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نقالاً من وثيقة ورقية أصلية ضمن الوثائق المتوفرة في قسم المكتبة والمحفوظات.

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INTERNATIONAL TELECOMMUNICATION UNION

# RADIO REGULATIONS

## A NOTE FROM THE ITU LIBRARY & ARCHIVES SERVICE

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**APPENDIX 26**

**to the Radio Regulations**  
**Geneva, 1959**

**Frequency Allotment Plan**  
**for the Aeronautical Mobile Service**  
**and Related Information**

(See Article 7 of the Radio Regulations, Geneva, 1959)



**General Secretariat of the  
International Telecommunication Union  
GENEVA**

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### **Frequency Allotment Plan for the Aeronautical Mobile Service and Related Information**

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and Related Information**  
(See Article 7)

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## PART I

### General Provisions

#### Section I. Definitions

1. *Frequency Allotment Plan*

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

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

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

3. *A Major World Air Route* is considered to be a long-distance route, made up of one or more segments, essentially international in character, extending through more than one country and requiring long-distance communications facilities.

4. *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.

5. *Regional and Domestic Air Routes* are all those using the Aeronautical Mobile (R) Service not covered by the definition of Major World Air Routes in paragraph 4 above.

6. *A Regional and Domestic Air Route Area (RDARA)* is one embracing a certain number of the air routes defined in the foregoing paragraph.

7. *Family of Frequencies in the Aeronautical Mobile Service*

A group of frequencies selected from different aeronautical mobile bands in such a way as to permit communication, at any time and over any distance, between aircraft in flight and appropriate aeronautical stations.

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

**A. Determination of Channel Width**

**1. Frequency Separation**

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

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

- a) It is assumed that A3 modulation frequencies will be limited to 3 000 cycles per second and that the sideband radiation of other authorized emissions will not exceed that of A3 emissions.
- b) 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.
- c) It is recognized that two or more A1 channels can be derived from each of the channels provided under this frequency separation plan.
- d) 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.
- e) The arrangements contemplated in b) c) and d) above should be made under the provisions of Article 43 (Special Agreements) of the International Telecommunication Convention and Article 4 of the Radio Regulations.

**2. Frequencies to be allotted**

The list of the frequencies to be allotted in the exclusive aeronautical mobile bands, on the basis of the frequency separation provided for under paragraph 1 above, will be found in the table opposite.

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

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

Notwithstanding those provisions of the Allotment Plan set forth in Part II hereof, the frequency 5 680 kc/s may also be used at aeronautical stations for communication with aircraft stations when other frequencies of the aeronautical stations are either unavailable or unknown. However, this use shall

