.

#### Aer/2 Document No. 111

- 2.2.1 The following amendment to the French text was made at the request of the Secretary:
  - Point 3.18, second sentence, read: "Vous ignorez souvent ....."
- 2.2.2 Mr. Bolkhovitine (USSR) made the following statement:
  - 1. The minutes of the 27th Plenary Meeting of the Conference (Aer/2 Doc.111) have been drawn up in a tendentious manner and in points 3.4 and 3.12 do not record the actual statements made by the Delegate of the Argentine, which gave rise to answering statements by the Soviet and other Delegations.
  - 2. The statement of the Delegate of the Argentine was tactless and provocative, and was directed against the Delegation of the USSR. The Chairman of the Conference ignored this fact and therefore the USSR and other Delegations were obliged to submit statements in reply.

2.2

- The USSR Delegation insists that the minutes of the Conference bedrawn up in an objective manner and that they accurately reflect the substance of statements of all Delegates as well as the proper nature of the discussons which take place".
- 2.2.3 Mr. Harizanov (Bulgaria) made the following statement:

"The Bulgarian Delegation considers that the statement made by the Delegation of the USSR, relating to points 3.4 and 3.12 of the minutes of the 27th Plenary Session, are fully justified, as these paragraphs are not a faithful record of the tendentious and misplaced statements of the Delegate of the Argentine. The Bulgarian Delegation is in complete agreement with, and strongly supports, the Soviet statement."

2.2.4 Mr. Kito (Albania) made the following statement:

"At the 27th Plenary Session, the Delegation of the People's Republic of Albania made a statement, of which the latter part constituted a reply to statements made by the Delegate of the Argentine. I also would point out that in Aer/2 Doc. 111 the passages relating to the statements of the Argentine Delegate are not a true record. At that time, the Argentine Delegate made tendentious statements which called forth replies from the Soviet and other Delegations, including the Delegation of Albania. Whereas the statements of the latter Delegation appear in the minutes, the import of those made by the Argentine Delegate has been altered. This is incorrect. Every Delegation taking the floor at an international conference must be responsible for its statements. For this reason, the Albanian Delegation supports the statement made by the Soviet Delegate."

- 2.2.5 Mr. Balazs (Hungary) fully supported the statement of the Delegate of the USSR. He pointed out that his statement in point 3.13 of Aer/2 Doc.III was made also on behalf of the Republic of Poland.
- 2.2.6 Mr. Hansen (Argentine) said that out of respect for the Assembly he did not wish to reopen this question. He merely wished to repeat that he had complete confidence in the Chairman and in the Secretariat, Ho fully agreed with the record of the 27th Plenary Session as it appeared in Aer/2 Doc. 111.
- 2.2.7

  Mr. Quijano (Colombia) proposed that, to make the reading of verbatim statements more convenient, the statements of the Delegates of the USSR, Bulgaria and Albania (Nos. 2.2.2, 2.2.3, 2.2.4) appear as an annex to the minutes of the 27th Plenary Session. This proposal, which was seconded by Mr. Anderson (Australia), was put to a vote, the results of which were 10 votes in favour, 5 against and 23 abstentions. Mr. Quijano then withdrew the proposal.

Thus amended, Aer/2 Doc. No. 111 was approved.

- 3. Item 3 of the Agenda : (RECOMMENDATION OF THE DRAFTING COMMITTEE RELATING
  TO THE "MINIMUM AND MAXIMUM RANGE CHARTS"
  (Aer/2 Doc. 88).
  - Mr. Mouchez (France), speaking as the Chairman of the Drafting Committee, said that the document "Minimum and Maximum Range Charts" had already been printed and distributed among the Administrations concerned. In the interests of economy, the Drafting Committee had recommended in Aer/2 Doc. 88 that the charts be omitted from the Final Report of the Conference.

- In reply to Mr. Greven (ICAO), Mr. White (USA) said that since 3.2 references to the charts were contained in the Interim Report of the First Session Administrations should experience no difficulty in obtaining copies.
- The recommendation contained in Aer/2 Doc. 88 was adopted unanimously. 3.3
- Item 4 of the Agenda: PREAMBLE OF THE FINAL DOCUMENT (Aer/2 Doc.102)
  - 4.1 Mr. Jouk (Bielorussia) considered that the Drafting Committee had exceeded its powers in having Acr/2 Doc. 102 printed before it had been considered by the Plenary Assembly. The customary procedure was for texts to be submitted in the first place for approval in Plenary Session.
  - The Chairman said that he knew of no rule thus limiting the Brafting Committee. It was quite usual for documents to be presented in printed form for initial reading, and the Drafting Committee had adopted this course merely to save time.
  - Mr. Harizanov (Bulgaria) said that he supported the views of the Delegate of Bielorussia regarding the submission of Aer/2 Document 102 in printed form. Such procedure was neither proper nor economical.

Further, since in his view the Preamble should not be considered prior to examination of the final draft plan, he would not participate in the discussion of this document.

4.2 The following minor drafting amendments to Document 102 were approved:

para.l, last line, read: "with the exclusive Aeronautical Mobile

Service bands,";

: "In Resolution No. 9 adopted during its para.2, read

Second Session, .. "

para.8, last line, read: "30 June 1949, at the latest.";

para.9, third line : delete the words "the Secretary of";

last line, read: "Aeronautical Mobile R Service.";

para.13, second line, read: "OR aeronautical mobile services...".

It was agreed that other drafting amendments, suggested by Mr. Quijano (Colombia) and Mr. Petit (IFRB), be referred to the Drafting Committee.

4.3 Mr. Sundaram (India) referred to para.ll of the Draft Preamble. This gave the impression that Aer/2 Doc. No. 5 alone had served as the basis for the work of the Conference, whereas all the material indicated in para.9 had been taken into account, in accordance with the terms of reference of the working groups decided at the 23rd Plenary Session (AGR/2 Doc. 22, No. 5.10). He proposed therefore that para. 12 be deleted, and that para.11 be amended as follows:

"11. The Conference adopted as the basis for its work the material mentioned in paragraph 9 above, and decided to prepare plans covering the needs of the regional and domestic services of the two hemispheres in the light of the work done during the First Session and considering all the material submitted during the recess."

# -6 - (Aer/2-148-E)

At the suggestion of Mr. Tabio (Cuba), he agreed that the reference in para, 11 to the ICAO regional meetings and to the ITU Region II Conference should remain,

With regard to the second part of para, ll it was unusual to specify in a preamble the manner in which certain material had been dealt with, and therefore this sub-paragraph should be omitted.

- 4.3.1 Mr. Khan (Pakistan) seconded the proposal of the Delegate of India.
- 4.4 Mr. White (U.S.A.) expressed sympathy with Mr. Sundaram's views, but considered it unwise for the Plenary Assembly to attempt to draft texts. He proposed that paras. 1 to 10 and para. 13 be adopted by the Assembly, and that paras. 11 and 12 be referred to the Drafting Committee for reconsideration. This proposal was seconded by the Delegates of Cuba, Canada, Indonesia, Netherlands, Morocco and Tunisia, Italy, New Zealand and the United Kingdom, and accepted by the Delegate of India.
- Mr. Jouk (Bielorussia) proposed that Mr. White's motion be amended by the insertion after para. 4 of an additional paragraph summarizing the Resolution appearing on page 2 of the Provisional Report of the First Session (Vol.1). This proposal was seconded by the Delegates of Roumania, Ukraine, Albania and Hungary.
- 4.5.1 Mr. White (U.S.A.) said that he could not accept Mr. Jouk's amendment.
  - Mr. Quijano (Colombia) said that he was opposed to any amendments tending to lengthen the Preamble,
- Mr. Kito (Albania) supported Mr. Jouk's amendment, Para, 4 mentioned the general terms of reference of the Conference according to the Atlantic City Resolution, and it would be logical to indicate how these had been interpreted by the Conference itself. One of its agreed tasks, for example, was the allocation of frequencies to countries, of which no mention appeared in paragraph 12. Mr. Bodeaga (Hungary) supported the views of Mr. Kito. Any amendment which would clarify the text of the Preamble should be adopted.
- 4,5.3 Mr. Hansen (Argentine) said that he was opposed to amendments of this kind, which should have been submitted before the document reached the Plenary Assembly.
- 4,5.4 The amendment proposed by the Delegate of Bielorussia was put to the vote, and was rejected by 26 votes to 10, with 6 abstentions.
- 4.6 Mr. Jouk (Bielorussia) said that paragraph 5 of Document 102, including the references to paragraphs 256 and 257 of the Atlantic City Radio Regulations, were unnecessary and should be deleted. It would suffice if paragraph 4 were amended to read "... exclusive aeronautical mobile R and OR frequency bands ....".
- 4.6.1 Mr. White (U.S.A.) said that in calculating requirements such delegates as had collaborated in the work had, in fact, strictly adhered to the provisions of paragraphs 256 and 257. All requirements had been closely surveyed to ensure that they were properly R, and not OR, requirements. It was important, therefore, that paragraph 5 be retained. Mr. Selis (Netherlands) supported the views of the Delegate of the U.S.A.

- 4.6.2 The proposal of the Delegate of Bielorussian for the deletion of paragraph 5 of Document 102 was put to the vote, and was rejected by 28 votes to 10, with 1 abstention.
- 4.6.3 The proposal of the Delegate of Bielorussia for the insertion of "R and OR" in paragraph 4 was adopted unanimously.
- 4.7 Mr. Jouk (Bielorussia), referring to paragraph 6 of Document 102, said that the main difficulty encountered by the Conference with regard to the R bands was not correctly defined. He proposed that paragraph 6 be amended to read:

  .... The main difficulty was, while observing the technical principles adopted by the Conference, to create the most favourable conditions for the MWARs by satisfying their requirements first of all and only after that satisfying the needs of national air routes."

This proposal was seconded by the Delegates of Roumania, Poland, Ukraine and Hungary.

- 4.7.1 Mr. Barajas (Mexico) said that he agreed with the view expressed by the Delegate of Bielorussia. However, a generally acceptable plan for the R services had now been drawn up, and he was opposed to the inclusion of such an amendment in the Final Report.
- Mr. Vorobiev (Ukraine) supported Mr. Jouk's proposal. Thus amended, the Preamble would give a more objective explanation of the course of the Conference and would enable the final plan to be better understood. There was no doubt that MWARs had received priority in the allotment of frequencies.

  Mr. Bölkhovitine (USSR) and Mr. Gudovic (Yugoslavia) were also in favour of the proposed amendment.
- 4.7.3 Mr. Lalung-Bonnaire (French Oversea Territories) said that the adoption of Mr. Jouk's proposal would mean over-amplification of the Preamble, The brief explanation given in the present text of paragraph 6 was correct and sufficient.
- 4.7.4 Mr. Jouk (Bielorussia) said that his amendment was as brief as the original text, and merely substituted one explanation for another. The main difficulty was not the small amount of spectrum space, as stated in paragraph 6. In the OR bands, for example, where frequencies were fewer and requirements greater than for the R service, a draft plan had been developed to the satisfaction of all countries.
- 4.7.5 Mr. Bodeaga (Roumania) said that the difficulty which arose in the Conference might have been solved by compromise, whereas preference had been given to MWARs. Amendment of paragraph 6 was necessary to relate the Preamble to the plan, and he supported the proposal of the Delegate of Bielorussia.
- 4.7.6 Mr. Selis (Netherlands) said that the number of revisions incorporated in the draft plan were evidence that priority had not been granted to MWARs. The real difficulty was as stated in paragraph 6 of Document 102. He proposed that the debate on the amendment submitted by the Delegate of Bielorussia, be closed. This proposal was seconded and adopted by 39 votes to 9, with no abstentions.
- 4.7.7 The proposal of the Delegate of Bielorussia (No. 4.7) was put to the vote, and was rejected by 33 votes to 10, with 2 abstentions.
- 4.8 Mr. Jouk (Bielorussia) referred to paragraph 9 of Document 102. He proposed that, since the Conference had adopted Aer/2 Doc. No. 5 as the basis of its work, the words "calculated requirements" be replaced by "draft frequency allotment plan".

# = 8 = (Aer/2-148-E)

- 4,8.1 Mr. Mouchez (France) considered that it would be more correct to amend paragraph 9 to read: ",, draft frequency allotment based on the calculated requirements ...",
- Mr. Barajas (Mexico) considered that paragraph 9, as amended by the Delegate of France, would provide a faithful record of the work accomplished during the recess. Region 2 Administrations had coordinated the results of their studies at the Region 2 Meeting to ensure an equitable plan.

  The draft plan of the First Session had been sufficiently revised to make it acceptable to Mexico.
- 4.8.3 Mr. Jouk (Bielorussia) said that Mr. Mouchez's suggestion was unacceptable as certain requirements had not been considered in the ICAO drage plan.
- 4.8.4 The proposal of the Delegate of Bielorussia (No. 4.8) was put to the vote, and was rejected by 30 votes to 10, with 2 abstentions.
- Mr. Greven (ICAO) proposed that para. 9 be amended to read: "... and to submit to the Secretariat of the I.T.U. their "Calculated requirements" for the Aeronautical Mobile R Service". This amendment was put to the vote and was adopted by 35 votes to 10, with no abstentions.
- 4.10 The proposal submitted by the Delegate of the U.S.A. (No. 4.4) was then put to the vote and adopted by 35 votes to 10, with no abstentions,
- 4.11 Mr. Jouk (Bielorussia) said that his Delegation had voted against the adoption of Aer/2 Doc. 102, as the proposed Preamble did not provide a true record of the historical background of the Conference.
- 4.11.1 Mr. Harizanov (Bulgaria) said that his Delegation had voted against the adoption of paras. 1 to 10 and para. 13 of Aer/2 Doc. 102, as this document did not faithfully reflect the course of the work of the Conference and since the majority had rejected any amendment which might have improved the text of the proposed Preamble.
- 4 ~ 1.2 Similar statements were made by the Delegates of Hungary, the USSR, Roumania, Ukraine Poland, Yugoslavia, Czechoslovakia and Albania,
- 5. Item 5 of the Agenda: POINTS 5,2 and 5,3 OF THE REPORT OF THE 4TH MEETING OF THE DRAFTING COMMITTEE (Aer/2 Doc, 99).
- Mr. Mouchez (France), Chairman of the Drafting Committee, explained that in its study of the Provisional Report the Committee had found certain Recommendations in Volume IV to be out of date, and had decided to recommend that they be deleted or redrafted.
- Recommendation No. 10, concerning the review of Forms 1 and 2 submitted to the P.F.B., was now obsolete, and he proposed that it be deleted. This was agreed unanimously.
- With regard to Recommendation No. 11, concerning the repetition of frequency assignments for the Aeronautical Mobile R Services, Xr. Mouchez (France) proposed that, as paragraph 88 of the Atlantic City Radio Regulations already covered this provision, this Recommendation also be deleted. This motion was seconded by Mr. White (U.S.A.).

- Mr. Rowland (United Kingdom) said that when he had proposed this Recommendation at the First Session it was recognized that provision already existed in the Regulations. However, in view of the fact that the bands would be used exclusively by the aeronautical services concerned, and since these services might not feel entitled to use any allotted frequency, it was considered useful to emphasize that derogations were possible within the framework of the plan. Certain post office administrations took a very conservative view of this right, and it was unlikely that abuses would occur. Mr. Selis (Netherlands) and Mr. Sundaram (India) fully supported the views of the Delegate of the United Kingdom, and favoured the retention of Recommendation No. 11.
- 5.2.2 Mr. Tewfik (Egypt) pointed out that the final plan would provide rather few frequencies for certain areas. The Recommendation would assist administrations to understand the course of the Conference, and would show that as many frequencies as possible had been allotted to the domestic services.
- 5.2.3 Mr. Brant (Canada) said that although paragraph 88 of the Regulations appeared adequate, he would not object to the retention of Recommendation No. 11, provided no amendments were made to it.
- 5.2.4 Mr. White (U.S.A.) suggested that, in view of the opinions expressed, the Drafting Committee might be instructed to include Recommendation No.11 in Part II of Volume 4, among documents of a permanent and general nature.
- 5.2.5. The recommendation of the Drafting Committee in point 5.2 of Document 99 was put to the vote. As no Delegates expressed themselves in favour of deleting Recommendation No. 11, the Chairman declared its retention unanimously agreed.
- 5.2.6 Mr. Harizanov (Bulgaria) said that, while he considered Recommendation No. 11 unnecessary, he had abstained from voting.
- 5.2.7 Mr. Jouk (Bielorussia) and Mr. Bolkhovitine (USSR) said that they had abstained from voting.
- 5.3 Mr. Mouchez (France), referring to point 5.3 of Document 99, said that Recommendation No. 7 also was obsolete in certain respects. It was for the Plenary Assembly to decide whether the text should be revised.
- Mr. White (U.S.A.) proposed that paragraph a) of part 1 of Recommendation No. 7 be deleted; that paragraph b) of part 1 be amended by the Drafting Committee to the effect that the Secretary General be left to decide whether or not the List of Aeronautical and ircraft Stations should be published before approval by the Extraordinary Administrative Conference of the new Frequency List; and that parts 2 and 3 be retained unaltered.
- 5.3.2 This proposal was seconded by Mr. Rowland (United Kingdom), and adopted unanimously.
- 6. Item 6 of the Agenda : DRAFT RESOLUTION SUBMITTED BY THE UNITED STATES
  DELEGATION (Aer/2 Doc.92)
  - 6.1 Mr. White (U.S.A.) said that the draft resolution contained in Aer/2 Doc.92 embodied the essential content of two previous resolutions which had been adopted at the ITU Region 2 Meeting, those parts of the latter

which referred to strictly operational questions having been excluded. He proposed the adoption of Document 92. This motion was seconded by Mr. Anderson (Australia).

- 6.1.1 Mr. Barajas (Mexico) suggested that the words "and without detriment to the services to which these frequencies are allotted" be added at the end of the 7th "consideration". This amendment was agreed by the Delegates of the United States and of Australia.
- 6.2 In reply to Mr. Kito (Albania), Mr. White (U.S.A.) said that, in the opinion of the Region 2 Meeting, the agency mentioned in recommendation c) should be appointed by the Administration concerned. At the present time a single airport was often served by several agencies, with a consequent waste of frequencies. The purpose of the recommendation was to ensure more economical and efficient service.
- Mr. Brant (Canada) said that recommendation c) implied that the responsible agency might be other than a government agency, and suggested the addition of the following sentence: "However, where the service is provided by an agency other than a government agency, the Administration concerned shall be responsible for the service." By this he intended that Administrations should be operationally, and not financially, responsible. A similar recommendation had been adopted by ICAO.
- Mr. Kito (Albania) said that adoption of the United States resolution would restrict the right of Member Countries to organize communications as they saw fit, and thus would contravene the Atlantic City Convention.

  The question was not one of domestic coordination, but of international implementation of the world frequency plan. No aeronautical organ existed within the ITU, and as IATA and ICAO did not represent the interests of all countries such a task should not be entrusted to these organizations.
- 6.5 Mr. White (U.S.A.) agreed with the Delegate of Canada that Administrations should be responsible for coordination and for ensuring proper cooperation by non-government agencies.

With regard to the statement by the Delegate of Albania, he emphasized that the recommendation was not concerned with the implementation of any plan: it was intended merely as a suggestion to ITU countries on the organization of operations.

- 6.6 Mr. Chef (Morocco and Tunisia) said that the recommendations appeared to be intended mainly for private companies in certain continents. A more exact draft was required: for instance, with reference to point a), apart from MWARS, frequencies were allotted, not to routes, but to areas and sub-areas; the word "service", which appeared in the French text, could apply equally to air companies. Point b) seemed to be synonymous with Recommendation III of the Brazilian resolution contained in \_\_Aer/2 Doc. 105. The type of agency intended in point c) should be specified.
- Mr. Hansen (Argentine) disagreed with Mr. Kito's interpretion (No.6.4) of the United States resolution. In the Argentine, and other countries of Region2 where many different air companies operated, it had been found useful and economical to adopt the recommendations contained in points b) and c). In the case of the Argentine, a government agency was responsible for the allotment of frequencies and efficiency of operation.

- 6.8 Mr. Bolkhovitine (USSR) agreed with the Delegate of Albania that the resolution would create an organization superior to Administrations, and therefore implied interference with the independance of governments. If, as stated by the Delegate of the USA, the recommendations were intended merely as private advice and not as obligatory provisions, then there was no reason to adopt them at an international conference.
- 6.9 Mr. Harizanov (Bulgaria) said that the "considerations" were vague and inexact. The recommendations were designed to assist private companies, whose difficulties were no concern of the Conference. Recommendations should be made for implementation by national Administrations, and the United States resolution therefore was unacceptable.
- 6.10 Mr. Harvey (Union of South Africa) said that the recommendations would facilitate the best use of the limited spectrum space available to the R service.

In order to meet Mr. Brant's suggestion (No.6.3), and to remove any objections with respect to Article 31 of the Convention, he proposed that recommendation c) be amended to read: "c) that as far as possible service should be provided by a single aeronautical communication agency at any one location, and where this is not possible coordination between agencies from the disciplinary aspect should be the responsibility of the Administration authorizing the operation of the afore-mentioned agencies, and should be such that division of frequency families is avoided".

- At the suggestion of the <u>Chairman</u>, the Delegate of the <u>United States</u> agreed to withdraw the resolution and to redraft it in cooperation with the Delegates of <u>Canada</u>, the <u>Union of South Africa</u>, <u>Morocco and Tunisia</u>, <u>United Kingdom Colonies</u>, <u>France</u> and the <u>Argentine</u>.
- 6.12 Mr. Petit (IFRB) pointed out that the "considerations" of the resolution should include reference to Article 42 of the Convention.

It was <u>agreed</u> that items 2, 7 and 8 of the Agenda would be considered at the next Plenary Session.

The Chairman closed the 28th Plenary Session at 12.30 hours on Friday, 30 September 1949

Rapporteur:

Secretary:

Chairman:

I.H. Hamilton

J. Kunz

A.L. Lebel

International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### COMMUNICATION FROM THE CHAIRMAN

#### OF THE PFB AND PROPOSED REPLY

The attention of the delegates to IAARC is invited to the attached letter (Annex 1) dated October 10, 1949, from the Chairman of the PFB. In this letter, Mr. Witt requests the views of this Conference regarding the disposition to be made of two frequency bands which, under the Atlantic City allocation table, are to be shared respectively between the aero-fixed and the aero-mobile R and between the aero-fixed and the aero-mobile OR services.

The delegates will perhaps recall that a recommendation had been adopted on this matter last year by Committee 6 (See paragraph 12, document Aer-192). It appears, however, that through an inadvertence, no action was ever taken on the subject by the Plenary Assembly. Obviously this decision of Committee 6 would affect only the first of the above two bands.

As to the views of this Conference regarding the second band, namely, the band which is to be shared between aero-fixed and aero-mobile OR, the delegates are referred to pages 61, 62, and 63, Volume 2 of the Interim Report.

In view of the above, it is suggested that the Chairman of this Conference might be instructed to reply to Mr. Witt in the sense of the abovementioned decision of Committee 6 as regards the bands shared by the aero-mobile R service, and by referring Mr. Witt to the appropriate pages of the IAARC Interim Report with regard to the needs of the OR services in the 23 Mc/s band (Annex 2).

If the above course is agreeable to the Assembly, the attached reply to Mr. Witt, with such amendments as the Assembly may wish to adopt, will be sent by the Chairman.

Chairman:



Geneva, 10th October 1949

Mr. Arthur Lebel, Chairman, International Administrative Aeronautical Radio Conference, 2nd Session,

Geneva

Dear Sir,

The Atlantic City Table of Frequency Allocations shows the following frequency bands shared between the aeronautical fixed service and the aeronautical mobile service:

21 850 - 22 000 kc/s - Aero fixed and Aero Mobile (R) 23 200 - 23 350 kc/s - Aero fixed and Aero Mobile (OR).

The P.F.B. has been given responsibility for effecting frequency assignments in these bands. However, before it does so, I would appreciate receiving from you any comments which your Conference may desire to make, particularly with regard to any aeronautical mobile requirements which may have to be accommodated in these bands.