## kc/s

2 850 - 3 155	3 400 - 3 500	5 450 - 5 480	6 525 - 6 765	8 815 - 9 040	11 175 - 11 400	15 010 - 15 100	
2 854	3 404·5	Region 2  5 454 (R) 5 461·5 4 channels 5 469 5 476·5	6 529·5 6 537 6 544·5 6 552 6 559·5 6 567 6 574·5 6 582 6 589·5 6 597 (R) 6 604·5	8 820 8 828·5 8 837 8 845·5 8 854 8 862·5 8 871 8 879·5 8 888 8 896·5 8 905	11 180·5 11 190 11 199·5 11 209 11 218·5 11 228 11 237·5 11 247 11 256·5 11 266 *11 273	15 016 15 026 15 036 15 046 15 056 (OR) 15 066 10 channels 15 076 15 086 *15 092·5 *15 096·5	
2 861	3 411·5		6 612	8 913·5	11 280·5 11 290 11 299·5 11 309 11 318·5 11 328 11 337·5 11 347 11 356·5 11 366 11 375·5 11 385 11 394·5	17 900 - 18 030  17 906·5 17 916·5 17 926·5 17 936·5 (R) 17 946·5 7 channels 17 956·5 17 966·5  *17 975 17 983·5 17 993·5 (OR) 18 003·5 6 channels 18 013·5 18 023·5	
2 868	3 418·5		6 619·5	8 922			
2 875	3 425·5		6 627	8 930·5			
2 882	3 432·5		6 634·5	8 939			
2 889	3 439·5		6 642	8 947·5			
2 896	3 446·5		6 649·5	8 956			
2 903	3 453·5		6 657	*/** 8 961·5			
2 910	3 460·5		6 664·5	8 967	(R) 13 channels		
2 917	3 467·5		6 672	8 975·5			
2 924	3 474·5		6 679·5	8 984			
2 931	3 481·5		*6 685	8 992·5 (OR)			
2 938	3 488·5		*6 687·5	9 001 9 channels			
2 945	3 495·5		5 574 (R)	9 009·5			
2 952			5 581·5 26 channels	9 018			
2 959			5 589	9 026·5			
2 966			5 596·5	9 035			
2 973			5 604				
2 980			5 611·5				
2 987			5 619				
2 994			5 626·5				
3 001	3 904	Region 1  3 911 (OR) 3 918 7 channels 3 925	5 634	10 005 - 10 100	13 205·5 13 215·5 13 225·5 (OR) 13 235·5 6 channels	(R) 10 channels	
3 008	3 911		5 641·5	10 012	13 245·5		
3 015	3 918		5 649	10 021	13 255·5		
3 023·5 (R) & (OR)	3 925		5 656·5	10 030	13 264·5		
3 032	3 932		5 574 (R)	10 039	13 274·5		
3 039	3 939		5 581·5	10 048	13 284·5		
3 046	3 946		5 589	10 057	13 294·5		
3 053			5 596·5	10 066	13 304·5		
3 060			5 604	10 075	13 314·5		
3 067			5 611·5	10 084	13 324·5		
3 074	4 654·5		5 619	10 093	13 334·5		
3 081	4 661·5		5 626·5		13 344·5		
3 088	4 668·5		5 634		13 354·5		
3 095	4 675·5		5 641·5				
3 102	4 682·5		5 649				
3 109	4 689·5		5 656·5				
3 116	4 696·5		5 664				
3 123			5 671·5				
3 130	4 703·5	(R)	5 680 (R) & (OR)				
3 137	4 710·5		5 688				
3 144	4 717·5		5 695·5				
3 151	4 724·5		5 703 (OR)				
	4 731·5		5 710·5 6 channels				
	4 738·5		5 718				
	4 745·5		5 725·5				

\* Available for A1 emission only.

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



be restricted to such areas and conditions that harmful interference cannot be caused to other authorized aeronautical uses.

4. The International Civil Aviation Organization (I.C.A.O.) co-ordinates aeronautical (R) communications with international air operations for a large part of the world and this organization should be consulted in appropriate cases, particularly in the operational use of the frequencies in the Plan.

#### *5. Adaptation of Allotment Procedure*

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

6. When necessary to satisfy the needs of international air operations Administrations may adapt the allotment procedure for the assignment of aeronautical mobile (R) frequencies, which assignments shall then be the subject of prior agreement between Administrations affected.

7. Resort to the co-ordination described in paragraph 4 shall be made where appropriate and desirable for the efficient utilization of the frequencies in question.

8. In addition to the extensions provided for in this Appendix for certain frequencies of MWARA's EU and ME to cover the requirements of international aircraft flights to and from U.S.S.R. territory, this Administration may use, for the same purpose, the frequencies allotted to RDARA's 2 and 3 and sub-RDARA's thereof. Such uses, however, must not decrease the protection below the standards mentioned in paragraph 5 above for all stations of the aeronautical mobile service.

## B. Interference Range Contours

#### *1. Definition of Contours*

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

The service range is not included in the contour.

#### *2. Type of Map Used*

These transparencies can be used only on a Mercator's projection world map of the scales given on each transparency, and will not be suitable for use on any other scale of Mercator's projection or any other projection. The world maps accompanying this Appendix, 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 co-ordinates 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 40° contour, etc.