Yours very truly,

Chairman P.F.B.: S.H. WITT Mr. S. H. Witt Chairman, P.F.B., Maison des Congrès,

Geneva

Sir:

I acknowledge with thanks the receipt of your letter of October 10, 1949, in which you were good enough to request the comments of the IAARC with regard to the possible disposition of the bands 21,850 - 22,000 kc/s and 23,200 - 23,350 kc/s, shared respectively by aero-fixed and aero-mobile R and by aero-fixed and aero-mobile OR.

The Plenary Assembly of this Conference has been consulted on this matter and has instructed me to answeryou in the following terms:

As to the band 21,850 - 22,000 kc/s, the Conference recommends that two adjacent channels in this band, each of band width of 12 ks/s, be made available for aeronautical mobile service and afforded worldwide protection, for use by those administrations requiring such facilities. It is believed that this requirement will no longer exist when a satisfactory worldwide aeronautical fixed service is provided.

As to the band 23,200 - 23,350 kc/s, you are referred to pages 61, 62, and 63 of Volume 2 of the Interim Report of IAARC, which contain the views of this Conference as to the needs of the OR services in those orders of frequencies.

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It is proposed that Recommendation 6, Aer/2-Document No.145-E, be amended as follows:

Retain the same text for the "Considerings" on pages 4 and 5.

Substitute the following for the text of this Recommendation after the word "DECIDES", on page 5:

#### DECIDES:

- a) that it is not necessary to present the basic allotment plan of this Conference to the P.F.B., in the form of the international frequency list, as provided for in Appendix 6 (List I) to the Radio Regulations):
- b) that these allotments (per area and sub-area) can appear as suitable entries in column 4a of List I of the New Frequency List to be prepared by the P.F.B.; those headings can be printed in bold type or in italics and will serve to govern the general use of the aeronautical mobile R channels. The following note can be inserted underneath these entries: "(I.A.A.R.C.)":
- c) that the insertion of those entries must not prevent the appearance in the New Frequency List of any specific assignments to stations, provided that these assignments were notified by the administrations within the required time and in accordance with the provisions of Article 11 of the Radio Regulations;
- d) that in the event the assignments to stations are made in conformity with the entries specifying the general use of each channel (i.e. with the plan developed by the I.A.A.R.C.), they be recorded in the REGISTRATION column; if the assignments are not in conformity with the said entries, they be recorded in the NOTIFICATION column. Article 11 of the Radio Regulations would establish the procedure to be observed in both cases;
- e) that all notifications made before the publication of the New Frequency List and included in its first edition would bear the same date, that is, the date of approval of the New International Frequency List. Any notification made afterwards would be published in supplements to the List (see number 470 of the Radio Regulations);
- f) that, however, assignments made in conformity with the Allotment Plan of the Conference be given no priority as among themselves, irrespective of the dates on which they will have been notified; such interference or conflicts as may occur to be dealt with by direct arrangements between the administrations concerned, as provided for by number 332 of the Radio Regulations.



Geneva 1949

#### Proposed Recommendation

#### Belgian Delegation

List of proposals and frequency requirements

- 1. The proposals and frequency requirements of the various Administrations Members of the I.T.U. constitute an important basis for the work of all the administrative radio conferences of the organization.
- 2. It appears from the experience of the latest administrative radio conferences that delegations are not acquainted with one another's proposals and requirements; this leads to confusion in the debates of the Plenary meetings and complicates the work of the various committees and working groups.
- In order that, at the outset of administrative radio conferences, a basic document shall be available comprising the proposals and, where appropriate, a list of the frequency requirements submitted in due time to the Secretariat of the I.T.U.,
- 4. and that the list of proposals and, in the case of aeronautical conferences, the list of requirements shall be up-to-date and shall supply a basis for the work of conferences,
- 5. It is recommended.
- that Administrations conform to the provisions of Chapter II § 7 of Annex 4 to the Atlantic City Convention, which stipulates that they should forward to the Secretary General of the I.T.U. their proposals for the work of forthcoming administrative conferences and, in the case of aeronautical conferences, their frequency requirements, within a period of four months;
- that the Secretary General of the I.T.U., under Chapter II § 7 of Annex 4 to the Atlantic City Convention, shall publish, as soon as possible before forthcoming administrative conferences, a list of the proposals and, in the case of aeronautical conferences, of the formal requirements submitted by administrations within the time limit fixed by the Secretary General;
- 5.3 that Administrations submit to the General Secretariat of the I.T.U. within 48 hours at the latest of the opening of the said conferences any amendments, additions and deletions to the proposals and requirements they have previously submitted.

V. SEYDEL



Aer/2 Document No.155-E 11 October 1949

International Administrative
Aeronautical Radio Conference
2nd Session

Geneva 1949

# PROPOSAL OF THE EDITORIAL COMMITTEE

The Editorial Committee proposes the adoption, by the Plenary Assembly, of the following text for the Preamble which is to precede immediately the Final Agreement and Plan to be adopted by the Conference:

The delegates of the following countries, being duly accredited to that effect by their respective Administrations, met in Geneva (Switzerland) from May 15 to September 25, 1948, then from August 1 to October , 1949:

People's Republic of Albania; Argentine Republic; Australia (Commonwealth of); Austria; Belgium; the Bielorussian Soviet Socialist Republic; Brazil; Bulgaria; Canada; Chile; Colombia (Republic of); Portuguese Colonies; Colonies, Protectorates, Overseas Territories and Territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland; Overseas Territories of the French Republic and Territories administered as such; Belgian Congo; Cuba; Denmark; Dominican Republic; Egypt; United States of America; France; Greece; Hungary; India; Indonesia; Ireland; Iceland; Italy; Luxembourg; Mexico; Nicaragua; Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curação and Surinam; Philippines (Republic of the); Poland (Republic of); Portugal; French Protectorates of Morocco and Tunisia; People's Federal Popular Republic of Yugoslavia; the Ukrainian Soviet Socialist Republic; Roumania; United Kingdom of Great Britain and Northern Ireland; Sweden; Swiss Confederation; Czechoslovakia; Territories of the United States of America; Union of South Africa and the mandated Territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (United States of).

The undersigned delegates have adopted the following provisions:

Part I

etc.



International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### MINUTES OF THE 29th PLENARY SESSION

held on Thursday,6th October
1949

The Meeting was opened at 09.30 h. by the Chairman, Mr. Arthur L. Lehel.

The following countries and organizations were represented:

People's Republic of Albania; Argentine Republic; Australia (Commonwealth of); Belgium; Belgian Congo; Bielorussian S.S.R.; Brazil; Bulgaria (P.R.); Canada; Chile; Colombia (Republic of); Czechoslovakia; Portuguese Colonies; Colonies, Protectorates, Overseas Territories and Territories under mandate or trusteeship of the United Kingdom of Great Britain and Northern Ireland; Overseas Territories of the French Republic and Territories administered as such; Cuba; Denmark; Dominican Republic; Egypt; Ecuador (Observer); France; French Protectorate of Morocco and Tunisia; People's Republic of Hungary; India; Indonesia; Ireland; Iceland; Italy; Luxembourg; Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curação and Surinam; Philippines (Republic of the); Poland (Republic of); Portugal; Rumania (P.R.); Ukrainian S.S.R.; People's Federal Republic of Yugoslavia; Territories of the United States of America; Union of South Africa and the mandated territory of South West Africa; Union of Soviet Socialist Republics; Uruguay (Oriental Republic of); Venezuela (United States of); I.F.R.B.; I.C.A.O.; I.A.T.A.

# 1. Item I of the Agenda (Aer/2 doc.127): CONSIDERATION OF DOCUMENT Aer/2 doc.126 (Aer/2 doc.92 revised by Working Group D).

- 1.1 Mr. White (USA) introduced document 126, and corrected certain typographical errors in it. Mr. Rowland (United Kingdom) said that the second sentence of paragraph b) of the recommendations was, as far as the United Kingdom was concerned, superfluous.
- After some discussion, in which Mr. Petit (I.F.R.B.), Mr. Brant (Canada), Mr. Barajas (Mexico), Mr. White (USA) and the Chairman participated, Document 126 was amended as follows:

The 4th "considering" to read:

"that it is essential that frequencies allotted to the aeronautical mobile "R" service be made available to all users of that service without discrimination and without detriment to the operations to which these frequencies are allotted; and...."

Paragraphs a) and b) of the Recommendations to read as follows:

"a) the satisfactory utilization of frequency channels and efficiency of service so that the aeronautical mobile R frequency channels be made available without discrimination to all users and without detriment to the operations to which these frequencies are allotted;

(89 - 84 - 89)



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- b) that as far as possible service should be provided by a single aeronautical communications agency at any one location; however, where this is not possible, close coordination between agencies should be effected and maintained. In any case the disciplinary and regulating action should devolve upon the administration authorizing the operation of the aforementioned agency or agencies."
- 1.3 Mr. Harizanov (Bulgaria) and Mr. Bolkhovitine (USSR) were opposed to the adoption of Document 126. The questions dealt with therein related to matters which fell within domestic jurisdiction, and which could not be the subject of recommendations from an international conference.
- 1.4 Document 126, as amended, was adopted by the assembly.

The results of the vote, which was taken by a roll call at the request of Mr. Harizanov (Bulgaria), were as follows:

In favor: Argentine; Paraguay; Belgium; Luxembourg; Brazil;
Chile; Canada; Sweden; French Overseas Territories;
France; Belgian Congo; Cuba; Denmark; Dominican
Republic; Egypt; United States of America; Philippines;
Indonesia; Ireland; Iceland; Italy; Mexico;
New Zealand; Netherlands, Curação and Surinam; Portugal;
USA Territories; Morocco and Tunisia; United Kingdom;
Union of South Africa; Uruguay; Venezuela; Norway.

Opposed: Albania; Bielorussia; Bulgaria; Hungary; Poland; Yugoslavia; Ukraine; Rumania; Czechoslovakia; USSR.

<u>Abstentions</u>: Australia ; Colombia ; United Kingdom Colonies ; India ; Pakistan ; Portuguese Colonies.

Absent : Austria ; Greece ; Nicaragua ; Switzerland.

- 2. Item 2 of the Agenda DRAFT RECOMMENDATION PRESENTED BY THE DELEGATION OF BRAZIL (Doc. Aer/2 No.105)
  - 2.1 Mr. Martins (Brazil), introducing Document 105, said that the proposals contained therein had been submitted by the Brazilian Delegation in the belief that, if adopted, they would improve security of air navigation.
  - 2.2 Mr. Kito (Albania) considered that the proposals in that Document 105 were premature, and that they could not be discussed by the Plenary Assembly before approval of the Draft Plan. Mr. Jouk (Bielorussia) expressed the same opinion.
  - 2.3 The Chairman replied that consideration of Document 105 was quite appropriate and that this would help dispose of the remaining business during the closing stages of the Conference. He was supported in this by Mr. Quijano (Colombia) and by Mr. Deuchars (U.K. Colonies), who proposed formally that Document 105 be discussed.
  - 2.4 Mr. Kito's proposal for the postponement of consideration of Document 105 was rejected, the results of the vote, by show of hands, being as follows:

In favour: 10 Opposed: 36 Abstentions: Nil

- 2.5 Mr. Hansen (Argentine) agreed with the principles laid down in Doc.105, and proposed its adoption by the Assembly. This proposal was seconded by Mr. Deuchars (U.K. Colonies).
- 2.6 Mr. Boctor (Egypt), while agreeing with the recommendation in Doc.105, thought that Recommendation V thereof should be deleted. The collection of data would be done automatically by administrations as preliminary work for the next similar special conference, and there was no need for a recommendation to this effect from the IAARC. Mr. Martins (Brazil) replied that the object of Recommendation V was to promote the collection of up-to-date data on HF systems.
- 2.7 Mr. Khan (Pakistan) and Mr. Sundaram (India) also considered that Recommendation V was unnecessary.
- After further discussion on Recommendation V between Mr. Sundaram,
  Mr. Khan, Mr. Martins, the Chairman, Mr. Brant, Mr. Boctor, and Mr. Harvey,
  this Recommendation was redrafted to read as follows: "to collect precise
  data on the operation of the HF communications systems which has a technical
  bearing on the technical and operating standards adopted by the Geneva
  Conference so as to facilitate such reexamination of this plan as may be
  undertaken in the future." The above text was proposed by Mr. Harvey (Union
  of South Africa).
- After some discussion on Recommendation III between Mr. Barajas (Mexico),
  Mr. Martins (Brazil), Mr. White (USA), Mr. Boctor (Egypt), Mr. Greven (ICAO),
  Mr. Quijano (Colombia), and Mr. Petit (IFRB), this Recommendation was modified
  to read as follows:

"to coordinate the use of families of frequencies necessary for a given communication segment in accordance with the technical principles adopted by the IAARC and in the light of the latest information as to propagation conditions, to insure that the appropriate frequencies be used with an aircraft at a given distance from the aeronautical station providing service within the communication segments concerned."

2.10 Doc.105, as amended, was declared adopted, the results of the vote being as follows:

In favour 33 Opposed 0 Abstentions 0

- The following Delegations intimated that they had not participated in the discussion on Doc. 105, considering, as they did, that the proposals contained in it were premature: Rumania, U.S.S.R., Bielorussia, Albania, Yugoslavia, Hungary, Poland, Czechoslovakia, Bulgaria.
- 3. Item 3 of the Agenda: RECOMMENDATION SUBMITTED BY THE DELEGATION OF SWEDEN (Aer/2 Doc.120).
  - 3.1 Mr. Overgaard (Sweden) introduced Doc.120, and Mr. Boctor (Egypt) drew attention to the similar recommendation submitted by the Egyptian Delegation in Doc.135.

3.2 Mr. Bodeaga (Rumania ) made the following statement:

"The Delegation of the P.R. of Rumania cannot accept the recommendation submitted by the Swedish Delegation in Doc. 120, for the following reasons:

"The draft plan drawn up by the IAARC cannot be implemented before its approval and its adoption, as the plan for the Aeronautical Mobile "R" and "OR" services, by the Special Administrative Conference, and after its incorporation in the International Frequency List.

It is not possible at present to forecast the changes which might be made by the Special Administrative Conference in the IAARC plan, with a view to its incorporation in the International Frequency List. Consequently, my Delegation considers that it would be neither reasonable nor useful to convene the conferences envisaged in the Swedish recommendation until the draft plan has been approved by the Special Administrative Conference."

- 3.3 Mr. Brant (Canada) seconded the Swedish recommendation, which, being more specific, was preferable to the Egyptian recommendation.
- Mr. Rowland (United Kingdom) proposed that Doc.135 should replace Doc.120, and that recommendation a) of the former Document be amended to read as follows:

"That, for RDARAs and MWARAs comprising only countries which are members of ICAO, that organization should take the measures necessary to hold regional or special meetings, for the purpose contemplated in (4) above".

Mr. White (USA) submitted the following statement at the request of the Delegation of Portugal which was unable to attend the meeting:

"The Delegation of Portugal, after a caraful study of Documents 120 and 135 regrets to say that it cannot agree with the suggestion for an ITU Conference for RDARA 1.

"We fully realise that the implementation of our plan and the specific assignment of frequencies to stations could not be done at the present stage and that the matter involves careful thought and investigation by the Administrations concerned.

"The Portuguese Delegation is in favour of any solution that allows the Administrations of RDARA 1 the necessary freedom of action to discuss these problems among themselves, either in ICAO or other informal meetings, before the Special Administrative Conference . In this Conference the necessary adjustments between the different sub-areas of RDARA 1 could be done quite easily.

"Therefore, our delegation will vote against Doc.120 and against any proposal that implies the convening of new ITU Conferences for this purpose."

Mr. Khan (Pakistan) preferred the recommendations submitted by the Egyptian Delegation in their unamended form, to those submitted by the Swedish Delegation. Recommendation a) of Document 135 was particularly acceptable, since it was important that Administrations should have the opportunity of studying the Draft plan before station assignments were made.

- Mr. Selis (Netherlands) considered that assignment to stations was a matter for the ITU, since that organization was recognized by the United Nations as the specialized agency dealing with frequency problems. Such procedure would, in addition, be in conformity with the terms of the Atlantic City Convention, and particularly of Article 6 of the Resolution on the New Frequency List. The Netherlands Delegation would abstain from voting on Docs.120 and 135.
- Mr. Kito (Albania) said that the Conference was not competent to issue recommendations such as those in Docs. 120 and 135. It could make such recommendations only to the Administrative Council. Moreover, the special conferences envisaged could be held if they were requested by 20 Members of the Union, under the provisions of Article 11, para.3b) of the Atlantic City Convention, and the initiative, therefore, lay with the Administrations concerned rather than with the IAARC. He considered that, in any event, such special conferences should not be held before the Special Administrative Conference had approved the allotments made by the IAARC to areas and subareas, and he would, therefore, vote against Docs.120 and 135.
- 3.9 Mr. Harvey (South Africa) speaking on behalf of the Delegation of the Portuguese Colonies, supported the statement submitted by the Delegation of Portugal (See No. 3.5 above), and expressed approval of Doc. 120 in substance.
- Mr. Sundaram (India) thought that, under its terms of reference, the Conference could not resolve or recommend that the special meetings referred to in Doc. 135 be convened by ICAO. The only possible procedure was that the convening of such meetings be suggested to the Administrations concerned. Moreover, Administrations would not be willing to surrender their national sovereignty and allow ICAO to make their domestic assignments. The Indian Delegation would abstain from voting on Docs. 120 and 135.
- 3.11 Mr. Hansen (Argentine) thought that the suggestions in Docs.120 and 135 were sound. As regards the Western Hemisphere, it would be both practical and economical if the regional assignments were done at the regular ICAO meetings.

He pointed to an apparent contradiction in the statements of those delegates who were opposed to Docs. 120 and 135. On the one hand, they asked that the Conference assign frequencies to stations and, on the other, that this be postponed until after the Special Administrative Conference.

- Mr. Kito (Albania) replied that there was no contradiction. The view-point was merely that, since the IAARC had not made assignments to countries, as it should have been done, this matter could only be referred to the Special Administrative Conference.
- 3.13 Mr. Harizanov (Bulgaria) made the following statement:

"The Delegation of the P.R. of Bulgaria, having examined Docs.Nos 120 and 135, makes the following statement:

The Delegation of Bulgaria, along with several other Delegations, has insisted that the IAARC should include in its work the allocation, for the Aeronautical Mobile "R" service, of individual frequencies to countries, as it has done for the "OR" service.

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"However, the majority of the IAARC has opposed all attempts to follow this procedure and has acted contrary to its own decision taken at the 1st Session. In addition, it would be possible to work and, possibly, to prepare a plan for individual frequency allocations shortly after the extraordinary conference. Therefore, the delegation of Bulgaria is opposed to the adoption of the Recommendation in Doc. No.120 and of the similar Recommendation in Doc. No.135; and will vote against these two Recommendations."

- 3.14 <u>Mr. Overgaard</u> (Sweden) withdrew his recommendation in favour of that submitted by the Egyptian Delegation and amended by Mr. Rowland (United Kingdom) (See No.3.4).
- Mr. Shores (United States) said that it was not possible for the IAARC to draw up a detailed plan of assignments to stations. It was essential that a certain flexibility be allowed to Administrations in deciding which frequencies were to be used by their ground stations, and this could best be done through the intermediary of ICAO. It was likewise essential that the ever-growing communication requirements of aviation be catered for by implementation conferences before the Special Administrative Conference.

He submitted the following statement on Aer/2 Doc.135 on behalf of the U.S. and Canadian Delegations:

"As far as ICAO holding Regional or Special meetings for RDARA's 10 or 11 is concerned, we feel it would be an unwarranted expense since only Canada and the U.S. are involved, and, therefore, in accepting this Recommendation, it is to be understood that there will be no such meetings for RDARA's 10 and 11."

- Mr. Boctor (Egypt) replying to Mr. Sundaram (See 3.10), said that, although the initiative did, in fact, lie with Administrations, and although the status of ICAO as a specialized agency of the United Nations had to be respected recommendation a) of Doc.135 was essential if the necessary coordination between administrations was to be achieved.
- 3.17 A vote was then taken on Mr. Rowland's suggested amendment to recommendation a) of Document 135 (See point 3.4). This amendment was accepted, the results of the vote being as follows:

In favour : 17 Opposed : 4 Abstentions : 17

Mr. Shores (USA) suggested that recommendation a) of Doc.135 read as follows: "that, with regard to RDARA's and MWARA's comprising only countries which are included within the boundaries of the established ICAO regions, that organization take the necessary steps...." and that there be appended to Document 135 a note, similar to that contained in Doc. 120, of the ICAO air navigation regions and the corresponding MWARAs and RDARAs. He was supported in this by Mr. Brant (Canada), ahd, after discussion between Mr. Greven (ICAO), Mr. Boctor (Egypt), Mr. Mouchez (France), Mr. Chef (Morocco and Tunisia), and the Chairman, it was decided that the text should remain as amended by Mr. Rowland (See No.3.4),

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- 3.19 Mr. Leunis (Indonesia) considered that the recommendations in Doc.135 would, if adopted, assist in the preparation of a satisfactory sharing plan. Indonesia would vote in favour of Doc.135, as amended.
- 3.20 Mr. Petit (IFRB) proposed that, with a view to reducing the number of ITU conferences, in accordance with the recommendations of the 4th Session of the Administrative Council, recommendation c) of Doc.135 read as follows:

"That in RDARAL those station frequency assignments be established by means of regional agreements of special arrangements concluded by ITU member states comprised in that area."

In the absence of objections, this proposal was declared adopted.

3.21 Mr. Bodeaga (Rumania) made the following statement:

"The Delegation of the People's Republic of Rumania, when expressing its opinion on the Swedish proposal, has emphasized that it cannot accept the basic principle of this proposal.

Since the Swedish proposal has been replaced by the Egyptian proposal in Doc.135, and since there is no difference of substance between these two proposals, my Delegation wishes to state that it maintains its point of view as already expressed.

Consequently, the Rumanian delegation is opposed to the adoption of the Egyptian proposal, either in its original or in its amended form.

In view of the conflicting opinions which have been expressed on this proposal and of the importance of the decision which is to be taken, my Delegation formally requests that the vote be taken by roll call."

- 3.22 The following amendments to Doc.135 were then submitted and adopted.
  - 1. Para.3 of the "considerings" to read:

"That the United Nations has recognized the ICAO as the specialized international agency for the coordination of questions concerning international civil aviation."

The above modification was proposed by Mr. Greven (ICAO) with a view to introducing conformity between this text and the ICAO Convention.

2. - me following additional para. d; to be added to the Recommendations :

"That in the sub-areas including countries which are members neither of ICAO nor of ITU the frequencies allotted to the said sub-areas be assigned to stations by regional agreements of special arrangements."

The above addition was proposed by Mr. Mouchez (France) with a view to extending the scope of the recommendations.

3. - Para.1 of the "considerings" to read as follows:

"That the next step following the adoption of an Aeronautical Mobile "R" Service frequency allotment plan by this Conference is the assignment of frequencies to stations on the basis of that plan."

The above amendment was submitted by Mr. Boctor (Egypt).

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3.23 Mr. Barajas (Mexico), after an exchange of views with Mr. Greven (ICAO) on the question of assignments to national services, suggested the addition of the following paragraph to the Recommendations of Doc.135.

"That assignments for the national services be effected by the respective countries by means of bi-lateral agreements or multi-lateral agreements, according to the circumstances."

After the <u>Chairman</u> had pointed out that the above addition would bind countries to enter into bi-lateral or multi-lateral agreements, <u>Mr. Barajas</u> (Mexico) withdrew his proposal. The <u>Chairman</u>, speaking as the delegate of the United States, gave an assurance that his administration would pay due regard to the considerations underlying Mr. Barajas proposed addition.