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

#### 4. Sharing Conditions Between Areas

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

Areas	Bands between:	Sharing Conditions
	Mc/s	
MWARA to MWARA	3 - 6.6 9 - 11.3 13 - 18	night propagation day propagation time separation  <i>Note : 6.6 Mc/s and 5.6 Mc/s sharing conditions considered the same</i>
MWARA to RDARA	3 - 5.6 6.6 - 11.3 13 - 18	night propagation day propagation time separation
RDARA to RDARA	3 - 4.7 5.6 - 11.3 13 - 18	night propagation day propagation time separation

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

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

#### 5. Method of Use

Take the MWARA or the RDARA maps accompanying this Appendix and select the transparency for the frequency order and sharing conditions under consideration.

Place the centre of the transparency (i.e. the intersection of the axis of symmetry and the latitude line) over the boundary of the area or at the location of the transmitter. Note the latitude of this point and select the contour corresponding to this latitude.

A transmitter located at any point outside the contour will result, as defined in paragraph 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 the areas which involve the transition of the equator.

6. Data for tracing interference contours

3.0 Mc/s, NIGHT

Latitude	00°		20°		40°		50°		60°	
Interference 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 for plotting of contours	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
	180° 155°W 148.5°W 155°W 180°	31.5°N 20°N 0° 20°S 31.5°S	180° 160°W 150°W 146°W 146°W 150°W 160°W 170°W 180°	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 10°N 08.5°N	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

3.5 Mc/s, NIGHT

Latitude	00°		20°		40°		50°		60°	
Interference 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 for plotting of contours	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
	180° 170°W 159°W 150°W 145°W 144°W 145°W 150°W 160°W 170°W 180°	36°N 35°N 30°N 21°N 10°N 0° 10°S 21°S 30°S 35°S 36°S	180° 170°W 160°W 150°W 144°W 140°W 145°W 150°W 160°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°	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

## 4.7 Mc/s, NIGHT

Latitude	00°	20°	40°	50°	60°	
Interference Range	N-S 50°	E-W 50°	N-S 50°	E-W 53°	N-S 50°	
Co-ordinates for plotting of contours	160°W 147°W 138°W 133°W 131°W 130°W 131°W 133°W 138°W 147°W 160°W 170°W 180°	47°N 40°N 30°N 20°N 10°N 0° 127°W 130°W 131°W 140°W 150°W 160°W 170°W 180°	180° 150°W 130°W 126°W 125°W 20°N 127°W 130°W 140°W 150°W 160°W 170°W 180°	70°N 66°N 50°N 40°N 30°N 20°N 15°W 10°W 5°W 0° 5°S 10°S 15°S 20°S 25°S 30°S	103°W 94°W 83°W 70°N 60°N 50°N 40°N 30°N 20°N 15°W 10°S 07°N 10°S 15°S 20°S 25°S 30°S	70°N 75°W 70°N 60°N 50°N 40°N 30°N 20°N 15°W 10°S 05°N 00°

## 5.6 and 6.6 Mc/s, NIGHT

Latitude	00°	20°	40°	50°	60°			
Interference Range	N-S 58°	E-W 58°	N-S 58°	E-W 63°	N-S 58°			
Co-ordinates for plotting of contours	180° 122°W 180°	58°N 0° 58°S	130°W 120°W 118°W 115°W 115°W 20°N 117°W 120°W 122°W 130°W 138°W 150°W 180°	70°N 60°N 50°N 40°N 30°N 20°N 118°W 10°N 00° 10°S 20°S 30°S 38°S	80°W 92°W 98°W 104°W 111°W 118°W 127°W 10°N 134°W 150°W 180°	48°W 73°W 50°N 40°N 30°N 20°N 120°W 130°W 146°W 180°	70°N 66°W 50°N 40°N 30°N 20°N 125°W 120°W 104°W 120°W 125°W 143°W 10°N 02°N	08°W 60°N 50°N 40°N 30°N 20°N 125°W 120°W 104°W 120°W 125°W 143°W 10°N 02°N

**3.0 and 3.5 Mc/s, DAY**

Latitude	00°		20°		40°		60°	
Interference Range	N-S 6.3°	E-W 6.3°	N-S 6.3°	E-W 6.7°	N-S 6.3°	E-W 8.5°	N-S 6.3°	E-W 12.6°

**4.7 Mc/s, DAY**

Latitude	00°		20°		40°		60°	
Interference Range	N-S 10.8°	E-W 10.8°	N-S 10.8°	E-W 11.5°	N-S 10.8°	E-W 14°	N-S 10.8°	E-W 21.6°

**5.6 Mc/s, DAY**

Latitude	00°		20°		40°		60°	
Interference 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	00°		20°		40°		60°	
Interference 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 Mc/s, day intermediate plotting points are unnecessary as contours approximate the circumference of a circle.

**9.0 Mc/s, DAY**

Latitude	00°		20°		40°		50°		60°	
Interference 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°
Co-ordinates for plotting of contours	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.
	180°	34°N	180°	54°N	148°W	70°N	122°W	70°N	100°W	69°N
	170°W	33°N	160°W	50°N	135°W	60°N	122°W	60°N	111°W	60°N
	160°W	28°N	150°W	42°N	133°W	50°N	127°W	50°N	120°W	53°N
	150°W	17°N	145°W	30°N	135°W	40°N	134°W	40°N	130°W	45°N
	146°W	00°	146°W	20°N	140°W	28°N	140°W	34°N	140°W	37°N
	150°W	17°S	147°W	10°N	150°W	17°N	150°W	24°N	150°W	32°N
	160°W	28°S	153°W	00°	160°W	11°N	160°W	20°N	160°W	28.5°N
	170°W	33°S	160°W	08°S	170°W	07°N	170°W	17°N	170°W	26°N
	180°	34°S	170°W	13°S	180°	06°N	180°	16°N	180°	25°N
			180°	14°S						

**11.3 Mc/s, DAY**

Latitude	00°		20°		40°		50°		60°	
Interference 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 for plotting of contours	Long.	Lat.								
180°	54°N	145°W	70°N	93°W	70°N	64°W	70°N	30°W	70°N	70°N
160°W	52°N	128°W	60°N	98°W	60°N	80°W	62°N	71°W	60°N	60°N
150°W	47°N	122°W	50°N	104°W	50°N	95°W	50°N	90°W	50°N	50°N
140°W	40°N	120°W	40°N	109°W	40°N	110°W	35°N	107°W	40°N	40°N
132°W	30°N	120°W	30°N	120°W	24°N	120°W	26°N	120°W	32°N	32°N
128°W	20°N	122°W	20°N	130°W	12°N	140°W	08°N	140°W	15°N	15°N
127°W	10°N	124°W	10°N	140°W	00°	150°W	03°N	150°W	11°N	11°N
126°W	00°	130°W	04°S	150°W	06°S	160°W	01°S	160°W	08°N	08°N
127°W	10°S	140°W	17°S	160°W	10°S	170°W	03°S	170°W	07°N	07°N
128°W	20°S	150°W	25°S	180°	14°S	180°	180°	180°	180°	06°N
132°W	30°S	170°W	33°S	140°W	34°S	140°W	34°S	140°W	34°S	34°S
140°W	40°S	150°W	47°S	160°W	52°S	150°W	54°S	140°W	54°S	54°S

**C. Radiated Powers**

Unless otherwise indicated in Parts II and IV, the peak envelope powers are assumed to be the following:

Class of Emission	Stations	Peak envelope Power
A1	Land Stations Aircraft Stations	1 kW 50 W
A3 (100% modulated)	Land Stations Aircraft Stations	4 kW 200 W

## PART II

### **Plan for the Allotment of Frequencies for the Aeronautical Mobile (R) Service in the Exclusive Bands between 2850 and 17 970 kc/s**

#### Section I

##### **Description of the MWARA, RDARA and Sub-RDARA 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 attached hereto.  
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.