- Mr. Boctor (Egypt) referring to the last 3 lines of paragraph 4 of the "considerings" in his recommendation, pointed out that the initiative remained with administrations for the preparation of their assignment plans and their submission to the PFB. The purpose of the ICAO regional meetings would be to assist administrations in preparing the most practical and mutually satisfactory plans.
- Document 135, as amended, was <u>adopted</u> by the assembly, the results of the vote, taken by roll call at the request of <u>Mr. Bodeaga</u> (Rumania) (No. 3.21), being as follows:
  - In favour: Argentine; Belgium; Brazil; Canada; Chile;
    UK Colonies; French Overseas Territories; Belgian Congo;
    Denmark; Egypt; United States; France; Indonesia;
    Iceland; Luxembourg; Mexico; Norway; New Zealand;
    Paraguay; Philippines Republic; Morocco and Tunisia;
    United Kingdom; Sweden; US Territories; Union of
    South Africa; Venezuela.
  - Opposed: Albania (P.R.); Bielorussian SSR; Bulgaria (PR); Portuguese Colonies; Hungary; Poland (Republic); Portugal; Yugoslavia (FRP); Ukrainian SSR; Rumania (PR); Czechoslovakia; USSR.
  - <u>Abstentions</u>: Australia ; Cuba ; Dominican Republic ; India ; Pakistan; Netherlands, Curação and Surinam ;
    - <u>Absent</u> : Austria ; Colombia ; Greece ; Ireland ; Italy ; Ninaragua ; Switzerland ; Uruguay.

Mr. Barajas (Mexico) announced that he had, on behalf of Cuba, abstained from voting on Doc.135, since he was not informed on the policy of Cuba in regard to its national services.

The Chairman announced that it was suggested that Delegates sign the blue proofs of the Final Document, on the understanding that any amendments made thereinwould be recorded in the Minutes of the Plenary Meeting at which the blue proofs were adopted.

# 4. Item 4 of the Agenda: RECOMMENDATION SUBMITTED BY THE DRAFTING COMMITTEE (Aer/2 Doc.121) ON THE FORMAT OF THE FINAL DOCUMENT OF THE CONFERENCE.

4.1 Document 121 was introduced by Mr. Mouchez, Chairman of the Drafting Committee.

Mr. White (USA) proposed that the Assembly approve Doc.121 as amended, as a basis for further work by the Drafting Committee. He was supported in this by Mr. Selis (Netherlands).

- 4.2 Mr. Jouk (Bielorussia) objected to the use of the words "Final Agreement" in the title. Although this document was to be signed, this did not constitute grounds for calling it an agreement; the Atlantic City Radio Regulations had likewise been signed, but had not been styled an "agreement".

  He proposed that the title be "Final Report".
- 4.3 Mr. Kito (Albania) also objected to the title "Final Agreement", since Doc.121 contained no material which could be regarded as an agreement. The Mexico City Conference, for example, had produced merely a "Plan", and the IAARC document was of a similar nature.
- 4.4 Mr. Mouchez (France), supported by Mr. Deuchars (U.K. Colonies) and Mr. White (USA), proposed that the words "Final Agreement" remain unchanged.
- 4.5 The Chairman proposed that, as an exception, Mr. Jouk's proposal (No.4.2) be voted upon before the vote on the Drafting Committee's recommendation. A vote was then taken on Mr. Jouk's proposal, with the following result:

In favour 10 Opposed 24 Abstentions 3

Mr. Jouk's proposal was therefore declared rejected.

Mr. Boctor (Egypt) announced that he had abstained from voting on Mr. Jouk's proposal.

- 4.6 Mr. Andrews (New Zealand) proposed some changes in the arrangement of the title (these are recorded in Doc.Aer/2 No.141). Mr. Petit (IFRB) proposed that Recommendation No.3 be transferred from Article 1 to Article 2. The Chairman proposed that the heading "Preamble" be altered to "Introduction". These proposals were adopted.
- 4.7 Mr. Jouk (Bielorussia) proposed that the word "Plan" in the title be replaced by "Draft Plan". This would be more appropriate since the plan produced by the Conference might be changed by the Special Administrative Conference. He was supported in this by Mr. Bodeaga (Rumania). Had the Final Document of the Conference been other than a draft plan, there would have been no necessity for the recommendation submitted by the Egyptian Delegation, and already approved by the Assembly (see No.3.25).
- 4.8 Mr. Jouk (Bielorussia), in support of his contention, quoted paras.

  12 and 3 of the Resolution on the new international frequency list, in which the word "Draft" was used.

# - 10 - (Aer/2-153-E)

- 4.9 The Chairman, supported by Mr. Luraschi (Argentine) and Mr. Selis (Netherlands), maintained that the title "Plan" was in conformity with the Atlantic City Convention. The Chairman quoted the text of Article 6, para. e) of the Annex to the Resolution on the New International Frequency List, wherein the term "Plan" was used.
- 4.10 A vote was taken on Mr. Jouk's proposal for the title "Draft Plan" (4.7). The proposal was rejected by 29 votes to 10, with no abstentions.
- 4.11 Mr. Jouk (Bielorussia) said that, since his proposed amendments had been rejected, he could not agree to the adoption of Doc. No.121.
- 4.12 Doc, 121 was approved by the assembly as a basis for further work by the Drafting Committee. The results of the vote were as follows:

In Favour : 29 Opposed : 10 Abstentions : 0

- 5. Item 5 of the Agenda : RECOMMENDATION SUBMITTED BY THE DRAFTING COMMITTEE (Aer/2 Doc.122).
- Mr. Mouchez (Chairman of the Drafting Committee) introduced Document 122. He said, in reply to a question from Mr. Selis (Netherlands), that the explanations in para. 5 of this document were necessary, since this information had been deleted from the preamble.
- be inserted after the words "aeronautical mobile "R" service", (the French text to read "..... toutes les lignes aériennes utilisant les fréquences du service mobile aéronautique...."). The Chairman corrected two typographical errors:

  1.- on page 2 of the English text, line 3 "allow" to read "allocate".

  2.- on page 2 of the French text, para. 4 b), line 3, "Règlement des Télécommunications" to read "Règlement des Radiocommunications".
- 5.3 Mr. Layzell (IATA) proposed that the various abbreviations used by the Conference i.g. MWARA, RDARA, etc. be inserted where necessary in paragraphs 6 to 10 inclusive.

The above proposals were adopted.

- 5.4 Mr. Jouk (Bielorussia) said that, since his proposal for the use of the term "Draft plan" instead of "Plan" had already been rejected in connection with Document 121 (See No. 4.10) he could not support Doc. 122 for the same reason.
- 5.5 Document 122, as amended, was <u>adopted</u> by the assembly as a basis for further work by the Drafting Committee. The results of the vote were as follows:

In Favour : 33 Opposed : 8 Abstentions : 2

- 6. Item 6 of the Agenda ANY OTHER BUSINESS
- No business was dealt with under this Item.

  The Chairman closed the 29th Plenary Meeting at 18.30 h.

Rapporteur:

Secretary:

Chairman:

G.M. Forrest

J. Kunz

A.L. Lebel

# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

1.

12.

### AGENDA

for the 30th Plenary Meeting to held Wednesday 30th October

2.30 p.m.

Approval of the minutes of 28th Plenary Meeting (Doc.148); Report of Chairmen of Committee and Working Groups ; 2. 3. Doc. 3 (Suggestion by Indonesia relating to international destress frequency); A. Doc. 149 (Communication by the Chairman of the PFB and proposed reply); Doc.141 (Definitions) : 5. Doc.146 (Technical principles); 6. Doc.145 (Recommendations and Resolutions); Doc.143 (Boundaries of MWARAs); 8. 9. Doc.144 ( of RDARAs) :\ 10. Doc.147 ("R" Plan); Doc.103 ("OR" Plan) ; 11.

Docs. 152 and 128 (Preamble and final formula for the documents of the

13. Doc.157 (Draft recommendation by the Belgian Delegation);

Conference);

14. Any other business.



Aer/2 Document 155-E 13 October 1949

International Administrative
Aeronautical Radio Conference
2nd Session
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The Secretary wishes to draw the attention of Delegates to the following communication addressed to the Chairman from the Delegation of Uruguay.

"Sir,

In view of the fact that the Delegate of Chili was authorized to represent and vote on behalf of Uruguay during my absence from meetings of the Conference, I request that the name of Uruguay also appear in all documents in which Chili is included in the list of countries represented."

I am, Sir your ofedient servant Colonel Hector BLANCO Delegate of Uruguay.



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Geneva 1949

# REPORT OF THE STEERING COMMITTEE

(Functioning as the Finance Committee)
37th Meeting
13 October 1949

- 1. The Meeting was opened at 6.10 p.m. by the Chairman, Mr. Arthur L. Lebel.
- 2. The Committee considered and approved the report submitted by the Secretary on the expenses of the Conference, and noted with satisfaction that they were less than those provided for in the budget.

In accordance with Resolution 83 of the Administrative Council, the Committee decided to submit its final report to the Plenary Assembly for approval (See annexes).

The Meeting was adjourned at 6.45 p.m.

Secretary:

Chairman:

J. Kunz

A.L. Lebel



### ANNEX I

## FINAL REPORT OF THE STEERING COMMITTEE

(Functioning as the Finance Committee) to the Plenary Assembly.

### 1. Composition and Terms of Reference of the Committee.

At its 23rd Plenary Meeting, the Conference entrusted the Steering Committee with the task of acting as a Finance Committee. The Committee considered that its Terms of Reference were as laid down in Resolution 83 of the Administrative Council, i.e.

- a) Supervision of the material organization of the Conference and of the facilities made available to delegates;
- b) Supervision of the expenses incurred by the Conference, and assessment of the total figure, as far as possible, at the end of the Conference.

# 2. Documents issued by the Committee,

The Committee has issued the following documents:

Nos. 34 - 35 - 36 - 42 - 45 - 156.

## 3. Work of the Committee.

The Committee noted, at its meeting of 10 August (doc.34) that the credit of 233,885 Swiss francs granted by the Administrative Council (before the budget for 1949 was revised) were inadequate for the 2nd Session of the Conference. The Committee therefore prepared a revised draft budget for the 2nd Session (doc.36) and referred it to the Plenary Assembly for approval. This draft budget provided for a sum of 294,500 Swiss francs for an estimated duration of 3 months. The Secretary General, at the request of the Conference, submitted this draft budget to the Administrative Council at its 4th Session: the Administrative Council considered this draft budget, and fixed the budget of the Conference at 324,000 Swiss francs.

Since the Conference had been organized on the basis of working groups, the Committee was of opinion that after 15 days, the number of interpreters made available to the Conference, could be reduced. The Committee, for reasons of economy, made a proposal to that effect.

After consultation with the Secretariat, it was decided that 8 interpreters instead of 10 would be sufficient.

Further, the Committee submitted a series of recommendations (doc.34) to the Plenary Assembly for approval; these recommendations proposed measures of economy in the publication of the documents of the Conference.

#### 4. Report on the material organization of the Conference.

By reason of the fact that a number of conferences have been held simultaneously in Geneva during the summer of 1949 (P.F.B., Region 1 and Region 3 Conferences, Aeronautical Conference, 4th Session of the Administrative Council), the question of providing staff and accommodation for the

conference has presented the General Secretariat of the Union with some very delicate problems. Because of these difficulties, the Conference has been obliged to hold its meetings in the High School, rue Necker, from August 1 to 22, and from 23 August until the end of the Conference at the Palais Electoral. The Committee considers that the facilities made available to delegates have been satisfactory, and that the General Secretariat has spared no effort to facilitate the work of the Conference.

# 5. Report on the expenses of the Conference.

The total expenses of the Conference cannot be accurately assessed, for the following reasons:

- a) the work of the Conference has not yet been completely finished, in particular insofar as the publication of documents is concerned.
- b) most of the expenses of the Conference arise out of services common to the Conference and to other conferences meeting simultaneously in Geneva (Linguistic service, Roneo, etc.).

The final apportionment of expenses between the different Conferences can only be done by the Financial Department of the General Secretariat after a certain laps of time, and in any case, only after the conferences at present sitting have come to an end. Hence, the Secretariat of the Conference has been able to provide for this report only estimates, similar in character to the budget of the Conference (doc.36).

It should be noted that when the Financial Department of the Secretariat has drawn up final accounts for the Conference, the total expenses may appear different from those shown in the Annex to this Document, which is merely given as an estimate.

It is, however, likely that the total will not exceed the budget limits laid down by the Administrative Council, as shown in Annex II.

# ANNEX II

Estima ed figures for the expenses of the Conference.

Administrative Council Budget (Revised budget based on the assumption that the Conference would last 3 months),

1.	Staff		
•	A) Administrative services	24,607	30,000
	B) Linguistic service	153,007	180,000
	C) Reproduction and distribution	8,494	25,000
۷.	Insurance	17,187	35,000
3.	Rent	15,800	16,500
4.	Equipment and installation	19,596(1)	30,000
5.	Unforeseen	<b>6,</b> 800	7,500
	•	245,491	324,000

<sup>(1)</sup> Figure up to 30 September 1949. Expenses incurred after this date should be allowed for.

# ANNEX II

List of countries which participated in the Conference and their units of contribution (see Notifications Nos. 561, 567 and 570 of the General Secretariat of the Union).

		N 1
Countries	Class of Contribution	Number of Units
Albania (People's Republic of). Argentine (Republic) Australia (Commonwealth of)	I	1 30 30
Austria  Belgium  Bielorussian (Soviet Socialist I	V	10
	VI	5 25
Brazil Bulgaria (People's Republic of)	······································	3
Canada ,	II	25
Chile		<b>3</b> <b>5</b>
Portuguese Colonies		15
Colonies, Protectorates, Oversea	,	
Territories and Territories under mandate or trusteeship of the Un		
Kingdom of Great Britain and No.	rth-	
ern Ireland		20 3
Cuba		5
Denmark		10 10
Dominican Republic		10
Ecuador	VI	5
United States of America		30 30
Greece	· ·	5
Hungary ( Popular Republic of)		1 30
Indonesia		10
Ireland		5
Iceland		1 25
Luxembourg		<b>.</b>
Mexico		10 3
Ndrway		10
New Zealand	VI	5
Pakistan		<b>1</b> 5 3
Netherlands, Curação and Surinam	n V	10
Philippines (Republic of the) Poland (Republic of)		5 20
Portugal	IV	15
French Protectorates of Morocco		
Tunisia		<b>1</b>
Tunisia	VIII	1
People's Federal Popular Republi Yugoslavia		1
	· · · · · · · · · · · · · · · · · · ·	

Countries	Class of Contribution	Number of Units
Ukrainian Soviet Socialist Republ	ic IV	15
Roumanian Popular Republic of		1
United Kingdom of Great Britain a		•
Northern Ireland	I	30
Sweden		10
Switzerland (Confederation)	V	10
Czechoslovakia	V	. 10
Territories of the United States	of	
America	I	30
Overseas Territories of the French		
Republic and Territories administ		
as such	II	25
Union of South Africa and the		
mandated territory of South-West		25
Union of Soviet Socialist Republi		25
Uruguay (Oriental Republic of)		5
Venezuela (United States of)	V	10
		651

 $\begin{array}{ccc} \text{INTERNATIONAL} & & \text{ADMINISTRATIVE} \\ \text{AERONAUTICAL} & \text{RADIO} & \text{CONFERENCE} \\ & & 2 \text{ND} & \text{SESSION} \, . \end{array}$ 

13 October 1949

Aer/2 - Document No. .157-E

GENEVA, 1949

#### **STATEMENTS**

### Canada

I

The Canadian Administration,

#### CONSIDERING

- (a) that the Aeronautical Mobile "R" Service frequency allotment plan formulated by the Aeronautical Radio Administrative Conference provides the basic minimum requirements for the Major World Air Route Areas;
- (b) that the plan does not provide sufficient frequencies for Canadian domestic operations in Sub-areas 10B, 10C, 10D and 10E;
- (c) that adjacent channel assignments to these areas limit the usa of certain frequencies;
- (d) that certain additional sharing possibilities are available in accordance with the sharing rules and technical principles adopted by the Conference;
- (e) that there are certain other sharing possibilities, such as the use of lower power or more restricted area of use than is provided for in the basic plan, which will provide the protection ratios adopted by the Conference;
- (f) that secondary sharing possibilities may be made available during joint consultation in implementation planning with other administrations concerned;
- (g) that some of the above possibilities are not under the control of the Canadian Administration;

#### RESERVES THE RIGHT

in the event that the Aeronautical Mobile "R" Service frequency needs of Canada are in the opinion of the Canadian Telecommunication Administration not fully provided for at implementation meetings, to take whatever steps may be necessary with respect to the use of such additional frequencies as may be deemed essential to provide a reasonably satisfactory service in the interest of safety of life in the air.

 $\Pi$ 

The Aeronautical Mobile "OR" Frequency Allotment Plan lists certain frequencies for Newfoundland (U.S.A. stations) and Labrador (U.S.A. stations). The Canadian Government reserves all rights with respect to any use of these frequencies in the Province of Newfoundland, which includes Labrador.



# Egypt

The Egyptian Royal Government desires to direct attention to the radio frequency requirements submitted by the United Kingdom to this International Administration Aeronautical Radio Conference for stations situated in Egypt in the Suez Canal Zone and to their intention to make at the extraordinary Administration Radio Conference to approve the New Frequency list a formal reservation on this matter, so far as their sovereign rights to regulate telecommunications in Egypt are concerned.

#### United States of America

The U.S. Delegation accepts the "R" frequency allotment plan prepared by this Conference. It has considered carefully the statement of the Canadian Delegation concerning this Plan, and feels that it contains a useful advance appraisal of the volume of work to be done during the period of implementation, particularly that part thereof which will deal with specific station assignment planning. We are fully confident that during that process substantial improvements will be made in the direction of further sharing possibilities. That, however, we feel, is a phase of the work which will come after this Conference, whose task ends with the adoption of a reasonably satisfactory basic allotment plan.

The United States also accepts the "OR" frequency allotment plan but only subject to conditions that there be subsequent negotiations by the Governments of Region 2 as to matters affecting solely Region 2 for further adjustment of OR frequencies and subject further to the conditions that the plan may be reviewed at any time prior to fianl acceptance by the Special Administrative Conference.

### **Switzerland**

On signing the Final Agreement of the International Administrative Aeronautical Radio Conference, the Swiss Delegation states that the 5 frequencies requested in the OR frequency bands represented the indispensable minimum for its services. The "OR" allotment plan provides for Switzerland only two assignments and one secondary assignment. Since these assignments are inadequate for the operation of the "OR" services, the Swiss Delegation reserves for its Administration the right to request additional indispensable assignments at the Extraordinary Administrative Conference.

# Oriental Republic of Uruguay

The Oriental Republic of Uruguay cannot consider itself bound in respect of the allotment of the "OR" Plan, as the minimum requirements of this service have not been taken into account, and it therefore reserves the right to raise the question again in the Extraordinary Conference shortly to be convened for the final approved of the Frequency Plan.

## United States of Venezuela

The Delegation of the United States of Venezuela considers that, within the available spectrum and in the technical form in which it has been prepared on the basis of objective factors, the Frequency Allotment Plan for the aeronautical mobile "R" service is satisfactory. It does not believe that any better result could have been achieved; however, it realizes that there are further possibilities for the use of frequencies already assigned in order to avoid harmful interference and to attain a maximum of safety for aircraft carrying out domestic services; most of the delegations here present seem to be aware of this.

It hopes, therefore, that the negotiations to take place between the administrations included in the area to which it belongs will be directed towards a thorough study of these possibilities, so that their technical analysis may lead to a more suitable use of frequencies and a greater satisfaction of its domestic requirements.

The Venezuelan Administrations does not consider that its requirements have been met by the frequencies assigned to it by the Frequency Allotment Plan for the aeronautical mobile "OR" service; it hopes that the countries concerned will cooperate in taking the necessary steps to submit to the forthcoming Extraordinary Administrative Conference proposals for essential amendments to the Frequency Allotment Plan for the aeronautical mobile "OR" service, with a view to obtaining a better use of the available spectrum.

INTERNATIONAL ADMINISTRATIVE
AERONAUTICAL RADIO CONFERENCE
2ND SESSION
GENEVA, 1949

Aer/2 - Document No. 158-E

14 October 1949

#### **PREAMBLE**

The delegates of the following countries, being duly accredited to that effect by their respective Administrations, met in Geneva (Switzerland) from May 15 to September 25, 1948, then from August 1 to October 14, 1949:

People's Republic of Albania; Argentine Republic; Australia (Commonwealth OF); AUSTRIA; BELGIUM; THE BIELORUSSIAN SOVIET SOCIALIST REPUBLIC; BRAZIL; BUL-GARIA (PEOPLE'S REPUBLIC OF); CANADA; CHILE; COLOMBIA (REPUBLIC OF); PORTUGUESE Colonies; Colonies, Protectorates, Overseas Territories and Territories under MANDATE OR TRUSTEESHIP OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND; OVERSEAS TERRITORIES OF THE FRENCH REPUBLIC AND TERRITORIES ADMINIS-TERED AS SUCH; BELGIAN CONGO AND TERRITORIES OF RUANDA-URUNDI; CUBA; DENMARK; Dominican Republic; Egypt; United States of America; France; Greece; Hungary (People's Republic of); India; Indonesia; Ireland; Iceland; Italy; Luxembourg; Mexico; Nicaragua; Norway; New Zealand; Pakistan; Paraguay; Netherlands, CUBAGAO AND SURINAM: PHILIPPINES (REPUBLIC OF THE); POLAND (REPUBLIC OF); PORTUGAL; FRENCH PROTECTORATES OF MOROCCO AND TUNISIA; PEOPLE'S FEDERAL POPULAR Republic of Yugoslavia; the Ukrainian Soviet Socialist Republic; Roumanian PEOPLE'S REPUBLIC; UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND; SWEDEN; SWISS CONFEDERATION; CZECHOSLOVAKIA; TERRITORIES OF THE UNITED STATES OF AMERICA; UNION OF SOUTH AFRICA AND THE MANDATED TERRITORY OF SOUTH WEST AFRICA; UNION OF SOVIET SOCIALIST REPUBLICS; URUGUAY (ORIENTAL REPUBLIC OF); VENEZUELA (UNITED STATES OF).

The delegates whose signature appears at the end of the present Agreement have adopted the following provisions:



 $\begin{array}{ccc} \text{International} & & \text{administrative} \\ \text{Aeronautical} & \text{Radio} & \text{conference} \\ & 2\text{nd} & \underset{\bullet}{\text{session}} \\ & \text{geneva, } 1949 \\ \end{array}$ 

Aer/2 - Document No. 159-E

14 October 1949

The delegates to the International Administrative Aeronautical Radio Conference state that it is their understanding that, in accepting this Plan and Final Agreement, they bind their administrations only to the extent of the jurisdiction of the above-named Conference.

In witness whereof the delegates to the International Administrative Aeronautical Radio Conference, Geneva (1949), have signed in the names of their respective administrations the present Plan and Final Agreement in a single copy which will remain in the archives of the General Secretariat of the International Telecommunication Union, and of which a certified copy will be sent to every country Member of the Union.

Done at Geneva, the 14 of October, 1949.



# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

#### REPORT OF WORKING GROUP C

9th Meeting

#### 11 October 1949

- 1. The Meeting opened at 9.40 a.m.
- 2. The following countries and organizations participated:

Argentine; Australia; Bielorussia SSR; Colombia; Portuguese Colonies; United States of America; Hungary; Indonesia; New-Zealand; Paraguay; Netherlands; Philippines (Republic of); Poland; Portugal; Ukrainian SSR; Yugoslavia (Federal People's Republic); Union of Soviet Socialist Republics; Rumania (People's Republic); United Kingdom; Czechoslovakia; Territories of the United States of America; Union of South Africa; Venezuela; ICAO; IATA.

- The minutes of the 7th meeting (Doc.133) was then placed before the Assembly for adoption.
- Mr. Rafuse (Canada) requested that the English text of Doc.133, page 6, first line, be corrected by deletion of the word "base" and substitution of the word "have".
- 3.2 Para.2 of Doc.133 was amended as follows:
- 3.2.1 to the list of countries represented add: Colonies of the United Kingdom, Hungary, Pumania, New Zealand, Belgian Congo.
- 3.22 the listing of "Netherlands" in para.2 should be corrected to read "Netherlands, Curação and Surinam";
- 5.2.3 it was agreed that the preliminary wording of para.2, Doc.133, should be corrected to read: "The following countries and organizations were represented." Additionally, wherever in the text of Doc.133 the representatives of ICAO and IATA are referred to as "delegates", the text should be corrected to reflect their proper status as "representatives". of these organizations.
- Mr. Harizanov (Bulgaria), referring to para. 18 in the French text of Doc.133, stated that this paragraph did not reflect the true situation insofar as the statements made by the Bulgarian delegation were concerned. The Bulgarian Delegation was in fact against the adoption of Doc. No.104, but put forward arguments which were completely different from those put forward by the delegate of Yugoslavia. Mr. Harizanov stated that actually he spoke before the delegate of Yugoslavia. He asked that para.18 be amended by inclusion of the following statement:



# - 2 - (Aér/2-160-E)

"Mr. Harizanov (Bulgaria) said that he would vote against the adoption of Doc. 104 and its annexes since the frequency allotment for the "R" service which is contained in this draft plan was not acceptable to the Administration of the People's Republic of Bulgaria, for the following reasons:

- 1) the plan was established solely on the basis of the ICAO draft without taking into consideration the requests of the various countries;
- 2) the sharing of available frequencies between the MWARA and RDARA and between different sub-regions was inequitable;
- 3) there were no allotment of individual frequencies to countries, and
- 4) the number of frequencies allotted to sub-area 1D, which included the People's Republic of Bulgaria, was inadequate."
- Mr. Chef (Morocco and Tunisia) pointed out that in the French text of para.16, Doc.133, it was incorrectly stated that a question had been put by the Delegate of Bielorussia to the Delegate of Morocco and Tunisia. Actually the question had been directed to the Delegate of Bielorussia by the Delegate of Morocco and Tunisia. The same error was noted in the English text.
- 3.4.1 Mr. Jouk (Bielorussia) stated that para.16 as it appears in Doc.133 completely distorts the meaning of his statement. He requested that the last sentence of para.13, be amended as follows:

"The Delegate of the Bielorussian Soviet Socialist Republic, in reply to the question put by the Delegate of Morocco and Tunisia concerning the reduction in the number of frequencies allotted to Region 1, said that Doc.104 provided for approximately the same number of frequencies to be allotted to Region 1 as had been envisaged in the original draft plan considered at the first Session; on the other hand, the frequencies allotted to Region 2, already inadequate, were being still further out down, whereas the Major World Air Routes were left unaffected. Giving a number of examples in support of his contention, he protested in the most emphatic terms against the adoption of so inequitable a draft plan."

- Mr. Hansen (Argentine), speaking as the rapporteur for the 7th meeting of Working Group C and referring to the statement made by Mr. Harizanov (para.3.3), stated that as reporter he had attempted to include only the substance of the many lengthy statements made by various delegates. He pointed out that he was not a short hand expert, and that only the United States, Canada, and Argentine had presented statements in writing to be included in the minutes. In conclusion, Mr. Hansen stated he was opposed to any modification of para.18, Doc.133, insofar as it referred to statements made by the Delegate of Bulgaria.
- 3.4.3 Mr. Bolkhovitine (USSR) made the following statement with regard to para.18, Doc.133:

"I am obliged to make some comments in connection with Doc.133. The serse of what I said at the 7th meeting of Working Group C has been completely distorted; in fact, not even a summary of it has been given. I do not insist that my statement be given in full in the minutes of the Group, but a summary

of it must be included in Document 133. I protested against the adoption of Document 104 and gave reasons for my objection; my reasons are not even given in summary form in Document 133. Further, I concluded by making a concrete proposal, which was put to the vote, although Document 133 makes no mention of that proposal or the fact that it was voted on.

"My propo al was as follows: the Soviet Delegation, objecting to Document 104 for the reasons given above, proposed that this document, instead of being referred to the Plenary Assembly, should be referred back to the Working Group in order that it might be redrafted in a form that would make the R frequency allotment plan acceptable to all,"

Mr. Gudovic (Yugoslavia) referring to para.18 of Doc. 133, said that the reporter had interpreted his words as an accusation against the majority. He asserted that this was not so and requested that the following statement be substituted for that part of paragraph referring to remarks made by the delegate of Yugoslavia:

"It is quite obvious to the Delegation of the People's Federal Republic of Yugoslavia that the plan under discussion today places the Major World Air Lines in a privileged position. In other words, the adoption of the plan submitted by Working Group C as its final document would signify that we recognize the privileges enjoyed by those bodies who monopolize MWAR operation.

"The Yugoslav Delegation will not accept this draft plan, which deliberately ignores the interests of its country".

3.5 Mr. Layzell (IATA) and Mr. Harvey (South Africa) asked that the "Day sharing" definition, included in para.4, Doc. 133, be amended as follows:

- a) First line correct "A channel allocated" to read "A channel allot-
- b) Second line correct "I hour before sunrise" to read "I hour after sunrise" -
- c) Third line correct "after sunset" to read "before" -
- d) Last line correct "primary allocation" to read "primary allotment".

Mr. Layzell, referring to para.15, Doc.133, pointed out that the translation into English was incorrect and asked that the paragraph be corrected to read:

"15. The representative for IATA pointed out that in the corrigendum to Doc.104 it should be added that the allotments to the Atlantic MET should also bear the designation ME, and those to the Pacific MET the designation EU. The allocation tables should be amended accordingly."

Mr. Khan (Pakistan) asked that his statement (para.13.Doc.133), be amended as follows:

- a) sub-para, 1,3rd line delete the word "plenary".
- b) sub-para.2, first line, sub-para.3 first and fourth lines, sub-para.4 seventh and eighth lines, substitute the word "meeting" for the word "plenary".
- c) sub-para.4, eighth line, substitute the word "should" for the word "duly".

3.7

3.6

(96-16-96)

- Mr. Hansen, rapporteur for the 7th meeting of Working Group C, noted that most of the foregoing corrections do not apply to the Spanish text of Doc.133, which was the text of original submission.
- 3.9 Mr. Layzell (IATA) suggested that para.12 (a), Doc.133 be amended to read as follows: "a) Region II of the ITU allotted and additional 11 Mc channel to NSAM-2 in place of the 10Mc channel allotted by the First Session, IAARC."
- Mr. Petit (IFRB) stated that with respect to para.5, item D should be amended to read "delete, in the last line, the words 'as recommended by the'", so that there would appear within the trackets only the letters IAARC. Further, in item 3, second line, instead of "Registration in the" it should read "approval of the new."
- 5. Document 133 was then approved as amended.
- 6. Mr. Petit (IFRB) recalled that during the seventh meeting of Working Group C, he had inquired as to what disposition would be made of recommendation number 5 of the Final Report of the First Session, IAARC, in view of the adoption of Aer/2 Document No.100. He had understood that recommendation number 5 would be withdrawn and a new recommendation drafted. Thus far no new draft had been prepared.

The Chairman replied that Working Group C had no authority to modify action taken by the Plenary Session, but that he sincerely hoped that the Editorial Committee would take note of our action with respect to Document 100, and would have a text available to replace recommendation number 5 in anticipation of approval by the plenary session of Working Group C's recommendation as reflected in Doc.100.

- 7. Minutes of the eighth meeting of Working Group C, Document 134, were then brought up for consideration. It was pointed out that Document 130 was included in these minutes by reference (see para,2,1,2 Doc, 134).
- 7.1 Mr. Harizanov (Bulgaria) suggested that para.2.1.2, Doc.134, be amended by adding at end of second line "(Aer/2 Doc. 130)", which was agreed.

The following amendments were made to Document 130:

- a) Page 2, item 11, sub-Area 4B "east work along" corrected to read "east along"
- b) Page 3, item 21, sub-Area 7C corrected to read as follows: "After coordinate '02'S 60'E' add coordinate '02'S 41'E'

Before the words 'the eastern coast of Africa' insert the words 'Thence to'"

- c) Page 4, in correction to sub-Area 4C, delete the sentence reading: "Be ore the words 'the eastern coast of Africa'" etc.
- Document 134 was then adopted without objection,

7.3

# 8. Document 137.

Mr. Jouk (Bielorussian SSR), in connection with the distribution of Document 137, protested that the last meeting of Sub-Group C-1 had been held without any prior announcement, with the result that, not being present at the meeting, he had been unable to submit amendments to Document 74 when it was adopted. That document incorrectly reflected the attitude of certain delegations (amongst them the Delegation of the Bielorussian SSR) to the proposed draft plan.

- 8.1 Mr. Harvey (Union of South Africa) referring to Mr. Jouk's statement (para.8) stated that the Chairman of C4 had posted a proper notice of the meetings of both C4 and C1, including a statement that Document 74 was to be considered, and that this notice had been posted before noon of the day prior to the meetings of C1 and C4.
- 8.2 Mr. Harizanov (Bulgaria) concurred with the statements made by Mr. Jouk (para.8), and submitted the following statement:

"The Bulgarian Delegation wished to make amendments to Document 74 (Report of the 4th meeting of Working Group CI). Since, however, this document was adopted by Group CI at its last meeting on 5 October, 1949 (Doc.137), and as the Bulgarian Delegation was not present at this meeting - which was not announced in the customary way - the Bulgarian Delegation supports the statement made by the Bielorussian Delegation in this regard and maintains its position with relation to Aer/2-Document No.3. The Bulgarian Delegation was and is still opposed to this document, so far as concerns the principles adopted and the draft plan of frequency allothent prepared by ICAO."

8.3 Mr. Bolkhovitine (USSR) stated that the Soviet Delegation had also been prevented from presenting amendments to Document 74 for the same reasons given by Mr. Jouk. He associated himself with the statements made by the Delegate of Bielorussia and submitted the following statement for the record:

"Document 74 incorrectly reflects the attitude of the Soviet Delegation to the report of Group Cl. I therefore intended to submit an amendment to that document at the moment of its adoption, but found that it had already been adopted and that the Group had been dissolved, as appears from Doc.137, so that I have had no opportunity of doing so. The reason why I have had no opportunity is that the Group held what one might call a family gathering, without prior announcement.

I therefore request that it be recorded in the minutes of the Group that the Soviet Delegation protested not only against the principles on which the plan was based, but also against the plan produced by Group Cl."

- 8.4 Mr. Andrews (New Zealand) speaking as Chairman of sub-Working Group C4, stated that he himself had arranged with the Secretariat for the posting of advance notice of meetings of C1 and C4 and that he personnaly inspected the bulletin board before noon of the day preceding the meetings and found the notice properly posted.
- 9. The Chairman called attention to Document 132, stating that he had faithfully attempted to carry out the instructions of the Working Group, issued in connection with previous adoption by the Group of Doc. 109, and asked for comments as to the completeness of the task.

# 9.1 Document 132.

Mr. Jouk (Bielorussian SSR) said that he was obliged to protest in emphatic terms against the adoption of Document 132 as the final report of Group C, since it gave no indication of the Group's terms of reference, and of the way in which the Group had carried out those terms of reference. Had such an indication been given, it would have been obvious that the Group had not fulfilled its terms of reference as shown in the annex to Document 52.

- 9.2 The Chairman pointed out that the arguments presented by Mr. Jouk were directed against the decisions taken by the Working Group, Sept.29, in adopting Doc.109, and that all of the same arguments had been presented at that time. He further stated that he considered a repetition of these arguments out of order unless they were accompanied by a motion for reconsideration of the previous decision of the Working Group.
- 9.3 Mr. Jouk (Bielorussia) stated in reply to the Chairman that the report of the seventh meeting of Working Group C (Doc.133) contained absolutely no reference to the substance of his protests on this question, and that for this reason he was forced to repeat his protests at the present meeting.
- 9.4 Mr. Bolkhovitine (USSR) made the following statement:

"Document 132 is called the Final Report of Working Group C. But it is obvious that his document is not a report. Its contents do not correspond to its title. It is simply a list of the documents which should be incorporated in the report, and makes no mention of what the Group was called upon to do or of what it did in fact. At the last meeting a Colombian proposal was adopted dealing with the form the report should take, the substance of the report to be included later. But this is not in Document 132. Hence the Soviet Delegation does not consider the document to be a report, and protests against its adoption as such."

- 9.5 The Chairman interrupted Mr. Bolkhovitine at this point and stated that criticism of the action taken by the Working Group at a previous meeting, was out of order unless accompanied by a motion for reconsideration.
- 9.6 No such motion was offered.
- 9.7 Mr. Harvey (Union of South Africa) stated that the last paragraph of Doc.132 was in error, in that it mentioned seven transparencies, when actually there were nine.
- 9.8 The paragraph was amended accordingly.
- 9.9 Mr. Harizanov (Bulgaria) and Mr. Kito (Ibania) briefly indicated their support of the criticisms of Doc. 132 as previously voiced by Mr. Jouk and Mr. Bolkhovitine.
- 10. Mr. Rowland (United Kingdom) pointed out that the business of Working Group C was now apparently completed, and moved that it be recommended to the plenary session that Working Group C be dissolved.
  - 10.1 Mr. Rowland's motion was seconded by Mr. Selis (Netherlands) and by numerous other delegates.

- 10.2 Being no objections the motion was declared adopted unanimously.
- 11. The Chairman was granted authority to approve the minutes of this final session of Working Group C.
- 12. Mr. Rowland (United Kingdom) made the following statement:

"The work with which this Group was charged has proved to be the most arduous and difficult of the entire Second Session. You, Mr. Chairman, have had the unenviable task of conducting this work.

Now that it is completed I feel that the members of Working Group C will wish to join with me in acknowledging the fairness, skill and courage with which you have carried out your job, and of acknowledging to the tremendous personal effort you have made. It is due in no small measure to that personal effort that the work has been completed in a relatively short space of time.

Therefore, Mr. Chairman, I would like to say - and I am sure the sentiment will be echoed by all - Thank you, Colonel White."

- 13. The Chairman, in thanking Mr. Rowland, pointed out that the work of the Group had been done by the delegates themselves, many of whom had worked long hours on the business of the Conference. His task had been merely that of coordination.
- 14. There being no further business the Chairman adjourned the meeting at 11:15 a.m.

Rapporteur:

Chairman:

E.V. Shores

E.L. White

# International Administrative Aeronautical Radio Conference 2nd Session

# Aer/2 Document No. 161-E, 18 October 1949

Geneva 1949

# LIST OF DOCUMENTS Nos.101 - 162

Notice: If a document has been followed by a corrigendum or an addemdum, the number of the document is followed by an asterisk.

Number	<u>Date</u>	<u>Subject</u> <u>Remarks</u>
101	19-9	Allotment for the Eastern Hemisphere (Frequency Order).
102*	22-9	Preamble - Historical background of the I.A.A.R.C. (Blue document). Revised 3 Oct.
103	19-9	Plan for the allotment of frequencies for the aeronautical mobile OR service - Part III - Pink document
104**	23-9	Report by sub-working group C4, Frequency al- lotment. Corr. & App.
105	22-9	Recommendation made by the Brazilian Delegation.
106	22-9	Withdrawal of statement issued by the Delegation of the United Kingdom (doc.91).
107	22-9	Report of the Credentials Committee - 6th Meeting.
108	22-9	Letter from the Delegation of the Belgian Congo giving proxy to the Delegation of Morocco and Tunisia.
109	22-9	Draft final report of Working Group C.
110	26-9	Minutes of the 26th Plenary Session - 2 and 5 September 1949.
111	24-9	Minutes of the 27th Plenary Session - 9 September 1949.
112	26-9	List of Documents Nos. 51 to 100.
113	26-9	Letter from the Delegation of the Commonwealth of Australia giving proxy to the U.K. Delegation.
114	27-9	Agenda for the 28th Plenary Meeting - 29 September 1949.
115	27-9	Table of discrete frequency allotments to designators - 6.6 Mc/s.
116	28-9	Letter from the Delegation of Denmark giving proxy to the Delegation of Sweden.



Number	Date	<u>Subject</u> <u>Remarks</u>
117	28-9	Report of the Drafting Committee (5th Meeting).
118	29-9	Second redraft of the 6.6 Mc/s plan (Aer doc. No.104).
119	3-10	Report of sub-working group C4 - 2nd Meeting.
120	4-10	Recommendation submitted by the Swedish Delega-tion.
121	4-10	Recommendation by the Drafting Committee - Final Document of the Conference.
122	4-10	Recommendation by Committee 3 (Drafting) - Final Document of the Conference.
123	4-10	Report of the Drafting Committee (6th Meeting).
124	5-10	Letter from the Swedish Delegation, giving proxy to the Canadian Delegation.
125	5-10	Letter from the Norwegian Delegation, giving proxy to the United Kingdom Colonies.
126	4-10	Report of Working Group D (Revision of doc.92).
127	4-10	Agenda for the 29th Plenary Meeting, 6 October.
128	4-10	Final Formula for the Documents of the Conference.
129	5-10	Report of the Steering Committee (36th Session),
130*	5-10	Corrigendum to Appendix to Document 104-E. Addendum
131	5-10	Letter from the Delegation of the Ukrainian Soviet Socialist Republic, giving proxy to the Bielorussian SSR.
132	5-10	Final Report of Working Group C.
133	5-10	Report of Working Group C (7th Meeting).
134	5-10	Report of Working Group C (Frequency sharing) 8th Meeting.
135	5-10	Recommendation submitted by the Egyptian Delegation.
136	5-10	Withdrawal of proxy given by the United Kingdom, to the U.K. Colonies.
137	5-10	Report of sub-working group Cl - 6th and Final Meeting.
138	5-10	Report of sub-working group C4 - 3rd and final meeting.
139	7-10	Report of the Credentials Committee (Committee 2) (7th Meeting).

N	umber	<u>Date</u>	<u>Subject</u> <u>Remarks</u>
	140	7-10	Definitions - Section I. (Blue document).
	141	7-10	Report of the Drafting Committee - 7th Meeting.
	142	7-10	Letter from the Italian Delegation, giving proxy to the USA Delegation.
	143	7-10	Plan for the allotment of frequencies for the aeronautical mobile "R" service. Part II. (Blue document).
,	144	8-10	Description of the Regional and Domestic Air Route Areas. Part II.
	145	8-10	Recommendations and Resolutions. Section III. Provisions of a special or temporary nature (Blue document).
	146	8-10	Technical and operational principles utilized for the establishment of the plan of allotment of frequencies in the aeronautical mobile "R" and "GR" services.
	147	8-10	Frequency allotment. Section II - Table of frequency allotments o MWARAS, RDARAS and sub-RDARAS.
	148	8-10	Minutes of the 28th Plenary Session - 29th and 30th September 1949.
	149**	10-10	Communication from the Chairman of the PFB and proposed reply.  Annex
	150	11-10	Amendment substituting text of Recommendation 6, Aer/2 Doc.145-E.
	151	11-10	Proposed recommendation - Belgian Delegation. List of proposals and frequency requirements.
	152	11-10,	Proposal of the Editorial Committee of text for the Preamble preceding the Final Agreement and Plan to be adopted by the Conference.
	153	12-10	Minutes of the 29th Plenary Session - 6 October.
	154	11-10	Agenda for the 30th Plenary Meeting, 12 October.
	155	13-10	Request that the name of Uruguay appear in all documents in which Chili is included in the list of countries represented.
	156	13-10	Report of the Steering Committee - 37th Meeting,

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Number	<u>Date</u>	Subject	Remarks
157	13-10	Statements - Canada (Blue document).	·
158	14-10	Preamble (Blue document).	
159	14-10	Plan and Final Agreement (Blue document).	
160	14-10	Report of Working Group C - 9th Meeting.	
161	18-10	List of documents from 101 to 162.	
162	19 -10	Minutes of the 30th Plenary Meeting 12, 13 and 14 October 1949.	

#### CORRIGENDUM

au Document Aer/2 Nº 162 (Procès-verbal de la 30° et dernière séance plénière)

Remplacer le texte entier du paragraphe 14,6 par le suivant:

14.6. M. Lalung-Bonnaire (Territoires d'Outre-mer de la République française), répondant à M. Kito (voir le par. 14.4 ci-dessus), maintient qu'il n'a pas été répondu à sa question et il estime que c'est parce que l'on ne veut pas y répondre. Il demande que soit pris acte de ce fait au procès-verbal.

### CORRIGENDUM

to Aer/2 Document No 162 (Minutes of the 30th and last plenary meeting)

Replace the whole paragraph 14.6 by the following:

14.6. Mr. <u>Lalung-Bonnaire</u> (French Overseas Territories) in reply to Mr. Kito (Nº 14.4) insisted that his question had not been answered, and this was, he thought, because they did not wish to reply. He asked that this fact be recorded in the Minutes.

#### CORRIGENDUM

al Documento Aer/2 Num.162 (Acta de la 30ª y última sesión plenaria)

Cambiar el texto entero del parrafo 14.6 por el siguiente:

14,6, El Sr. <u>Lalung-Bonnaire</u> (Territorios franceses de Ultramar), respondiendo al Sr. Kito (Véase 14.4), insiste en que no se ha contestado a su pregunta, y esto es, a su juicio, porque no se quiere responder. Solicita que este hecho se haga constar en el acta,



# International Administrative Aeronautical Radio Conference 2nd Session

Geneva 1949

# MINUTES OF THE 30TH PLENARY SESSION

held on Wednesday, Thursday and Friday 12, 13 and 14 of October, 1949

The Meeting was opened at 14.30 hrs. by the Chairman, Mr. Arthur L. Lebel.

The following countries and organizations were represented:

Albania (PR); Argentine; Australia; Belgium; Bielorussian SSR; Brazil; Bulgaria (PR); Canada; Chile; Colombia; Portuguese Colonies; U.K. Colonies; French Overseas Territories; Belgian Congo; Cuba; Denmark; Dominican Republic; Egypt; United States; France; Hungary; India; Indonesia; Iceland; Italy; Luxembourg; Mexico; Norway; New Zealand; Pakistan; Paraguay; Netherlands, Curacao and Surinam; Philippines (Republic of); Poland (Republic of); Portugal; Morocco and Tunisia; Yugoslavia (FPR); Ukrainian SSR; Roumania (PR); United Kingdom; Sweden; Swiss Confederation; Czechoslovakia; U.S. Territories; Union of South Africa; USSR; Uruguay (Oriental Republic of); Venezuela (United States of); IFRB; ICAO; IATA.

The following corrections were made in the Agenda (Aer/2 Doc. 154):

Item 5, read: "Doc. 140 (Definitions)";
Item 13, (English text only) read: "Doc. 151....";
add: "Item 15. Doc. 102".

- 1. Item 1 of the Agenda: APPROVAL OF THE MINUTES OF THE 28TH PLENARY MEETING (Aer/2 Doc. 148).
- 1.1 At the request of Mr. <u>Bolkhovitin</u> (USSR), it was <u>agreed</u> that, in No. 2.2.2 the words "a ignoré" in the third line of paragraph 2) be replaced by "n'a pas prété attention à" (applies only to the French text).
- 1.2 Subject to the above amendment, Aer/2 Doc. 148 was approved.
- 2. Item 2 of the Agenda: REPORTS OF CHAIRMEN OF COMMITTEES AND WORKING GROUPS
- On the proposal of Mr. Souto Cruz (Portugal), Chairman of the Credentials Committee, the reports of the 5th and 6th meetings of this Committee (Aer/2 Docs. Nos. 84 and 107) were approved. It was unanimously agreed that the Credentials Committee be dissolved.

On his own behalf and on behalf of the Assembly, the <u>Chairman</u> thanked the Delegate of Portugal for the efficient manner in which he had accomplished a delicate task.

2.2 Mr. Mouchez (France), Chairman of the Drafting Committee, gave a brief résumé of the work carried out by his Committee, and made the following statement:

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"The Drafting Committee has held seven meetings, the Reports of which have been published as Conference documents. It has, in addition, held a large number of working sessions, often at night, for the drafting of texts.

During its work, the Committee has found it necessary to make to the Plenary Assembly some Recommendations, which have suffered various fates.

The result of this work will be submitted to the Plenary Assembly, in accordance with the directives which the Assembly has given to the Committee.

I would have finished there, Mr. Chairman, had it not seemed to me more diplomatic to make at this stage an observation which I might be forced to make later in reply to delegations who might consider themselves involved,

This observation is the following, and here I speak both as Chairman of Committee 3 and as the Delegate of France.

Our Conference is coming to a close. Many Delegates have already left us, and others are on the point of leaving, because their Administrations are finding our work rather long drawn out.

The Conference has already lasted eleven weeks, and many documents drawn up last year have been at the disposal of delegates for a year.

I can, therefore, only oppose vehemently any request for amendments in texts drawn up and approved by the First Session of the Conference."

The Assembly received with approval the oral report of the Chairman of the Drafting Committee.

Mr. White (U.S.A.), Chairman of Working Group C, introduced the final report of Group C (Aer/2 Doc. 132), which, along with Documents 143, 144 and 147 comprised the recommendations of this Group to the Conference. Illustrative maps were being printed, and in case of inconsistency the report was to be taken as authentic. Nine transparencies were being prepared, and the last paragraph of Document 132 should be amended accordingly. The pictorial presentation referred to in the second last paragraph was also being printed and was not intended for inclusion in the report. Statements had been submitted by the Delegations of Canada and of the United States (Aer/2 Doc. No. 133) for inclusion in the report.

The successful outcome of the Group's work was due entirely to the tireless efforts and generous cooperation of its members.

He moved that the final report contained in Document 132 be approved by the Plenary Assembly and that, its task having been completed, Group C be formally dissolved.

2.3.1 Mr. <u>Jouk</u> (Bielorussia) said that in no way could Document 132 be considered as a final report. It did not reflect the course of the work of Working Group C and was merely a list of proposals. Moreover, Working Group C had not fulfilled its terms of reference as laid down in the annex to Aer/2 Document 52. These were not even mentioned in the report.

## - 3 -(Aer/2-162-E)

- 2.3.2 Mr. Harizanov (Bulgaria) said that, as the report of the Group's 7th meeting (Aer/2 Doc. 133) did not correctly record his views concerning Aer/2 Document 104, he had requested certain amendments at the Group's final meeting. Document 133, thus amended, should be considered along with Document 132, so that the Bulgarian viewpoint could be properly appreciated. He agreed with the Delegate of Bielorussia that Document 132 could not be accepted as a final report. Mr. Bolkhovitin (USSR) and Mr. Bodeaga (Roumania) expressed the same opinion.
- 2.3.3 The Chairman pointed out that the actual acceptance of the report of Group C was a matter for the members of that Group. The results of the Group's work, however, were embodied in the various related documents which would be considered separately and decided upon by the Plenary Assembly.

Mr. White (U.S.A.) added that the form of the final report had been approved in Group C by 27 votes to 10 with no abstentions.

- 2.3.4 Mr. Selis (Netherlands) said that, according to Rule 20, Chapter 6, of the General Regulations, the report was quite in order, and he seconded the proposal of the Chairman of Working Group C.
- 2.3.5 The proposal that the report of Working Group C be <u>received</u> by the Plenary Assembly, subject to later examination of the documents submitted therewith, was put to a vote, and was <u>adopted by 32 votes to 10</u>, with 2 <u>abstentions</u>.
- 2.3.6 Mr. <u>Jouk</u> (Bielorussia) said that he had voted against the proposal, as Group C had not fulfilled its terms of reference. Mr. <u>Gudovic</u> (Yugoslavia) made a statement to the same effect.
- 2,3.7 Mr. Quijano (Colombia) said that, since he had been uncertain as to whether the verbal report of the Chairman of Working Group C or Document 132 had been at issue, he had abstained from voting.
- 2.3.8 In regard to the proposal that Working Group C be dissolved (No. 2.3), Mr. <u>Jouk</u> (Bielorussia), and Mr. <u>Kito</u> (Albania), said that this question should not be decided prior to examination of Document 147.

The proposal that Working Group C be dissolved was put to a vote, and adopted by 30 votes to 3, with 5 abstentions.

- 3. Item 3 of the Agenda: Aer/2 Document 3 (SUGGESTION BY INDONESIA RELATING TO INTERNATIONAL DISTRESS FREQUENCY)
- 3.1 Mr. Leunis (Indonesia) said that his Delegation wished to withdraw Document 3, since it dealt mainly with operational details rather than with frequency allotment.
- 4. Item 4 of the Agenda: Aer/2 Document 149 (COMMUNICATION FROM THE CHAIRMAN OF THE PFB AND PROPOSED REPLY)
- 4.1 The <u>Chairman</u> introduced Document 149 containing a draft reply to a request from the PFB regarding the possible disposition of two high frequency bands.

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- 4.2 Mr. Witt, Chairman of the PFB, said that the course of action suggested would be satisfactory.
- Mr. Rafuse (Canada) proposed that, to avoid loss of frequency space, the last paragraph of the draft reply should be amplified to show that the channels indicated on page 41 of Document 103 were in fact 12 kc/s channels.
- Mr. Jouk (Bielorussia) said that the two bands in question, viz. the 21 and 23 Mc/s bands had been allocated in Atlantic City as shared for joint use by several services and that they fell under the sole jurisdiction of the PFB. The Aeronautical Conference was not at all competent to deal with them. Division of chamels as suggested in the draft reply implied that these channels were to be reserved for exclusive use. At the 1st Session, Committee 6 had recommended that some channels be allotted solely to the aeronautical mobile services and that the others be used exclusively by the fixed services. This, however, would contravene the Atlantic City decision, on page 28 of the Recommendations and Resolutions adopted by the International Radio Conference to instruct the PFB to receive requirements from Administrations for those bands and to make allotments accordingly. Mr. Bolkhovitin (USSR) expressed the same view.
- The <u>Chairman</u> agreed that the PFB retained jurisdiction over the bands in question, and emphasized that it had merely sought advice from the Aeronautical Conference.
- 4.6 Mr. <u>Selis</u> (Netherlands) considered that the last sentence of the third paragraph of the draft reply was superfluous, and should be deleted.
- 4.7 Mr. Rowland (United Kingdom) moved that the draft reply in Document 149, as amended by the Delegates of Canada and the Netherlands, be approved. This proposal was seconded by Mr. White (USA), and was adopted by 32 votes to 10, with no abstentions.
  - Note: From this point, the order of discussion laid down in the Agenda (Doc. 154) was not followed, since several of the Documents concerned had not been distributed in the three working languages.
- 5. Item 8 of the Agenda: Document 143 (BOUNDARIES OF MWARAS)
- Mr. <u>Bolkhovitin</u> (USSR) said that Document 70, submitted by the USSR, Bielorussian and Ukrainian Delegations, had contained proposals for the revision of MWARA boundaries with a view to the improvement of frequency repetition possibilities. These, however, had not been accepted by the Conference, and he was therefore opposed to the adoption of Document 143. He was supported by Mr. <u>Jouk</u> (Bielorussia), Mr. <u>Harizanov</u> (Bulgaria), Mr. <u>Bodeaga</u> (Roumania) and Mr. <u>Kito</u> (Albania), who intimated that they would vote against the adoption of Document 143.
- After a brief discussion, in which Mr. Harvey (Union of South Africa), and Mr. Hansen (Argentine) took part, Mr. Shores (U.S.A.) proposed that, subject to drafting amendments suggested by Mr. Mouchez (France) and Mr. Quijano (Colombia), Document 143 be adopted. This proposal, which was supported by Mr. Hansen (Argentine), was put to the vote and was adopted by 32 votes to 10, with no abstentions.

5,3 Mr. Hansen (Argentine), rejected the statements made in support of Document 70. He himself had prepared a plan on the basis of the principles enunciated in Document 70, and he had found that these principles did not, in fact, allow of better repetition of frequencies. In reply to Mr. Jouk (Bielorussia), he said that he did not propose to produce his plan, but merely to quote figures from it in the event that the sponsors of Document 70 submitted a plan.

> Mr. Jouk pointed out that, during the discussion of Document 70 at the 26th Plenary Assembly, he had offered to delegates tables prepared on the basis of the Soviet proposals for the MWARAs (See Aer/2 Doc. 110, No. 3.17.36). However, at that time, no interest had been shown in his offer. Mr. Hansen replied that Mr. Jouk could have handed in his tables to the Secretariat if he had wished to do so. It was not true to say that Delegates had not been interested in Mr. Jouk's offer.

- Item 11 of the Agenda: Document 103 (PLAN FOR THE ALLOTMENT OF FREQUENCIES 6. FOR THE AERONAUTICAL MOBILE "OR" SERVICE)
- 6,1 The Chairman recalled that Document 103 had been approved at the First Session of the Conference. It was proposed that this document form part of the Final Acts of the Conference.
- 6.2 Mr. Löpez (Venezuela) read the following statement, for inclusion in the Final Agreement:

"The Venezuelan Administration does not consider that its requirements have been met by the frequencies assigned to it by the Frequency Allotment Plan for the aeronautical mobile "OR" service; it hopes that the countries concerned will cooperate in taking the necessary steps to submit to the forthcoming Extraordinary Administrative Conference proposals for essential amendments to the Frequency Allotment Plan for the aeronautical mobile "OR" service, with a view to obtaining a better use of the available spectrum."

6,3 Mr. Boctor (Egypt) made the following statement:

> "In order that our Conference may follow the general practice of the I.T.U. and in view of the desirability of making the list contained in Document 103-E parallel with other frequency assignment plans previously produced by other conference of the Union with similar terms of reference and in order to avoid any confusion - I would like to make the following editorial amendments to Document 103:

Page 15.

Last line 1st Column:

1). Sudan should read EGYP/G

2). Anglo-Egyptian Sudan should read Anglo-Egyptian Sudan Egypt's 3rd region (British Stations)

1st line - 2nd Column:

3) Suez - Suez Canal Zone, to be deleted.

2nd line - 2nd Column:

4) Suez/G - read EGYP - SUEZ/G

# -6 - (Aer/2-162-E)

The subsequent tables should be amended accordingly wherever any of the abovementioned words appear.

Mr. <u>Bolkhovitin</u> (USSR) intimated that his delegation reserved the right to express its opinion on the OR plan after a decision had been taken on the R plan, and would not participate in the discussion or the vote on Document 103. He was joined in this by Mr. <u>Jouk</u> (Bielorussia), Mr. <u>Bodeaga</u> (Roumania), Mr. <u>Kito</u> (Albania), Mr. <u>Balazs</u> (Hungary), Mr. <u>Harizanov</u> (Bulgaria), Mr. <u>Flisak</u> (Poland), Mr. <u>Koffer</u> (Czechoslovakia) and Mr. <u>Gudovit</u> (Yugoslavia).

Subject to the various amendments suggested, Document 103 was approved for inclusion in the Final Agreement.

- 7. Item 12 of the Agenda: Documents 152 and 128 (PREAMBLE AND FINAL FORMULA FOR THE DOCUMENTS OF THE CONFERENCE)
- 7.1 Mr. <u>Jouk</u> (Bielorussia) proposed that Document 147 be considered before Documents 152 and 128, since the "R" Plan contained in Document 147 was of more fundamental importance.
- A vote was taken and Mr. Jouk's proposal was rejected, 32 delegations voting in favour of the immediate consideration of Documents 152 and 128, 10 against, and 2 abstaining.
- 7.3 Mr. Mouchez, Chairman of the Drafting Committee, introducing Document 152, said that the proposed Preamble of the Final Agreement was the customary text used.
- 7.4 Mr. <u>Jouk</u> (Bielorussia) said that the Conference, in considering Document 152, was violating the "24 hour" and the "6 hour" rules; he would not, therefore, participate in the discussion on it,
  - Mr. Harizanov (Bulgaria), Mr. Balazs (Hungary) and Mr. Bodeaga (Rumania), while refusing, along with Mr. Jouk, to participate in the discussion of Document 152, requested that the words "People's Republic of" be added after the names of their respective countries in the Preamble. It was so agreed. Mr. Bodeaga also requested that the same addition be made after "Rumania" in Document 103, where necessary.
- 7.5 Mr. <u>Luraschi</u> (Argentine) requested that the last word in the Spanish text, "provisiones" be replaced by "disposiciones", and it was so <u>agreed</u>.
- 7.6 Mr. Mouchez, Chairman of the Drafting Committee, introduced Document 128, explaining that the formula suggested in it for insertion before the signatures in the final document was, again, the customary one.
- 7.7 Mr. Selis (Netherlands) proposed the deletion of the second sentence in the first paragraph of the formula, viz. from "They further state" to "in the matter" inclusive. This sentence merely repeated what was said in the first sentence. Moreover, the terms of reference of the Extraordinary Administrative Conference adequately covered this point. His proposal was seconded by Mr. Harvey (Union of South Africa), Mr. Seydel (Belgium) and Mr. White (U.S.A.) and, in the absence of objections, was adopted.

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- 7.8 In the absence of further objections, Doc. 128, as amended, was declared adopted.
- 8. Item 15 of the Agenda: Document 102 (INTRODUCTION TO THE FINAL DOCUMENT;
  HISTORICAL BACKGROUND OF THE INTERNATIONAL ADMINISTRATIVE AERONAUTICAL
  RADIO CONFERENCE)
- Mr. Mouchez (France), proposed some minor changes in the form of paragraphs 10 and 11 of the French text only of Document 102, Mr. Harvey (Union of South Africa) pointed out that "June 1948" in the last line of para, 8 should read "June 1949" (English text only), Mr. Layzell (IATA) suggested the addition of the letter "R" to the expression "Aeronautical Mobile Service" in the last two lines of paragraph 9. (Applies to Spanish and English texts). Mr. Barajas (Mexico) requested some grammatical corrections, to be submitted to the Drafting Committee, in the Spanish text.
- The above amendments were <u>agreed</u>, and Document 102 was declared <u>adopted</u>, as amended, the results of the vote being as follows:

In favour : 35 Opposed : 10 Abstentions : 0

8,3 The following delegations intimated that they maintained their previously expressed opposition to the adoption of Document 102:

Bielorussian SSR, Bulgaria (P.R.), Albania (P.R.) and USSR.

- 9. Item 10 of the Agenda: Document No. 147 (FREQUENCY ALLOTMENT TABLES)
- 9.1 Mr. Bolkhovitin (USSR), made the following statement:

"The Soviet Delegation has carefully studied the draft R frequency allotment plan submitted to this Plenary Assembly, and considers that it does not possess the characteristics of a plan capable of world-wide implementation, since it takes no account of the interests of a large number of countries, amongst them the Union of Soviet Socialisst Republics.

"IT. What does the draft plan as such submitted to the Plenary Meeting represent? The draft plan is a crying example of injustice in the allotment of R frequencies. Discrimination has been exercised against certain countries - first among them the Soviet Union - while others, using the so-called Major World Air Route Areas as a cover, enjoy a privileged position. This means that the inflated appetites of certain countries have been satisfied in full at the expense of other countries which have not used the Major World Air Routes as a cover for their ambitions.

The following facts show what privileges have been reserved for the so-called Major World Air Route Areas:

1. The frequency requirements for these areas have been met in full, while the frequency requirements for areas 2 and 3 have been met on an average to the extent of 50%. Nor have the frequency requirements of sub-areas 10 and 1D been met to any great extent.

- 2. The degree of protection accorded to those areas is considerably higher than that accorded to other areas, in particular areas 2 and 3.
- 3. The coefficient of repetition is considerably lower than in other areas.
- 4. In many areas of the so-called Major World Air Routes the channel loading is very low.

In short, the draft plan not only allots a large number of frequencies to the Major World Air Route Areas, but the quality of the frequencies allotted to those areas is higher than in other areas and sub-areas. The outstandingly favourable conditions under which frequencies have been allotted to the so-called Major World Air Route Areas appear clearly not only from a consideration of individual bands, but of the plan as a whole.

# "2. Could the degree of frequency repetition in the so-called Major World Air Route Areas be increased?

"Yes, certainly! This could have been done by changing their boundaries, by altering their dimensions. This could have been done if the Soviet proposals contained in Document 70 had been taken into account. The draft plan now before the Assembly does not take account of the interests of all countries. It does not reflect the actual needs of a large group of countries possessing an extensive network of air Routes. The aim of the plan has been to provide frequencies only for the services of certain countries; for this reason it cannot be regarded as a world-wide plan.

### "3. Why did the Second Session have so few frequencies available to it?

"At this Second Session we have heard not a few times that frequencies are few and requirements great. This is an explanation beloved of Delegates representing countries whose interests have been safeguarded either directly or by using the watchword of Major World Air Routes as a cover. But we may ask - why does this frequency shortage affect requirements and areas unequally Why is the frequency shortage not reflected in the frequency requirements of countries demanding frequencies for Major World Air Routes? Normally the persons behind this peculiar R frequency allotment plan prefer not to vouchsafe an answer. The frequency bands allocated to the aeronautical services are indeed restricted. But the bands with which the Second Session has had to deal have been narrower than those envisaged by the Atlantic City Radio Regulations, All that remained in the way of frequencies for the Second Session was what was left over after the inflated frequency requirements of the so-called Major World Air Routes had been met. Satisfaction of those requirements substracted about half of the entire frequency resources available for the R service. In spite of the protests made against such a procedure, the majority, at the instigation of certain Delegations, proceeded to allot the frequencies left over and left intact those frequencies which had been reserved beforehand for the so-called Major World Air Route Areas. The disproportion existing between frequencies available and requirements was thereby of course increased. It is quite contrary to all rules and regulations but it is a fact, that Members of ICAO, without obtaining the agreement of all Members of the I.T.U. not Members of ICAO, laid hands on a large portion of available frequencies thus preventing them from being considered at a I.T.U. conference.

Such a procedure can only be described as completely arbitrary. If we add to the above the fact that specially favourable conditions were created for the Major World Air Routes, it becomes clear that the reason why insufficient frequencies have been available for the national needs of a number of countries resides in the fact that a large part of the R frequencies have been allotted to a certain group of countries under the pretext that they have been used for the so-called Major World Air Route Areas.

# "4. Could an R frequency allotment plan have been produced which would have been acceptable to all?

"It is of course true that the task of producing a world-wide R plan is no easy one - and I shall not try to make light of the difficulties. But the Soviet Delegation is convinced that this problem could certainly have been solved, if all Delegations had been animated by a genuine desire to produce a plan which would have safeguarded the interests of all countries, if certain Delegations had done more than pay lip-service to the ideal of a just allotment of R frequencies, and while mindful of their own interests, had not forgotten those of other countries. Indeed it can be said that had all Delegations wanted a real plan, such a plan could have been produced. As a proof of this, we may point to the draft OR frequency allotment plan produced at the First Session of the Conference.

### "5. Is the draft plan produced at the Second Session a realistic one?

"It would be naive to suppose that any plan could be realistic which did not take account of the interests of a large group of countries, covering a huge area with a population running into hundreds of millions of people, and possessing air routes extending over hundreds of thousands of kilometers,

"Of course, in order to produce and adopt a plan, it is sufficient to have a majority in the Conference. But before a plan can become effective, it must be approved by all delegations and adopted by all Administrations. But this particular draft plan certainly cannot be approved by delegations when their opinions have been ignored and when nothing has been done to safeguard the interests of the countries they represent.

"Can there be such a thing as an effective multilateral international agreement affecting the interests of all countries, but not approved by all countries?

"Of course not. Everyone here is well aware of that. Such will be the fate of the draft plan submitted to this Assembly. But if a plan does not correspond to the interests of a large group of countries, then it cannot be considered a real plan. It is pure illusion on the part of certain delegations to imagine that such a plan can be made real and effective by means of a vote.

### "6. Can frequencies be allotted by voting?

"He who imagines that frequencies can be allotted by voting is making a serious mistake. Whatever may be the wishes of certain delegations or their Administrations, such a thing cannot be done. We meet together in international conferences in order to come to an agreement, of our own free will,

on how best to use frequencies without infringing national sovereignties. I repeat we met to come to an agreement, and not to vote on every possible occasion. If these problems could be solved by voting, then it seems to me that our task would be too simple. I would say to those of you who are fond of voting: No, gentlement you cannot allot frequencies that way. Those delegates who are firm believers in the power of the vote must be made to understand this truth.

"The work of this Conference was based exclusively on voting, and such a state of affairs runs counter to the Convention, which summons all Members of the Union to cooperation and mutual understanding at all times.

### "7. Why is the draft plan produced by Group C not satisfactory for all?

"The Soviet Delegation would advance the following reasons:

- "1. At the instigation of certain Delegations, a majority at the Second Session chose to use the vote as a method of reaching conclusions. Both in Working Groups, and in meetings of the Plenary Assembly, any and every point of issue was settled by the vote, without any attempt at mutual understanding.
- "2. Certain Delegations, pursuing their own selfish ends, imposed a plan evolved outside the Conference as a basis for the work of the Second Session, knowing full well that it would be unacceptable for a large group of countries and that it constituted a measure of discrimination directed against the Soviet Republics.
- "3. Certain Delegations, pursuing their own ends, would not accept the practical proposals made by the Delegation of the Soviet Union, the Bielo-russian and Ukrainian Soviet Socialist Republics.
- "4. At the instigation of certain delegations, the so-called Major World Air Routes were put in a privileged position at the expense of the national interests of other countries.

### "Mr. Chairman [ Gentlemen [

"The Soviet Delegation has already drawn the attention of delegates from the Eastern Hemisphere to the practical nature of our proposals as expounded in Document 70, and has recommended them to consider the matter and to change their attitude to the plan which is being imposed on the Conference by certain countries. The Soviet Delegation does not feel that it is too late to draw once again attention of delegates to the disadvantages of the draft plan, particularly for countries of the Eastern Hemisphere. We are convinced that the time will come when many of the delegates taking part in the Second Session, who have embarked on the slippery slope of discrimination, will realize their mistake in adopting by the vote an R frequency allotment plan as unjust and unrealistic as this one.

"In view of the above, the Soviet Delegation protests in the most emphatic terms against the adoption of this plan, and proposes that the Conference adopt the following resolutions:

"The Conference, in view of the fact,

9.2

that the draft R frequency allotment plan submitted by Working Group C has proved unacceptable for a considerable number of delegations, and therefore has no chances of being implemented, decides:

not to adopt this draft plan, but, instead, to refer the material accumulated, together with other proposals relative to the preparation of an R plan to Administrations for study, in order that they may prepare proposals for the forthcoming Extraordinary Administrative Radio Conference in 1950."

- Mr. Bodeaga (Roumania), seconded the Soviet proposal.
- 9.3 The <u>Chairman</u> ruled that Document 147 would be considered prior to Mr. Bolkhovitin's resolution.
- 9.4 Mr. Jouk (Bielorussian SSR) made the following statement:

"Looking through the final variant of the draft R frequency allotment plan presented by Working Group C, the Delegation of the Bielorussian Soviet Socialist Republic is obliged to state, firstly, that this draft plan is in certain respects even more unsatisfactory than the initial one which was prepared during the First Session but which was not adopted by the Conference, on the grounds that, having given priority in allotment to the so-called Major World Air Routes, it did not meet the requirements of a substantial number of countries.

"As an example, several figures may be quoted for Areas 2 and 3, which cover the Soviet Republics. The minimum requirements for Area 2 and its sub-areas in the 3 Mc/s band were 18 frequencies (including those common to Areas 2 and 3), the first draft plan allotted 5, whereas this one allots only 4, thus meeting only 22% of requirements. In the 9 Mc/s band, 2 frequencies were allotted last year to meet a requirement for 8; now, however, only 1 is allotted (12.5% of requirements). Last year it was possible to meet requirements in the 13 and 18 Mc/s bands almost entirely; we now find only 1 frequency allotted in each of these bands, thus meeting only 33% of minimum requirements.

"Taking Areas 2 and 3 with their sub-areas as a whole, it appears that, in this latest plan, minimum requirements in all bands of the R service have received on an average about 50% satisfaction.

"At the same time we find that the requirements of the "Major World Air Routes" have been met fully and on a very uneconomical basis. Moreover, in many cases, considerably more frequencies have been allotted even to the Regional and Domestic Air Routes than were required by "calculation".

"Area 6 and its sub-areas provide a particularly instructive example of this arbitrary treatment. In spite of the fact that the "calculations" themselves were made using absurdly high coefficients in the formula, (thus, a figure of 2.5 was adopted as the factor A instead of the usual 1.25-1.3) those responsible for the draft plan were not content with even that. For example, in the 3 Mc/s band only 2 frequencies were required for night use; however, 8 were allotted under night conditions of repetition - i.e., requirements were met by 400%. In the 5.6 Mc/s band, where the "calculated requirements" amounted to 7 frequencies, 13 have been allotted - 186% of requirements.

"All records, however, are broken with Area 7 and its sub-areas, where the sum total of calculated requirements in all bands amounts to 7 frequencies only. In this case, 48 frequencies have been allotted or 685% of requirements.

"These examples prove that the method of "calculating requirements" by means of a formula was in actual fact a sort of smokescreen designed to disguise a purely arbitrary allotment of frequencies in the draft R plan.

"They also show that this draft R plan, like former ones, is an obvious act of discrimination directed against the Soviet Republics. Former decisions of the Conference relating to equal satisfaction of the needs of all categories of the aeronautical R service have been set aside. Working Group C has not even carried out its terms of reference as laid down in paragraphs (3) and (4) of the annex to Document 52.

"For these reasons, the Delegation of the Bielorussian Soviet Socialist Republic protests in emphatic terms against the adoption of the R frequency allotment plan contained in Document 147, and supports the resolution submitted by the Delegation of the Union of Soviet Socialist Republics."

## 9.5 Mr. <u>Harizanov</u> (Bulgaria) made the following statement:

"At its First Session, the International Administrative Aeronautical Radio Conference - agreeing that it was difficult to prepare a draft final plan acceptable to all the Members of the Union and equitably meeting the operational requirements of aviation services - decided to draw up a final plan of frequency allocations in the "R" service bands at its Second Session; it invited the national Administrations to supply information on their minimum frequency requirements and requested the I.C.A.O. to reduce to a minimum the requirements of the so-called Major World Air Routes and to prepare a draft plan for the allocation of frequencies to the international services of its Member States.

At the beginning of the Second Session of the I.A.A.R.C., the I.C.A.O. draft was adopted by a majority as the sole basis for the preparation of the draft plan for the allocation of frequencies for the "R" service passing over the requirements of national Administrations. The decision to allocate frequencies to countries, adopted at the First Session, was also reversed by a majority.

Together with several other Delegations, the Delegation of the People's Republic of Bulgaria has clearly stated on numerous occasions that such working methods must be abandoned, as they cannot lead to the preparation of a draft plan acceptable to all Delegations. However, all our attempts to convince the Delegations composing the majority to adopt a course of international collaboration and to make constructive decisions were rejected and every means was used to stifle criticism of the I.C.A.O. draft. As the end of the Second Session of the I.A.A.R.C. approaches, every delegation should realize that a draft plan that neither contains individual frequency allocations for the "R" services, nor meets the minimum requirements of the national Administrations of several Members of the Union, cannot be accepted or implemented.

The Bulgarian Delegation considers, therefore, that the arguments advanced by the Delegations of the U.S.S.R. and the Bielerussian SSR against the adoption of the draft plan in the bands for the aeronautical mobile "R" service, contained in Document No. 147, are entirely justified by the draft

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plan itself, which is characterised by preferential allocation of frequencies to the so-called Major World Air Routes to the detriment of regional and domestic routes. Moreover, equitable sharing of frequencies among all the areas and sub-areas is not to be found in the plan.

It should be pointed out especially that we cannot see how the requirements of the Bulgarian Administration can possibly be met, as the number of frequencies allocated to the 9 countries of sub-area 1D (viz: 7 common frequencies and 2 exclusive frequencies in the 5.6 and 6.6 Mc/s band) is very limited and these frequencies will not, in view of their order, enable domestic services to be assured. For these reasons the Bulgarian Delegation fully supports the statements made by the Delegations of the U.S.S.R. and the Bielorussian SSR and seconds the U.S.S.R. Delegate's formal motion not to adopt the plan contained in Document No. 147, on the grounds that it is incomplete and is not satisfactory to several of the Delegations to the I.A.A.R.C."

- 9.6 Mr. <u>Kito</u> (Albania) fully agreed with all the criticisms of Document 147, and supported the Soviet proposal.
- 9.7 Mr. Flisak (Poland) made the following statement:

"Mr. Chairman and Gentlemen:

Our Conference is ending and unfortunately, despite the work of several months, the result of this Conference is, in the opinion of my Delegation, rather a negative one.

<u>Firstly</u> - our Conference did not carry out the terms of reference given to it by the Atlantic City Conference.

The allotment of frequencies has been carried out only in general outlines, and this is practically of no value to the individual countries.

The final allotment is to take place in the subsequent Regional Conferences, but not under the auspices of the I.T.U.

As we may see from these results, our Conference did not fulfil the task entrusted to it.

<u>Secondly</u> - the allotments of frequencies are not based upon real requirements and needs, dictated by operational conditions and upon already existing installations.

For countries damaged by war, like Poland, where, during the reconstruction of her whole national economic life, telecommunication installations have been rebuilt with great difficulty, the acceptance of such a plan would prevent the operation of new installations, because no frequencies have been allotted to them.

The plan does not in the least degree take into account the difficult situation of countries prevented by war damages from increasing their air communication network - as compared with countries where civil aviation has not been destroyed but continuously developed. Such a plan shuts the door on every future development in damaged countries.

Thirdly - the needs of the so-called MWA Routes have been largely satisfied to the detriment of allotments for national services, and this is contrary to the resolution accepted at the First Session.

For the above reasons, the Polish Delegation does not agree with the draft plan and states that, under such circumstances, it cannot sign it."

Mr. Rowland (United Kingdom) made the following statement:

"Mr. Chairman:

9.8

After the many discussions which have taken place during this Conference, both in Plenary Assembly and in Committee, and bearing in mind the many statements of a dissenting character that have been placed on the record, I have little confidence that what I am now going to say will have the desired effect of winning new recruits to the plan on which we are now about to make a decision.

I propose in these remarks to deal mainly with technical issues. However, since during the course of our work I have become convinced that this Conference has not been entirely free from political bias, I am going, for the first time during this and, indeed, any other conference, to touch lightly on political aspects.

As for the plan itself, so much has already been spoken in its favour by the large majority of the countries here present, and the minority countries which have spoken so much and repetitiously in its disfavour have been so often and so fully answered, that I feel it would be tedious to other delegates, and would unnecessarily encumber the record, were I to retrace the ground already covered. Therefore, Mr. Chairman, I will content myself with a reference to my statement at the closing Plenary meeting of the 1st Session, much of which will serve to point the way to the possibilities for expansion inherent in the present plan, and with a brief exposition of one or two points which have hitherto had little or no attention.

As the Civil Aviation member on the United Kingdom pre-Atlantic City Conference planning committees, I was instrumental in including the Civil Aviation case for frequency allocation in the United Kingdom draft plan later to be presented to the World Conference. In assessing those requirements, I took account almost solely of the needs of international aviation, it being my belief that the domestic requirements of the smaller countries at least could be largely met, not from the world-wide bands, but more economically by provision in the allocation table on a regional or even a national basis, taking into account the fact that much of the internal operations could and should be accommodated on V.H.F. Had my viewpoint been known and shared by others, then this Conference might have been excused, had it indeed paid prior regard to the international services. In point of fact, it has done no such thing, and if the stated requirements of individual countries have not on paper - I repeat, on paper - been fully met, the reasons are other and two-fold:

- (1) that these requirements are so impossibly high that no plan could do so within the scope of the frequencies available and
- (2) that the dissenting countries have refused throughout to contribute to the one and only method open to us, namely, a co-ordinated system of use.

Perhaps I can best illustrate this latter point by referring to the methods employed in calculating the requirements of the MWARAS, against which certain countries have spoken so much and so often. If, in "EU" for example, the 20 countries concerned had assessed independently their requirements for their Major World Air Route operations in this area, and assuming that each country had asked for no more than 3 frequencies, a total of 60 frequencies would have been required. In reality 12 only have been allotted - an average per country of slightly more than one half of one frequency - and these will be the exclusive property of no one country, but the common property of all concerned, to be used under an amicable and co-ordinated arrangement. Such is typical of the MWARAs allotments in general and serves, I hope, to discount the oft repeated allegations that special treatment has been accorded these particular services.

The United Kingdom Delegation has, throughout this Conference, maintained an earnest desire to reach a solution which would be acceptable to all and this attitude has been reflected in a number of unsuccessful attempts which I, like a number of other delegates, have made in order to reconcile opposing viewpoints and so achieve greater unanimity. Some of these attempts are on the record; others are not, however, sufficient is it to say that these failures have hardened my attitude to the extent that I have become convinced that if this Conference is to establish a plan at all it must establish one which is acceptable to the large majority of the countries of the world.

Mr. Chairman, I said in my opening remarks that I would touch on the political aspects. However, I am first and foremost a telecommunications man with little knowledge, and even less experience, of matters political. For these reasons, and, in addition, because this is essentially a technical conference, I will dwell but lightly on the subject.

I share with a vast concourse of other common men a burning anxiety to see the world a place wherein peace and happiness are bedfellows, wherein technical developments may go forward hand-in-hand with security and good fellowship. International aviation with its unique facility for the safe and rapid movement of people on peaceful pursuits can contribute in large measure to these ends. Radio frequencies, being a keystone without which aviation could not flourish to the same extent, it follows logically that assignments should be of a realistic and practical character. For this I believe the plan now before us provides, and it is regrettable that certain countries, for what, in view of all the discussion, I can only conclude to be misguided political considerations, have steadfastly refused to have any part of their territories included in the MWAR frequency allotment areas although, in so doing, they are denying themselves the use of frequencies which would otherwise be available to them.

In conclusion, Mr. Chairman, may I say that with the adoption of this plan our Conference will have made history - if not in the general sphere of I.T.U. matters, at least in that of aviation.

Never before in the aviation field of frequency endeavour has so much time, labour and scientific and engineering thought been given to the subject, and I am confident that the majority at least of the delegates present will share with me the hope, and indeed the confidence, that our efforts will serve as a pattern and an inspiration to the other conferences concerned in planning the use of the Atlantic City bands. Thank you, Mr. Chairman."

- 9,9 Mr. De Haas (Indonesia) associated himself with Mr. Rowland's statement.
- 9,10 Mr. <u>Balazs</u> (Hungary) supported the viewpoint of the Soviet and Bielorussian Delegations. Since he found the draft plan for the "R" services in Document 147 was unacceptable, he would vote against its adoption, and would support the Soviet Resolution.
- 9.11 Mr. Koffer (Czechoslovakia) made the following statement:

"The Czechoslovakian Delegation makes the following statement:

The T.A.A.R.C. has prepared a draft frequency allotment plan for the aeronautical mobile "R" services, in which:

- 1) MWARAs have been favoured to the detriment of the interests of national services,
- 2) frequencies are not allotted to countries, as recommended in the final report, 1st Session I.A.A.R.C. 1948, Volume I, page 2, Item "b".

Therefore, the Czechoslovakian Delegation cannot accept this plan and considers that the Conference has not accomplished its task. It regrets very much that this Conference has not taken, as the basis of its work, the proposals made by the USSR Delegation in Document Aer/2, No. 70.

It is of the opinion that the ideas contained therein would be very useful for the aviation of the whole of Europe, and would assist the Conference in accomplishing its task.

Since the present plan has become unacceptable not only for Czechos-lovakia but for many other countries as well, this plan cannot be a realistic one.

Therefore, the Czechoslovakian Delegation states that its Administration reserves the right to use any frequencies of the aeronautical bands (according to the Atlantic City Regulations), which it deems necessary for its air traffic, until a new frequency allotment plan acceptable for all is prepared.

- 9.12 Mr. Gudović (Yugoslavia) replying to Mr. Rowland (No. 9.8) said that the latter, although stressing that he spoke solely as a radio engineer, had failed to reply to Mr. Jouk's criticisms of the work of the Conference. A salient feature of the plan in Document 147 was the disproportionate number of frequencies allotted to the MWARAs. His Delegation would vote against it, since it was detrimental to the interests of his country, and would hinder development of its aviation services. He supported the Soviet Resolution.
- 9.13 Mr. <u>Deuchars</u> (United Kingdom Colonies) made the following statement:

"Mr. Chairman:

1. I too would like to answer the many statements made during this Conference by the Delegates of Albania, Bielorussia, Bulgaria, Czechoslovakia, Hungary, Poland, Yugoslavia, Ukraine, Roumania and the U.S.S.R.

- 2. Those statements contain many and varied objections and protests now, Mr. Chairman, I took note of these statements and, in order that I may inform the Administrations I represent as to the veracity of the allegations made, my Delegation has investigated these objections and protests and is satisfied that they are without real substance or foundation.
- 3. As I said at a previous Plenary meeting, no one could have all the frequencies they would like we have to coordinate carefully and share the frequencies we do have available.
- 4. I would like to point out to the few disgruntled delegates who have not participated in the real work of this Conference that we are here to deal in the cold hard facts of providing the frequencies necessary to ensure safe and efficient aviation and each delegation should contribute to this end, consequently, the fact that some delegates now find themselves embarrassed must rest fairly and squarely on their own shoulders.
- 5. Mr. Chairman, Gentlemen: The Delegation of the Colonies and Protectorates of the United Kingdom associates itself with the statement and philosophy of the United Kingdom we are happy to have actively assisted in the work of this Conference.

I wish to express the thanks of my Delegation for the sympathetic understanding and assistance given by this Conference to our many problems.

We are sure that the plan detailed in Document No. 147 will contribute considerably to the development of safe and efficient operation of long distance, Regional and domestic aviation. Thank you, Mr. Chairman."

9.14 Mr. Lopez (Venezuela) read the following statement, for inclusion in the Final Agreement:

"The Delegation of the United States of Venezuela considers that, within the available spectrum and in the technical form in which it has been prepared on the basis of objective factors, the Frequency Allotment Plan for the aeronautical mobile "R" service is satisfactory. It does not believe that any better result could have been achieved; however, it realizes that there are further possibilities for the use of frequencies already assigned in order to avoid harmful interference and to attain a maximum of safety for aircraft carrying out domestic services; most of the delegations here present seem to be aware of this.

It hopes, therefore, that the negotiations to take place between the administrations included in the area to which it belongs will be directed towards a thorough study of these possibilities, so that their technical analysis may lead to a more suitable use of frequencies and a greater satisfaction of its domestic requirements."

Mr. White (USA) agreed with the opinions expressed by Mr. Rowland (No.9.8). It was desirable that, with ten dissenting statements already on record, the point of view of the majority favouring Document 147 be clearly expounded. He did not agree that the MWARAs had been favoured in frequency allotment to the detriment of other areas. The "R" plan in Document 147 was the best obtainable, and his Administration would implement it fully in the U.S.A.

- 9.16 Mr. Selis (Netherlands) supported Mr. Rowland's statement (No. 9.8). The Soviet Delegation had had the opportunity to submit requirements for MWARAS, and had not done so. He was, therefore, unable to understand its hostile attitude.
- 9.17 Mr. Bodeaga (Roumania) shared the Soviet Delegation's viewpoint on the draft plan. It had been said that all stations could not be assigned all the frequencies requested for them. The Soviet Delegation and its supporters, however, asked merely that minimum requirements be met, and the application of the ICAO formula did not allow of this, as the plan itself showed. The Roumanian Delegation could not, therefore, accept it.
- 9.18 Mr. De Haas (Indonesia) considered that the plan, although certainly not ideal, and perhaps not even the best possible, was nevertheless a good and practicable plan, and one which would set an example to other conferences in the equitable treatment of the requirements of all countries.
- 9.19 Mr. Rafuse (Canada) requested that the following statement, already contained in page 6 of Aer/2 Document 133 (Report of the seventh meeting of Working Group C) be reproduced:

"The Canadian Administration,

#### CONSIDERING

- (a) that the Aeronautical Mobile "R" Service frequency allotment plan formulated by the Aeronautical Radio Administrative Conference provides the basic minimum requirements for the Major World Air Route Areas;
- (b) that the plan does not provide sufficient frequencies for Canadian domestic operations in Sub-areas 10B, 10C, 10D and 10E;
- (c) that adjacent channel assignments to these areas limit the use of certain frequencies;
- (d) that certain additional sharing possibilities are available in accordance with the sharing rules and technical principles adopted by the Conference.
- (e) that there are certain other sharing possibilities, such as the use of lower power or more restricted area of use than is provided for in the basic plan, which will provide the protection ratios adopted by the Conference;
- (f) that secondary sharing possibilities may be made available during joint consultation in implementation planning with other administrations concerned:
- (g) that some of the above possibilities are not under the control of the Canadian Administration;

### RESERVES THE RIGHT

in the event that the Aeronautical Mobile "R" Service frequency needs of Canada are in the opinion of the Canadian Telecommunication Administration not fully provided for at implementation meetings, to take whatever steps may be necessary with respect to the use of such additional frequencies as may be deemed essential to provide a reasonably satisfactory service in the interest of safety of life in the air."

9,20

The <u>Chairman</u> repeated the statement which had been made in reply to the foregoing Canadian statement by the U.S. Delegate at the Seventh Meeting of Working Group C (Aer/2 Document 133, page 9, No. 20).

9.21

Mr. Hansen (Argentine) supported Mr. Rowland's statement (No.9.8). The plan, if not ideal, was certainly practical and equitable. For instance, some countries smaller than the Argentine had been allotted more frequencies. The principles proposed in the Soviet Document 70 would, on the other hand, result in infinitesimal allotments to many countries. He rejected as incorrect all statements made in opposition to the plan.

9.22

Mr. <u>Gudovic</u> (Yugoslavia) referring to Mr. De Haas' statement (No.9.18) said that the latter had not explained why only 20% of the requirements of some countries had been met.

9.23

Mr. Barajas (Mexico) said that his Delegation maintained its approval of the "R" plan and its optimism that, in the future, it could give reasonable satisfaction to the requirements of all countries. Since, however, the final task of making specific assignments to stations had not been carried out at the Second Session of the Conference, there were not sufficient details available on which to base a final decision, and to do so at that time would be premature. He therefore requested that the following statement be inserted in the Minutes of the Meeting:

"The Delegation of Mexico accepts provisionally the Frequency Allotment Plan for the Aeronautical Mobile "R" Services, and reserves its final acceptance until the stage of specific station assignments has been completed, so that it may determine how the Plan will meet its minimum requirements for national flights."

"He hoped that, from the regional meetings and bilateral or multilateral negotiations to be held before the Extraordinary Administrative Radio Conference, there would result a final plan which would be approved by that Conference."

9,24

Mr. Quijano (Colombia) strongly supported the statements made by Mr. Rowland (No. 9.8). The plan in Document 147 was a magnificent example of modern scientific planning. He objected to the use of the term "shared channel" in the text, since all channels were, in fact, shared; he agreed to collaborate with the Drafting Committee in finding a more appropriate term. (For the text finally agreed upon in the Drafting Committee, see Document 147, page 6, para. 3 of the "General Notes").

9.25

Mr. Searle (New Zealand) made the following statement:

The New Zealand Delegation fully supports the statements made by the Delegation of the United Kingdom, the Delegation of the United Kingdom Colonies, and the Delegation of the United States of America. We think it appropriate that recognition should be given to the important and difficult work accomplished. In this respect it is noteworthy that what appeared to be almost an impossible situation at the close of the First Session has now become, by viwtue of the co-operative spirit of a majority of countries, a reasonable situation; and a plan has now been evolved which should be both practicable and generally acceptable. This plan is one which illustrates what human endeavor can accomplish when directed into the correct channels. We now have a plan which should materially assist the orderly and methodical present operation and future development of world seronautical radio communications. This is in

the interests of safety, and consequently human progress has made a step forward.

It must be especially pleasing to you, Mr. Chairman, to see the plan at last being accepted on such a satisfactory basis. New Zealand believes that a great deal of the evident success of the plan is due to the tenacity, patience and impartiality of the Conference Chairman. We wish to thank you, Mr. Chairman, and those delegations who have co-operated in making this satisfactory position possible. Thank you, Sir."

- 9.26 Mr. White (USA) moved that the plan contained in Document 147 be approved by the Assembly. This motion was seconded by several delegates, including Mr. Selis (Netherlands), Mr. Rowland (United Kingdom), and Mr. Deuchars (United Kingdom Colonies),
- 9.27 Document 147, as amended by the Assembly, and subject to the various editorial changes to be made in the Drafting Committee, was approved, the results of the vote being as follows:

In favour : 34 Opposed : 10 Abstentions : 0

9.28 Mr. <u>Kito</u> (Albania) made the following statement:

"The Delegation of the People's Republic of Albania, considering:

- 1) the resolution of the First Session of the International Administrative Aeronautical Radio Conference concerning its task, contained in the Report
  of the First Session, paragraph b), in which it is stated that "R" frequencies
  must be allocated to countries and to areas;
- 2) the Atlantic City Resolution relating to the preparation of the new International Frequency List; and
- 3) the fact that the First Session was not able to prepare a draft plan for "R" services, because it gave priority to the so-called Major World Air Routes;

has repeatedly stated that the Second Session of the Conference had to allocate "R" frequencies not only to areas and sub-areas but also to countries, that such draft allocation should be based on the requirements of the countries and on just principles acceptable to all countries, and that the requirements of the MWAR and the RDAR should be considered and satisfied on an equal footing.

Unfortunately, under pressure from certain Delegations which wish to occupy a dominant position in Aeronautical Radiocommunication at the expense of other countries, the work of the Second Session has not only followed the same erroneous course as that followed by the First Session, but has been even worse directed. The Atlantic City decisions and those of the First Session of the I.A.A.R.C. have been ignored and, in order to attain their ends, these delegations have often violated the democratic rules of procedure of international conferences.

Thus, from the outset, the Second Session mechanically and wrongly adopted the I.C.A.O. plan as a basis for its work. This plan has been prepared outside the Conference and in violation of the Atlantic City decisions. It considers

only the interests of a group of countries Members of the I.C.A.O. Although the First Session recognised the need to reduce the allocations to the so-called Major World Air Routes to a minimum, these lines have priority in the I.C.A.O. draft plan and their requirements have been fully satisfied at the expense of regional and domestic routes. It is obvious that this arbitrary and discriminatory draft taking no account of the requirements of Administrations, prejudicial as it is to a large number of countries, Members of the I.T.U. and not Members of I.C.A.O., could not serve as an equitable solution of the problem.

The Albanian Delegation and many other Delegations have emphasized this fact and have pressed for the Conference itself to prepare a draft plan in conformity with the Atlantic City decisions and those of the First Session and acceptable to all countries. Constructive proposals to this effect have been put forward. But, acting in their own interests, certain delegations were determined to have the I.C.A.O. draft adopted as the plan of the Conference. Moreover, these delegations did not wish the I.A.A.R.C. to allocate frequencies to countries, intending that this allocation should be done outside the Conference so that they could seize the biggest share of the frequencies assigned to areas and sub-areas. That is why, in the face of the spirit of collaboration shown by several delegations, they used the voting machine and showed a tendencious attitude by rejecting systematically every constructive proposal which aimed at achieving a realistic and just solution of the problem in the interests of all countries. Thus they have prevented cooperation and mutual understanding between all delegations, the determining factor for the success of an international conference.

The results of the intransigent attitude of these delegations are that the Conference has made no substantial change in the original I.C.A.O. plan, the so-called draft plan of the Conference for the "R" services is not complete, as it does not contain allocations to countries, and the allocations to areas and sub-areas are unacceptable to many countries. It therefore becomes clear that the I.A.A.R.C. has not been able to finish its task and that the so-called draft plan for the "R" service cannot be considered a draft plan of the Conference.

For the reasons given above and especially because the allocations to sub-area 1D, of which Albania is a part, do not satisfy the requirements of many countries of this sub-area, the Delegation of the P.R. of Albania finds it necessary to state on behalf of its Administration:

- that it will neither accept nor sign the draft plan for the "R" services or the draft plan for the "OR" services whose application is bound up with that of the plan for the "R" services;
- that it reserves all freedom of action in the choice and use of "R" and "OR" frequencies in the bands dealt with by this Conference until a plan which is acceptable and applicable for all countries is prepared and put into force;
- that it does not consider itself bound by any decision of the I.A.A.R.C.

I request that this statement be inserted in the final acts of the Conference."

# 9,29 Mr. <u>Harizanov</u> (Bulgaria) made the following statement:

- "I. The Delegation of the P.R. of Bulgaria voted against the adoption of Document No. 147, containing a draft frequency allocation plan for the "R" services.
- II. The Bulgarian Delegation considers that the statements made by certain Delegations before the vote on Document No. 147, in order to discredit the minority Delegations' statements, are devoid of any argument explaining the discrimination on which the frequency allocation plan for the "R" service is based; nor do they explain why the minority Delegations cannot accept the draft plan. This proves that the statement of the Bulgarian Delegation and those of several other Delegations opposed to the adoption of Document No.147 are fully justified and well-founded.

III. In voting against the adoption of the draft frequency allocation plan for the aeronautical mobile "R" services prepared by the majority at the Second Session of the I.A.A.R.C., the Delegation of the P.R. of Bulgaria feels bound to make the following statement and requests its insertion in the final report of the Conference:

The Delegation of the People's Republic of Bulgaria to the International Administrative Aeronautical Radio Conference, Geneva (1949),

#### CONSIDERING:

- 1) that the draft frequency ellocation plan in the exclusive bands for the aeronautical mobile "R" services had been prepared by the IAARC solely on the basis of the draft submitted to the Conference by the International Civil Aviation Organization, without regard to national Administrations' requirements;
- 2) that countries' frequency requirements have been calculated without reference to the diversity of equipment and communication systems in use;
- 3) that the draft plan favours and gives preference to the so-called Major World Air Routes, to the detriment of regional and domestic air routes;
- 4) that the distribution of available frequencies has not been effected equitably for all the areas and sub-areas and that there has been discrimination against those countries that are not Members of the I.C.A.O.;
- 5) that the number of frequencies allocated to the European area and to sub-area 1D thereof, of which the P.R. of Bulgaria is a part, is inadequate to meet the requirements of this sub-area and, in particular, of the Bulgarian Administration; and
- 6) that the draft does not contain individual allotments to countries; formally declares, on behalf of the Bulgarian Administration:

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- 1) that it has neither approved nor accepted the draft frequency allocation plan for the "R" services, and that it does not accept the plan for the "OR" services prepared at the First Session of the Conference, as its implementation depends in a certain measure on the draft for the "R" services;
- 2) that it does not consider the Bulgarian Administration in any way bound by any of the decisions of the I.A.A.R.C.; and
- 3) that it reserves the Bulgarian Administration's right to use freely any of the frequencies in the "R" and "OR" bands that it may judge necessary for the operation of its air lines, until such time as a plan for the "R" and "OR" bands acceptable to all countries is prepared and implemented."

## 9.30 Mr. Flisak (Poland) made the following statement:

"The Delegation of the Polish Republic, in the name of its Administration, disagrees with the draft frequency allotment plan prepared by the International Administrative Aeronautical Radio Conference (I.A.A.R.C.), in Geneva in 1948 and 1949 for the aeronautical mobile "R" services.

The reasons of the Delegation of the Polish Republic for disagreeing with this draft plan are the following:

- 1) The I.A.A.R. Conference did not carry out its terms of reference, since it did not allot frequencies to individual countries.
- 2) The draft plan does not consider the requirements of the individual Administrations, based upon real needs of their aeronautical services.
- 3) The draft plan has been primarily worked out in the interest of the so-called Major World Air Routes. This is a flagrant violation of the interest of national Administrations.
- 4) For the Sub-area including Poland there have been allotted only 2 frequencies which are at the same time at the disposal of almost the whole of Europe.

The acceptance of such a plan, would render impossible the normal operation of the Polish aeronautical services, which were completely destroyed during the war and which could not be developed to a degree corresponding to their needs. In addition, their further development would be definitely stopped.

In view of these facts the Delegation of the Polish Republic

- 1) definitely rejects the draft plan of the I.A.A.R. Conference,
- 2) does not consider itself in the least degree bound by the resolutions of this Conference, and
- 3) reserves the right of its Administration to use in conformity with its needs the frequencies designated by the Atlantic City Conference for seronautical mobile "R" and "OR" services until such time as a just plan, acceptable to all countries, has been drawn up."

### 9.31. Mr. <u>Bolkhovitin</u> (USSR) made the following statement:

"In connection with the adoption of the draft frequency allotment plan for the "R" service by the Second Session of the International Administrative Aeronautical Radio Conference (Geneva, 1949), the Delegation of the Union of Soviet Socialist Republics declares:

1. That the draft frequency allotment plan adopted by the Conference safeguards only the interests of a few countries, Members of I.C.A.O., and constitutes a measure of discrimination directed against countries which are Members of the I.T.U., but not Members of I.C.A.O.

The draft plan gives priority in the allotment of frequencies to the so-called Major World Air Routes, to the detriment of the needs of the national air routes of many countries, particularly those of the Union of Soviet Socialist Republics.

Frequency requirements of the so-called "Major World Air Routes", calculated at the Conference so as to provide them with great frequency reserves, have been fully met, on a very uneconomical basis, in the draft "R" frequency plan, whereas the minimum requirements of the Union of Soviet Socialist Republics have for the most part not been satisfied. Hence the Union of Soviet Socialist Republics regards the draft plan as unacceptable.

- 2. Although the draft frequency allotment plan for the "OR" service which was adopted by the First Session of the Conference (1948) was unobjectionable from the point of view of frequency allotment, the Administration of the Union of Soviet Socialist Republics cannot, in view of the new circumstances that have arisen, accept it, since it could only be implemented if put into effect in conjunction with a plan for the "R" service.
- 3. The Delegation of the Union of Soviet Socialist Republics therefore declares that its Administration will not consider itself bound by any decisions of the International Administrative Aeronautical Radio Conference (Geneva, 1948-1949), and will reserve the right to use, at its own discretion, any of the frequency bands allocated to the aeronautical mobile R and OR services by the Atlantic City Radio Regulations (1947), until such a time as a new plan, acceptable to all, is adopted.
- 4. In view of the fact that the draft "R" plan was not approved by a considerable number of Delegations, and that, therefore, it has no chances of being implemented, the Delegation of the Union of Soviet Socialist Republics thinks that in adopting such a plan by a majority vote the Conference cannot be considered to have fulfilled its task. Instead, the material accumulated should have been sent to Administrations for study, with a note to them and to the forthcoming Special Administrative Conference to the effect that the International Administrative Aeronautical Radio Conference had failed to attain its ends."

## 9.32 Mr. <u>Jouk</u> (Bielorussian SSR) made the following statement:

"In connection with the adoption by the International Administrative Aeronautical Radio Conference of a draft frequency allotment plan for the aeronautical mobile R service, the Delegation of the Bielorussian Soviet Socialist Republic declares:

- 1. That the draft plan, which was adopted by a majority vote, does not meet the minimum requirements of many countries, amongst them the Bielorussian Soviet Socialist Republic.
- 2. That in the draft plan adopted, preferential treatment has been accorded to the so-called Major World Air Routes, frequencies being allotted to them first and under the most favourable conditions, thus making it impossible to meet the requirements of national air routes in many areas.

Hence the Delegation of the Bielorussian Soviet Socialist Republic, considering such a draft plan to be unacceptable, fully associates itself with the statement made in this connection by the Delegation of the Union of Soviet Socialist Republics, and hereby declares that the Administration of the Bielorussian Soviet Socialist Republic will not be bound by any decisions of the Conference. Furthermore, the Administration of the Bielorussian Soviet Socialist Republic reserves the right to use, at its own discretion, the frequency bands which by the Radio Regulations of 1947 were allotted to the aeronautical mobile R and OR services, until such time as a plan is adopted which will meet the requirements of all countries."

9,33 Mr. <u>Jouk</u>, (speaking on behalf of the Ukrainian S.S.R.) made the following statement:

"The Delegation of the Ukrainian Soviet Socialist Republic fully associates itself with the statement made by the Delegation of the Union of Soviet Socialist Republics in connection with the adoption by the International Administrative Aeronautical Radio Conference, at its Second Session, of the draft frequency allotment plan for the aeronautical mobile R service.

The Delegation of the Ukrainian Soviet Socialist Republic hereby declares that this draft frequency allotment plan for the aeronautical mobile R service is unacceptable, in view of the fact that in it not even the minimum frequency requirements of the Ukrainian Soviet Socialist Republics have been met.

Hence the Delegation of the Ukrainian Soviet Socialist Republic declares that its Administration will not consider itself bound by the decisions of the Conference. Its Administration reserves the right to use frequencies in all the bands allocated by the Atlantic City Radio Regulations (1947) to the aeronautical R and OR services, according to its needs, until such time as a plan is produced which will satisfy the requirements of all countries to an equal extent."

9.34 Mr. <u>Gudović</u> (Yugoslavia) made the following statement:

"At the end of the work of the International Administrative Aeronautical Radio Conference, the Delegation of the Federal People's Republic of Yugoslavia finds it necessary to make the following statement:

Owing to an obvious tendency on the part of the majority to reserve a large proportion of the available frequencies for the so-called MWAR, it has been impossible for our Conference to prepare a draft frequency assignment plan for the "R" bands satisfactory to all countries.

Throughout the Conference, our Delegation has maintained a firm and equitable attitude in order to create the conditions in which a draft plan for the "R" bands might be made which would satisfy the requirements of the air services of all nations Members of the I.T.U., so that the principles and undertakings to which the sovereign nations signatory to the Atlantic City Convention subscribed might be complied with fully.

The draft plan prepared by the Conference is based on I.C.A.O. principles and recommendations, and is full of factors which make it impossible for us to recognise and sign it. Among such factors are the following:

It is evident that this draft plan not only satisfies all the requirements of the Major World Air Routes, but also reserves a large number of frequencies for their "protection" - a fact which can be reconciled only with the tendency to harm and restrict air transport services.

The draft plan shows discrimination against countries which are not Members of I.C.A.O. because those who prepared the "ground work" of this draft did not take into account the interests of countries non-Members of I.C.A.O. In following the I.C.A.O. recommendations and trying to impose them on everyone, the majority of the Conference forgot that the plan prepared within the I.T.U. had to be acceptable on an international scale.

The draft does not satisfy even the minimum requirements of our country. The draft plan accepted as a final variant of the work of the Conference (Document 147) is, in our opinion, the worst of all the drafts discussed. If the plan is put into practice, it will be impossible for us to meet the needs of our air transport services and we therefore declare that:

The Delegation of the  $F_{\bullet}P_{\bullet}R_{\bullet}$  of Yugoslavia will not sign the draft plan for the Aeronautical "R" and "OR" services and reserves the right of its Administration to consider itself unbound by the decisions taken by the Conference and to use frequencies in the bands between 2850 kc/s and 18030 kc/s and in the bands reserved for the "OR" service freely, and as it thinks fit, until such time as a plan is prepared which is satisfactory to all Members of the I.T.U."

9.35 Mr. Balazs (Hungary) made the following statement:

"The Delegation of the Hungarian People's Republic wishes to make the following statement, on behalf of its Administration:

The Delegation of the Hungarian People's Republic cannot accept the draft frequency allocation plan prepared by the International Administrative Aeronautical Radio Conference.

The reasons for which the Delegation of the Hungarian People's Republic is obliged to reject the plan are as follows:

- 1) The draft frequency allocation plan for the aeronautical mobile "R" service does not take into account the frequency requirements of national Administrations as stated by the Administrations.
- 2) The procedure whereby frequencies are not allocated to countries is erroneous and is contrary to the decision taken at the First Session of the Conference.

- 3) The draft plan in question takes into account primarily the requirements of the so-called Major World Air Routes, meeting them to a large degree and allocating to them the greater part of the available frequencies, to the detriment of regional and domestic services. Thus there is no provision in the plan for an equitable distribution of frequencies to all categories of the aeronautical mobile service.
- 4) This measure, adopted for the benefit of a certain group of countries while the draft plan was being prepared, is erroneous and even unjust and goes against the resolution of the First Session of the Conference, which advocated the greatest possible reduction of the requirements of the Major World Air Routes, by means of the most effective methods of coordination.

In view of the above it may be seen that the International Administrative Radio Conference, in devoting itself to a detailed study of the frequency requirements of flight areas of the Major World Air Routes and in allocating frequencies to areas and sub-areas alone, has not accomplished its task.

For the above reasons the Delegation of the Hungarian People's Republic reaffirms that it cannot accept the draft frequency allocation plan for the aeronautical mobile service prepared by such a procedure. It does not regard it as a plan which fully satisfies the frequency requirements of all the Administrations Members of the International Telecommunication Union and cannot, therefore, sign it.

At the same time, the Delegation of the Hungarian People's Republic formally declares that it does not consider any decision of the Conference binding upon its Administration and reserves the right, on behalf of its Administration, to use, in conformity with the Table of Frequency Allocations of the Atlantic City Radio Regulations, any frequency allocated to the aeronautical mobile service that it may deem necessary for the operation of its domestic air services, until such time as a frequency allocation plan for all categories of the aeronautical mobile service acceptable to all countries has been prepared."

## 9,36 Mr. Bodeage (Roumania) made the following statement:

"The Delegation of the Roumanian People's Republic, considering that the International Administrative Aeronautical Radio Conference (I.A.A.R.C.) has drawn up the draft frequency assignment plan for the Aeronautical Mobile "R" service on the basis of the decisions reached unanimously at its First Session regarding the main task of the Conference - the division of the world into areas so that frequency assignments may be repeated as much as possible and the assignment of frequencies to areas and to countries without encroaching on the essential rights of Administrations Members of the International Telecommunication Union - is of the opinion that:

- the I.A.A.R.C. has prepared the draft plan on the basis of the frequency assignment plan for the Aeronautical Mobile "R" service submitted by I.C.A.O., which gives first priority to the so-called Major World Air Routes (MWAR), without satisfying in an equitable manner the present minimum requirements of the Regional and Domestic services of several countries;

- in order to ensure the priority of the MWAR, all proposals to revise the flight areas of the MWAR were rejected, thus making it impossible to exhaust all possibilities of repeating the frequencies of the available spectrum:
- the draft plan is unfinished as it assigns frequencies to areas and sub-areas only and does not go so far as to assign frequencies to National Administrations, which is part of the task of the Conference; and
- the draft plan allows an insufficient number of frequencies for several countries in certain sub-areas and among them for countries of sub-area lD.

For the above reasons, and as the draft plans for the "R" and "OR" services must form a coherent whole, the Delegation of the Roumanian People's Republic finds itself obliged to declare formally on behalf of its Administration that it cannot accept the draft plans prepared by the I.A.A.R.C. and that it does not consider itself bound by the decisions of the Conference. In the name of its Administration it reserves the right to use the frequencies of the Aeronautical Mobile Service bands which are indispensable for the satisfactory operation of its services until such time as a frequency assignment plan acceptable to all countries is prepared."

- 9.37 Mr. Koffer (Czechoslovakia) asked for the insertion in the Final Agreement of the statement made by him before the vote on Document 147 (No.9.11).
- 9.38 Mr. <u>Lalung-Bonnaire</u> (French Overseas Territories) asked whether those Delegations which had stated that they would not comply with the decisions taken by the I.A.A.R.C. intended to observe the provisions of Article 44 of the Atlantic City Convention.
- 9.39 The <u>Chairman</u>, referring, as Delegate of the United States, to the requests made for insertion of statements in the Final Agreement, said that it was uncommon for parties to a contract to allow the insertion in that contract of derogatory statements by non-signatories. In any event, those insertions could only serve to perpetuate in print the negative influences exercised during the Conference. Such requests, coming at the end of eighteen months arduous work by the Conference, were most ill-timed. The final decision on the matter had, however, to be taken by the Assembly.
- 9.40 Mr. <u>Jouk</u> (Bielorussia) said that the Bielorussian Delegation, having participated throughout in the work of the Conference, had every right to request that its point of view be stated in the final document. This had been permitted at the European Broadcasting and Maritime Conferences in Copenhagen in 1948, and also at the Loran Conference in Geneva in February 1949. Moreover, the final document of the Conference would be examined by the Extraordinary Administrative Conference, and if the dissenting opinions were not included, the work of the I.A.A.R.C. would be presented in a one-sided manner. He wished, therefore, to insist on the inclusion of his statement in the Final Agreement.
- 9.41 Mr. Quijano (Colombia) while agreeing that any delegation had the right to make reservations, could not consent to signing a document which contained statements, derogatory to his country, made by one delegation and repeated by several others. He was, therefore, opposed to the inclusion of such statements in the Final Agreement. The Delegations concerned would have full opportunities to express their opinions at the Extraordinary Administrative Conference.

- 9.42
- Mr. Souto Cruz (Portugal) thought that Delegations which were not prepared to sign the Final Agreement did not have the right to insert statements in it. Mr. Jouk had pointed to the procedure followed at Copenhagen and elsewhere, but other cases where the opposite had been done could also be quoted. Since it would, nevertheless, be useful if Administrations were informed on the points of view expressed at the Conference, he proposed the following resolution:
- "1. That the Final Acts of the Conference contain only statements of signatory countries.
- 2. That the statements of non-signatory countries be included in the Minutes of the final Plenary Meeting, and that a copy of these Minutes be sent, along with a copy of the Final Acts of the Conference, to each of the countries Members of the Union."
- Mr. Hansen (Argentine) seconded the above proposal, which was entirely equitable. He had already pointed out to Mr. Jouk in the Drafting Committee that he had no objections to the inclusion of reservations in the Final Agreement, provided that the Delegation concerned signed the Agreement. However, as he had said at the 26th Plenary Session, it had become clear to him that the Soviet Delegations did not intend to sign. Subsequent events had proved him to be correct. From the time that Document 70 had been submitted, and rejected by the Assembly, it had been evident that the Soviet intention had been solely to obstruct the work of the Conference. The Argentine Delegation was opposed to the inclusion of the dissenting statements in the Final Agreement.
- 9.44 Mr. <u>Deuchars</u> (U.K. Colonies), made the following statement:

"Mr. Chairman - As I said earlier, I am quite satisfied that there is no substance or foundation in the many complaints and objections made by certain Delegations.

As a member of one of the Delegations who have approved Document No.147, I cannot see any justification for allowing those few Delegations who chose to reject this plan to carry these unfounded statements into the final report or final acts of this Conference.

I therefore support the motion of the honourable delegate of Portugal."

- 9.45 Mr. <u>Kito</u> (Albania) protested against the United States Delegation's suggestion, (No.9.39) which was discriminatory and unjust towards a large number of delegations, and which should be rejected by the Assembly. At other conferences of the I.T.U. such as those at Montreux and Lucerne, and at the 1948 Copenhagen Conference, non-signatory delegations had inserted their final statements in annexes to the respective Conventions. This right should also be respected at the I.A.A.R.C., which had drawn up, not even a convention, but a final report.
- 9.46 Mr. <u>Harizanov</u> (Bulgaria) made the following statement:

"I know in advance what will be the outcome of this discussion arising out of the question just raised by the Delegation of the United States of America. Nevertheless, I feel bound to point out that the work of an international conference is no more than the sum of various proposals, counter-proposals, criticisms, replies, etc., etc. All things considered, a spirit of cooperation can alone assure success. In the present case, therefore, when a unanimous decision has been impossible, it is logical that the non-signatory delegations should have an opportunity of explaining their motives for abstaining. The normal procedure in such cases is to insert the statements of non-signatory delegations in the final acts of the Conference. The Bulgarian Delegation, therefore, feels bound to protest strongly against the discriminatory and biassed tactics used by the Chairman and the majority with a view to preventing the inclusion of the minority delegation's statements in the final acts of the Conference."

9,47 Mr. <u>Bolkhovitin</u> (USSR) quoted the procedure adopted at Copenhagen and elsewhere. The opinion of those who did not sign the Final Agreement had to be clearly recorded in it, especially since the Plan was only a draft.

He rejected Mr. Quijano's inference that the Soviet Delegation had dictated the attitudes of other delegations. The Delegations present represented sovereign countries and they accepted no dictation in matters of policy.

In reply to Mr. Hansen (No.9.43), he said that the Soviet Delegations made its own decisions and required no advice from other quarters. Mr. Hansen's statement was tactless and reflected no credit on the Argentine Delegation.

Mr. Bodega (Roumania), referring to the Chairman's statement as U.S. Delegate (Nr. 9.39), pointed out that the final document was not, strictly speaking, a final contract or convention, since the Conference's task had been to draft a plan for submission to the Extraordinary Administrative Conference. The final document was more in the nature of a report to the Extraordinary Conference showing the results of the work and the extent to which the task had been fulfilled. It was logical, therefore, that the grounds on which several delegations had refused to accept the plan be clearly stated in the document, so that the Extraordinary Conference would be able to draft a realistic plan.

It had been said that the inclusion of the statements would prevent some delegations from signing. At the same time it was said that the statements were unfounded. This, he thought, merely demonstrated once more that the statements were well founded and that the real objection lay in the fact that they might damage the interests of countries whose requirements had been fully satisfied.

9.49 Mr. Barajas (Mexico) said that this problem had been discussed at length at the Mexico Conference, which had decided that such statements shauld not be included. He moved that the debate be closed, and this motion was seconded by Mr. Quijano, Mr. White, and others, The motion was adopted, the results of the vote being as follows:

In favour : 31 Opposed : 10 Abstentions : 3

In accordance with the above decision, a vote was then taken on Mr. Souto Cruz's proposal, (No.9.42) which was adopted, the results of the vote being as follows:

In favour : 31 Opposed : 10 Abstentions : 1

### • 9.50 Mr. Kito (Albania) made the following statement:

"The Delegation of the People's Republic of Albania considers that the decision taken by the majority, on the basis of the suggestion by Mr. Lebel, Delegate of the United States of America and Chairman of the Conference, not to insert the statements of non-signatory delegations in the final acts, is a discriminatory and anti-democratic decision inspired by purely political considerations.

The fact that amongst the delegations voting for the United States
Delegation's enggestion are those of countries (the United Kingdom and France
for example) which last year, at the Plenipotentiary Broadcasting Conference
at Copenhagen, raised no objection to the insertion in the Convention of nonsignatory delegations' statements (those of Austria, Egypt, Sweden, Turkey,
etc.), proves that the reason for the United States proposal and for the
decision taken is that the non-signatories at this Conference are the Soviet
Union and the People's Republics.

At the Copenhagen Conference, my Delegation and those of the Soviet Union and the People's Democracies did not contest the right of non-signatory Delegations to include their statements in the Convention. It is to be deplored that the Delegations of the countries that did not sign the Copenhagen Convention and whose statements appear in that Convention have now voted for the United States suggestion, taken up again in another form by the Delegation of Portugal.

The above facts and the fact that, though the statements of non-signatory countries are to be found in the conventions of plenipotentiary conferences of the I.T.U., this Conference forbids the insertion of such statements in its final acts - and it is a question not of a convention, nor even an agreement, but of a final report - these facts, I say, incontestably prove that, behind the technical and legal arguments advanced by certain delegations supporting the decision taken, are tendencious motives of a political nature.

The Albanian Delegation, therefore, most categorically protests against this discriminatory and undemocratic decision, which is in violation of the rights of a large number of the sovereign countries Members of the I.T.U.".

- 9.51 Mr. <u>Harizanov</u> (Bulgaria) supported Mr. Kito's statement.
- 9.52 Mr. <u>Bolkhovitin</u> (USSR) also supported Mr. Kito's statement. The Soviet Delegations had been accused of political bias, but the decision not to include statements in the final agreement was indeed a political decision.

In regard to the remaining documents on the Agenda, the Soviet Delegation would not participate in the discussion on them in accordance with the statement previously made by the Soviet Delegation.

- 9.53 Mr. <u>Lalung-Bonnaire</u> (French Overseas Territories) requested an answer to his question (No. 9.38) concerning the observation of Article 44 of the Convention, by those Administrations which did not propose to respect the decisions of the I.A.A.R.C. Mr. <u>Bolkhovitin</u> (USSR) agreed to answer this question later in the Meeting (See No. 14.2).
- 10. Item 13 of the Agenda DRAFT RECOMMENDATION BY THE BELGIAN DELEGATION
- 10.1 Mr. <u>Seydel</u> (Belgium) introducing Document 151, said that the aim of the proposal was to provide administrations with as much documentation as possible

on the proposals made by I.T.U. Members for the work of administrative conferences. This, it was felt, would help in the solution of problems and in actual preparation for such conferences.

- Mr. <u>Selis</u> (Netherlands) suggested that this matter be dealt with, not in a recommendation from the Conference, but in a letter from the Chairman of the Conference to the Secretary General of the Union, suggesting that in the future all preparations for aeronautical conferences be made in accordance with para. 4 of Chapter 1 of the General Regulations. This proposal was accepted by Mr. <u>Sevdel</u>, who withdrew his proposed recommendation, and it was <u>agreed</u> that the Secretary be requested to draft a letter, to the Secretary General as suggested by Mr. Selis, to be signed by the Chairman of the Conference.
- 11. Item 5 of the Agenda DEFINITIONS (Document No. 140)
- 11.1 The <u>Chairman</u> suggested that, since this document had already been fully examined in the Plenary Assembly, it might be adopted without further discussion. In the absence of objections, Document No. 140 was unanimously approve
- 12. Item 7 of the Agenda RECOMMENDATIONS AND RESOLUTIONS (Document No. 145)
- The <u>Chairman</u> announced that the "decisions" on page 5 of Document 145 were to be replaced with those given in Document 150.
- Document No. 145 and Document 150 were discussed at length by Mr. Petit (IFRB), Mr. Searle (New Zealand), Mr. Rafuse (Canada), Mr. Boctor (Egypt), Mr. Seydel (Belgium), Mr. Layzell (IATA), Mr. Lalung-Bonnaire (French Overseas Territories) and Mr. Selis (Netherlands) were amended to read as they appear in the Final Agreement.
- Mr. <u>Harizanov</u> (Bulgaria) intimated that he would not participate in the discussion of Documents 140, 145, 151 and other documents on the Agenda, since they represented only insignificant additions to the plans already rejected by the Bulgarian Delegation.
- Mr. Rafuse (Canada) requested that the statement made jointly by the U.S. and Canadian Delegations during the 29th Plenary Session (See No.3.15 of Aer/2 153) be included in the Minutes of the Meeting as follows:

"As far as I.C.A.O. holding Regional or Special meetings for RDARAs 10 or 11 is concerned, we feel it would be an unwarranted expense since only Canada and the U.S. are involved, and, therefore, in accepting this Recommendation, it is to be understood that there will be no such meetings for RDARA's 10 and 11."

Mr. Seydel (Belgium) raised the question of the use of "safety frequencies" for public correspondence in the case of flights over large land masses where there were no coast stations. Mr. White (USA) said that the U.S. viewpoint was that safety frequencies should never be used for public correspondence. Such use was unwarranted, and might prejudice the allotment of frequencies to the aeronautical services at the next administrative conference dealing with that question.

- 12.6 Mr, Rowland (United Kingdom) wished to repeat his viewpoint frequently expressed at the First Session, that the use of aeronautical mobile frequencies for public correspondence was to be deprecated.
- 12,7 Mr. Selis (Netherlands) made the following statement:

"The Netherlands Delegation feels that in certain cases it may be impracticable to use maritime mobile facilities for public correspondence with aircraft, and it believes that a very small amount of public correspondence could be handled on certain aeromobile Al frequencies without any difficulty of any character.

The Netherlands Delegation therefore feels that it must reserve the right to make such small use of those frequencies for public correspondence with aircraft as may be necessary and possible, on the condition that in so doing the absolute priority of safety and control messages will be recognized."

- Mr. <u>Lalung-Bonnaire</u> (French Overseas Territories), Mr. <u>Chef</u> (speaking on behalf of the Belgian Congo) and Mr. <u>Seydel</u> (Belgium) asked that it be recorded that their viewpoints on this question coincided exactly with that of Mr. Selis.
- 13. Item 9 of the Agenda: Document 144 (BOUNDARIES OF RDARAS)
- Mr. White (U.S.A.), Mr. Layzell (I.A.T.A.) and Mr. Khan (Pakistan) requested various amendments to this text, and it was <u>agreed</u> that this should be dealt with by the Drafting Committee. Subject to these amendments, Document 144 was declared approved.
- 14. Item 6 of the Agenda: Document 146 (TECHNICAL PRINCIPLES)
- Before discussion of Document 146 was commenced, the following items were dealt with:
- Mr. <u>Bolkhovitin</u> (USSR), in reply to the question put by Mr. Lalung-Bonnaire concerning possible interference in connection with the implementation of the plan, with which a number of delegations had expressed their disagreement, stated that those delegations had previously given warning that such a plan was unacceptable.
  - If, in spite of this, the majority of the delegates to the Conference had decided to adopt such a draft plan by means of the vote, then obviously the responsibility for possible mutual interference would reside with those delegates of the "majority" and with their Administrations, who, in full knowledge of the possible consequences, had accepted such a decision.
- 14.3 Mr. <u>Lalung-Bonnaire</u> (French Overseas Territories) asked whether, if the plan adopted by the majority were not to be respected by the minority, there could have been any possibility of the majority's accepting the plan desired by the minority.

Although unanimity had not been obtained, there had been agreement.....

14.4 Mr. <u>Kito</u> (Albania) considered that Mr. Lalung-Bonnaire's question was out of place and premature, since the Plan was to be submitted to the Extraordinary Administrative Conference. The appropriate time to answer such a question would be during that Conference.

- Mr. <u>Hansen</u> (Argentine) was not satisfied with the answer given to Mr. Lalung-Bonnaire's question. If the democratic principles so often evoked were adhered to, a satisfactory answer to this question, which the Argentine Delegation also wished to pose, would be a simple act of courtesy. If no such reply were forthcoming, he would request that it be recorded that the Delegates of the minority had refused to answer.
- 14.6 Mr. Lalung-Bonnaire (French Overseas Territories) in reply to Mr. Kito (No. 14.4) insisted that his question had not been answered, and this was, he thought, because they did not wish to reply. He asked that the following be recorded in the Minutes:

"After the ten minority Delegations stated that they would not sign the Final Agreement, certain discussions and decisions on various documents have taken place. The ten above-mentioned Delegations did not participate in these discussions and decisions."

14.7 Mr. Petit (I.F.R.B.) made the following statement:

"I wish to inform your Conference of certain aspects of the work of the P.F.B. which concern the Aeronautical Conference.

For some time already, the P.F.B. has been dealing with the requirements for the aeronautical mobile fixed service, for that body is responsible for frequency assignment to the stations of that service.

Unfortunately, with the exception of the circuits between the countries of Western Europe for which it was possible to draw up a coordinated plan, the situation as regards the remainder of the world is not perfectly clear, and I think I may even say that here there is a certain confusion. However, it has become a matter of urgency that the situation be clarified without delay and that the circuit requirements of the aeronautical fixed service be coordinated, in order to ensure on the one hand that stations belonging to the same network receive the same frequencies, and, on the other, to avoid any waste of frequencies which would arise if different allotments were made to circuits comprised in the same network.

The National Members of the P.F.B. were therefore requested, in a memorand dated October 7th 1949, (Document P.F.B. No. 653), to draw up a list of all circuits which had already been notified to the Board and which are intended for the international aeronautical fixed service, domestic circuits belonging to the networks of the said service to be included. It was, moreover, suggested that, in case of uncertainty, they consult the aeronautical experts participating at the time in the Aeronautical Conference.

Considering that this matter affects the interests of the aeronautical service in general, I take the liberty of asking the experts of the Aeronautical Conference now present to contact as soon as possible, and, in any event, before leaving Geneva, the National Members of the P.F.B. and supply them with whatever information they might lack.

I feel certain, in advance, that my appeal will be heard, for no delegate here present will fail to appreciate the importance for the operation of air lines, of the satisfactory functioning and coordination of the aeronautical fixed service circuits."

14.8 Discussion was opened on Document 146.

Various amendments were suggested and accepted, and the amended document was declared approved by all Delegations, except those which had already stated that they would not participate in the discussion.

During the discussion, Mr. Petit (I.F.R.B.), in reply to a suggestion by Mr. Layzell (I.A.T.A.) for the deletion of paragraph 9 on page 6, said that such deletion would render pointless the inclusion of an Article entitled "Technical Principles". Mr. White U.S.A.) emphasized that Article 2 was to be regarded merely as an index of the information in the relevant sections of Volume I of the Interim Report. The proposal for deletion of paragraph 9 was rejected. On a proposal of Mr. Quijano, it was decided that the word "Acceptable" in title of para. 9 be altered to "Accepted".

## 15. Item 14 of the Agenda: ANY OTHER BUSINESS

- 15.1 The Minutes of the 29th Plenary Session (Aer/2 Doc. 153) were considered and approved subject to various amendments which appear in the corrigendum (Doc. Aer/2 No. 163).
- It was <u>agreed</u> that, in accordance with para.4. (1) of Rule 21, Chapter 6 of the General Regulations, this Document No. 162, constituting the Minutes of the closing session of the Plenary Assembly, would be examined and approved by the Chairman of the Conference.
- 15.3 Mr. Mouchez (France), Chairman of Committee 3, said his Committee would be formally dissolved after the documents approved during the 30th Plenary Session had been drafted in their final form.
- 15.4 Mr. <u>Boctor</u> (Egypt) submitted the following reservation for inclusion in the Final Document of the Conference:

"The Egyptian Royal Government desires to direct attention to the radio frequency requirements submitted by the United Kingdom to this International Administrative Aeronautical Radio Conference for stations situated in Egypt in the Suez Canal Zone and to their intention to make at the Extraordinary Administrative Radio Conference for the approval of the New Frequency List, a formal reservation on this matter, in so far as their sovereign rights to regulate telecommunications in Egypt are concerned."

- 15.5 Mr. White (U.S.A.), Chairman of Working Group C, announced that the report of the final meeting of his Working Group (Aer/2 Doc. 160) was to be approved by him in accordance with the decision taken at that meeting (Aer/2 Doc. No.160 No. 11).
- 15.6 Mr. <u>Gillioz</u> (Switzerland) submitted the following reservation for inclusion in the Final Document of the Conference:

"On signing the Final Agreement of the International Administrative Aeronautical Radio Conference, the Swiss Delegation states that the 5 frequencies requested in the OR frequency bands represented the indispensable minimum for its services. The "OR" allotment plan provides for Switzerland only two assignments and one secondary assignment. Since these assignments are inadequate for the operation of the "OR" services, the Swiss Delegation reserves for its Administration the right to request additional indispensable assignments at the Extraordinary Administrative Conference."

15,7 After the Chairman had explained the arrangements for signature of the Final Agreement, Mr. <u>Bolkhovitin</u> (USSR) made the following statement:

"Since, in defiance of the previous decision taken by the Conference itself (Aer Doc. 87), the final documents of the Conference are not prepared in the Russian language, which is an official language of the I.T.U., the Soviet Delegation considers this to constitute a violation of Article 15, para. 2 of the Atlantic City Convention (1947) and of Article 24 of the General Regulations, and to be discriminatory towards the Russian language.

The Soviet Delegation, therefore, reserves for its Administration the right to determine accordingly its attitude towards the Conference expenses for the other languages."

- 15.8 Mr. <u>Jouk</u> (Bielorussia) fully supported Mr. Bolkhovitin's statement both on behalf of the Bielorussian S.S.R. and the Ukrainian S.S.R.
- 15,9 Mr. White (U.S.A.) pointed out that paragraph 3 of Article 15 of the Convention referred to the procedure to be followed on publication of the final documents by the Secretary General. Until that time the documents remained working documents of the Conference. He therefore rejected the Soviet statement that the Conference had violated its own decisions on languages.
- 15.10 Mr. Quijano (Colombia) agreed with Mr. White's statement, and drew the attention of the Soviet Delegation to the relevant Resolution on publication of documents of the 4th Session of the Administrative Council.
- Mr. Jouk (Bielorussia) replied that, in accordance with Rule 24 of Chapter 6 of the General Regulations, final documents of a Conference had to be prepared by the Conference itself. This had not been done by the I.A.A.R.C., and he considered that the Convention had, therefore, been violated. The publication of documents after the Conference was a separate matter. The Soviet Delegations had read and duly noted the Resolution of the Administrative Council referred to by Mr. Quijano.
- Mr. Harizanov (Bulgaria) said that the Soviet statement in regard to para, 2 of Art. 15 of the Convention was entirely correct and justified. Russian was an official language of the I.T.U., and, in virtue of the paragraph quoted, which was only too clear, the final document of the I.A.A.R.C. had to be prepared also in the Russian language. For these reasons, he supported the viewpoint of the Soviet Delegation.
- Mr. <u>Kito</u> (Albania) disagreed with Mr. White's interpretation of para. 3 of Art. 15 (No. 15.4). Rule 24, Chapter 6 of the General Regulations made it quite clear that the Final Document had to be prepared by the Conference itself. Article 15 had indeed been violated, and the Soviet and Bielorussian protests were completely justified.
- Mr. Quijano (Colombia) pointed out that the Soviet Delegation had not requested that the final documents be completed in Russian at the same time as in the other languages. Rule 24 of Chapter 6 of the General Regulations specified that texts would be final <u>after</u> they had been read; he could not, therefore, understand the protests made by Delegations whose mother tongue was not Russian.

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- Mr. <u>Harizanov</u> (Bulgaria) replied that the non-Russian speaking delegations were not defending any individual rights, but the rights accorded all members of the I.T.U. by the Convention.
- Mr. <u>Bolkhovitin</u> (USSR) replying to Mr. Quijano, said that the Soviet Delegation had not thought it necessary to raise the question of simultaneous preparation in all languages of the Final Document because the Conference itself had taken a decision to this effect (Doc. Aer/2 No. 87). Rule 24 made it quite clear that the preparation of documents for signature had to be done by the Conference itself.
  - Mr. Quijano (Colombia) said that Rule 24 dealt with "final approval" and did not imply, as Mr. Bolkhovitin thought, that the documents had to be prepared for signature in all languages simultaneously.
  - Mr. Mouchez (France), Chairman of the Drafting Committee, said that, since no Russian speaking delegates had been present at the Drafting Committee, it would have been impossible to prepare the texts in that language,
  - 15,18 Mr, Gudović (Yugoslavia) pointed out that his Delegation considered the Final Document to be in the nature of a final report. If, however, the majority decided, as it had done, to consider this document as "Final Acts", then the language provisions of the Atlantic City Convention would have to be observed.
  - Mr. <u>Harizanov</u> (Bulgaria), in reply to Mr. Mouchez (No.15.17) said that, if the presence of Russian speaking delegates had been desired by the Drafting Committee, a notice to this effect could have been posted on the notice board.
  - 15.20 Mr. <u>Jouk</u> (Bielorussia) said that he would have willingly checked any Russian text for Mr. Mouchez, had there been any; he did not consider, however, that he should be expected to do the actual translation.
  - Mr. <u>Bolkhovitin</u> (USSR) rejected Mr. Mouchez's statement that the work of translation into Russian would not have been possible in the Drafting Committee, on account of the absence of Russian speaking delegates. There had been translators available to do such work, and Russian speaking delegates could have been consulted on the matter without difficulty.
  - The <u>Chairman</u> introduced the Final Report of the Steering Committee (sitting as the Finance Committee), contained in the Annexes to Doc. 156, and drew attention to the considerable savings effected in comparison with the budget prepared by the Administrative Council. It was reasonably certain that there would be no substantial departures from the figures of estimated expenditure given in Annex II.
- Mr. Searle (New Zealand) proposed that the Finance Committee's Report be approved by the Assembly, and his proposal was seconded by Mr. Rowland (United Kingdom), Mr. Mouchez (France), Mr. White (U.S.A.), Mr. Barajas (Mexico), Mr. Boctor (Egypt), and other delegates. No objections being raised, the Report of the Finance Committee was declared adopted unanimously. It was further agreed that the Chairman should transmit this Report to the Secretary General of the Union.

- The <u>Secretary</u> read out the texts of the documents which were to be included in the Final Agreement, with the amendments which had been proposed and accepted during discussion on them earlier in the Meeting (Items of the Agenda 5 to 12 inclusive). The amended documents were accepted by the Assembly as being in order.
- The <u>Chairman</u> proposed that, since the above-mentioned documents had already been formally approved by the Assembly, Delegates proceed to sign them. It was so <u>agreed</u>, and the Final Agreement and Plan was then signed by the individual Delegations, with the exception of those Delegations which had previously notified their intention not to sign.
- During the signing ceremony, Mr. Rao, the Delegate of India, submitted the following reservation, for inclusion in the Final Agreement:

"India is not adequately satisfied with the plan at present made for the "R" service, although she agrees that, under the present circumstances, it is expedient that the work of the Conference be terminated at this stage. She fully expects that improvements could be made at the Extraordinary Radio Administrative Conference, and signs the Final Agreement on the understanding that it does not limit in any manner the carrying out of such improvements."

During the signing ceremony, Mr. Khan, the Delegate of Pakistan, submitted the following reservation, for inclusion in the Final Agreement:

"The Delegation of Pakistan has lent its support to the technical principles adopted by the Conference as basis for determining the frequency allotment plan for the Aeronautical Mobile "R" Service; however, it finds itself in agreement with the considerations which appear in the declaration of the Canadian Administration; and in the event that the needs of Pakistan for Aeronautical Mobile "R" service frequencies are not fully provided for at the implementation meetings, the Government of Pakistan reserves the right to the use of such additional frequencies as may be deemed essential, in the opinion of the Pakistan Administration, to provide a reasonably satisfactory service in the interests of safety of life in the air."

15.27 Mr. Rowland (United Kingdom) made the following statement:

"Mr, Chairman: My opening remarks I wish to direct to the Conference as a whole,

It seems a long, long time since we first came together to carry out the task which has now been concluded.

Only by an intense determination to succeed could we have surmounted the many trials and tribulations we met along the road, and may it be to the lasting credit of this Conference that even in our disagreements — and they have been many and varied — we have never lost that spirit of good fellowship without which nothing — even success — would be worth while.

My closing remarks I have reserved for you, Mr. Chairman.

There have been dark moments during the long days of our Conference when it has seemed that we might fail in our task. In those moments your chairmanship par excellence, your energy, drive and inimitable personal qualities have been the inspiration by which we have survived and the torch which has led us to our success.

It seems a pitifully small reward for so great a service to say - thank you, Mr. Arthur Lebel."

- 15.28 Mr. Souto Cruz (Portugal) supported Mr. Rowland's statement. The great advances made during the Conference were largely due to the Chairman's leader-ship.
- 15.29 Mr. <u>Deuchars</u> (United Kingdom Colonies) wished to associate himself with the United Kingdom statement above (No.15.27).
- Mr. Selis (Netherlands) thanked the Chairman for his efficient and impartial leadership, which had been one of the main factors contributing to the success of the Conference. All the tributes already paid to the Chair were eminently deserved.
- 15.31 Mr. Khan (Pakistan) made the following statement:

"According to popular belief, words flow as abundantly in the East as sentiments and emotions; however, on this occasion I am at a loss to find enough words to express my deep appreciation of the good work done by you, Sir, as the Chairman of this Conference; there is a word in my language which would adequately express all that I feel at the present moment, and that is "Mar-habb". It is not possible for me to translate this word as it is so full of meaning. It is a word we use to show our admiration as well as appreciation of a deed done bravely and successfully — and that, Sir, is what you have done, from the start to the finish, at this Conference. Mr. Rowland, the honourable Delegate of the United Kingdom, who spoke a few minutes ago, has voiced many of our thoughts — he has the command of the English language which I have not and therefore, Sir, I would like to associate myself with Mr. Rowland in what he has said about your contributions, and that of the Delegation of the United States, to the success of our Conference. I thank you, Sir,"

15.32 Mr. <u>Searle</u> (New Zealand) made the following statement:

"Mr. Chairman: The result achieved today is a tribute to the cooperation and understanding which has existed between the countries interested in a safe world plan for aeronautical radiocommunications. In many cases international interests have been placed before national interests and motives of the highest order have therefore been in evidence.

There has been cooperation in the aeronautical sphere of the Conference where countries have in many cases drastically reduced their frequency requirements. Countries have also come together with a view to the coordination of frequency usage and therefore a most efficient condition has emerged from the Conference. The member countries of I.C.A.O. have effectively played their part within that organization with a view to giving general assistance in solving the essentially aeronautical problems involved.

The result of the Conference has, thus, clearly been based on a cooperative spirit, shown in both the aeronautical and radio communications spheres.

Looking in retrospect, we should also remember that the Geneva Plan is based on a wise application of technical principles and propagation data. The propagation data used for the sharing of frequencies is again the result of scientific cooperation between many countries who have seen fit to establish and operate a world system of ionosphere recording stations. Without this system, the same plan would not have been possible. A tribute must, in this respect, be paid to the U.S. Delegation in making High Frequency propagation data available to the Conference in consolidated form.

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Mr. Chairman, two days ago New Zealand drew attention to the part played by yourself and those who have assisted you in the activities of the Conference.

We now fully endorse these remarks and those of the Delegations of the United Kingdom, Portugal, United Kingdom Colonies, Netherlands and Pakistan.

Thank you, Sir."

- Mr. Rao (India) said that the purpose of the Atlantic City Conference had been the re-organization and regulation of world communications on a scientific basis, and this purpose had been fulfilled most effectively by the aeronautical Conference, which had approached its work in a truly international spirit. The United States Delegation and organizations in the United States had contributed magnificently to the success of the work, and he wished to associate himself with all the tributes paid to that Delegation and to the Chairman of the Conference.
- Mr. <u>Mulatier</u>, Assistant Secretary General of the Union, expressed apologies on behalf of Dr. von Ernst, who had been prevented by pressure of work from attending the Meeting. The successful results of the Conference were due, he considered, to the international spirit which had prevailed. This spirit had been fostered by the Chairman, to whom he extended warm congratulations. Mr. Lebel had given unsparingly of his energies throughout the whole Conference. The truly international spirit which he had shown throughout his long connection with the I.T.U, had undoubtedly stimulated many of the Delegates. He had guided the debates with good nature and justice.

The Conference had carried out efficiently a very difficult task, and in a much shorter period than had originally been forecast; it had set an example in this respect to other conferences.

He congratulated the Delegates on the successful outcome of their work and welcomed to the headquarters of the I.T.U those among them who were to remain in Geneva as Delegates to the Provisional Frequency Board.

- 15.35 The <u>Chairman</u> thanked Mr. Mulatier on his own behalf and on behalf of the Conference.
- Mr. <u>De Haas</u> (Indonesia) said that the result of the work of the Conference was a landmark in international cooperation. The many difficulties which had arisen had been speedily overcome, and it was clear that Administrations had been willing to modify their requirements in the interests of air navigation and of safety of human life. He wished to associate himself with the tributes already paid to the Chairman.
- 15.37 The Chairman made the following statement:

"May I be permitted to say a few words, as Chairman of this Conference, regarding the work done?

We have just signed a document which contains a plan for the allotment of frequencies to the aeronautical mobile R and OR services. That plan is based on carefully considered technical principles which when tested by the standards of those who are known to have had extensive experience in the operation of international and domestic air transport services, will be judged

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sound. The technical standards are listed in the documentation of the Conference, and they are summarized very briefly in Part I of our Final Document. They are not only sound standards, but they are also minimum standards, because throughout the course of their preparation we have borne in mind the fact that the radio spectrum is today the scarcest commodity in the world. It is true that we have had to make some departures from those standards but such departures were resorted to only in cases where it was clear that by that method we would gain substantial advantages in the direction of greater frequency repetition possibilities. We maintain our opinion, however, that the standards, as set forth, are minimum standards if we are to have reasonably safe and efficient air/ground communications.

The allotment plan itself, in our own judgment, is also sound. We admit that it may be possible to make a better plan; but anything that is made by the human hand or mind can always be better. We believe that the Geneva I.A.A.R.C. plan, within reasonable limits, makes the best possible use of the frequencies, altogether too few, which we had at our disposal. It is our belief that if it is judiciously implemented, it will satisfy the majority of the needs of air/ground communications in radio channels.

In the process of working out a plan for the ultimate utilization of the Atlantic City aeronautical mobile bands, there is a point at which the task of this Conference had to end: that point is the completion of a reasonably satisfactory allotment plan. The next phase will be implementation, starting with the detail work of station assignments. There is no reason to expect that those who will come after us and undertake that next phase will have less skill or less perseverance than we have had.

I wish finally to record my very profound and sincere regret that it was not possible for some of the participating delegations to sign this Final Document. At the same time I wish to express my fervent hope that from now until the time of the Extraordinary Administrative Conference which will study the new Frequency List, they will find it possible to accept, at least in a general way, the views of the majority of this Conference. We want them to join us, we ask them to do so and hope they will."

- 15.38 The <u>Chairman</u> thanked the Assembly for the compliments and tributes paid him. The success of the Conference was, however, the result of teamwork between the delegates themselves and the Chairmen and Vice-Chairmen of Committees and Working Groups. Without this teamwork, and without the magnificent support and friendly cooperation which had been given him, success could not have been achieved.
- 15.39 The <u>Chairman</u> expressed his gratitude to the Secretary, Mr. Kunz, to the rapporteurs, translators, interpreters and to the Secretariat. The efficiency of their work had been an indispensable contribution to the success of the Conference.
- The <u>Chairman</u> then declared the International Administrative Aeronautical Radio Conference closed at 11.10 a.m. on Friday, October 14th 1949.

The Rapporteur:

The Secretary

The Chairman:

G. M. FORREST

J, KUNZ

A, L, LEBEL