#### ARTICLE 1

##### **Description of the Major World Air Route Area (MWARA) Boundaries**

###### ***Major World Air Route Area — CENTRAL EAST PACIFIC (MWARA-CEP)***

From the point 32°N 117°W through the points 16°N 159°W, 22°N 159°W, 50°N 122°W, 38°N 120°W, to the point 32°N 117°W.

###### ***Major World Air Route Area — CENTRAL WEST PACIFIC (MWARA-CWP)***

From the point 17°N 155°W through the points 10°N 160°E, 10°N 117°E, 23°N 114°E, 40°N 117°E, 25°N 155°W, to the point 17°N 155°W.

###### ***Major World Air Route Area — EUROPE (MWARA-EU)***

From the point 33°N 12°W through the points 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 point 40°N 19°E, through the point 45°N 13°E; then along

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\* These descriptions were taken from Annex 8 of the 1951 Extraordinary Administrative Radio Conference Agreement, except in a few cases, where the 1959 Administrative Radio Conference made certain amendments.

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 points 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 points 72°N 30°E, 70°N 00°, 54°N 12°W, to the point 33°N 12°W.

*Note 1 \** As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the east of the Area boundaries.

These frequencies, noted in the Frequency Allotment Table as EU (Ext), shall be available for use in the area bounded by the following line: from the co-ordinate 72°N-30°E through the co-ordinate 72°N-40°E thence south along the meridian 40°E to the coast of the Black Sea through Tuapse, Sochi and Sukhumi to Ankara rejoining the present boundary of the MWARA-EU.

*Note 2 \** Particular attention is drawn to the Notes attaching to the descriptions of the Areas—MWARA-ME, MWARA-NA, MWARA-SA, MWARA-EU as affecting the availability of frequency allotments, and to Resolution No. 13.

*Major World Air Route Area — FAR EAST - 1*  
(MWARA-FE-1)

From the point 40°S 145°E, through the points 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 point 40°S 145°E.

*Major World Air Route Area — FAR EAST - 2*  
(MWARA-FE-2)

From the point 12°N 124°E, through the points 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 point 12°N 124°E.

*Major World Air Route Area — MIDDLE EAST*  
(MWARA-ME)

From the point 05°N 80°E, through the points 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 the point 45°N 13°E then through the points 40°N 14°E, 37°N 51°E, 24°N 93°E, to the point 05°N 80°E.

*Note 1 \** As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the north of the Area boundaries. These frequencies, noted in the Frequency Allotment Table as ME(Ext) shall be available for use in the area bounded by the following line: from the junction of the existing area boundary with the meridian 80°E along the meridian 80°E northwards to the co-ordinate 50°N-80°E then north-west to Moscow thence south-west to Kiev and through to rejoin the present boundary at Ankara.

*Note 2 \** As a further interim measure pending the revision mentioned in Note 1 above the MWARA-ME shall not extend into the European Area beyond the line connecting the following terminals: Sollum, Alexandria, Cyprus, Ankara.

*Major World Air Route Area — NORTH ATLANTIC*  
(MWARA-NA)

From the point 39°N 78°W, through the points 47°N 75°W, 68°N 20°W, 60°N 20°E, then south along the border of the EU MWARA and the northern border of Czechoslovakia to the point 50.5°N 12.5°E; then through the points 45°N 10°E, 32°N 07°W, 35°N 25°W, 30°N 62°W, 16°N 78°W, 21°N 86°W, to the point 39°N 78°W.

*Note 1* Only one family of frequencies allotted to this area, which is noted in the Frequency Allotment Plans as NA(Ext), is available for use S. and W. of a line extending from 39°N 78°W to 30°N 62°W.

*Note 2 \** As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-NA shall not extend into the European Area beyond a line connecting the following terminals: Stavangar, Copenhagen, Amsterdam, Brussels, Paris, Madrid, Lisbon, Casablanca and drawn to the area boundaries.

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\* Amendment made by the 1959 Geneva Administrative Radio Conference.

*Major World Air Route Area — NORTH PACIFIC*  
 (MWARA-NP)

From the point 46°N 122°W, through the points 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 point 46°N 122°W.

*Major World Air Route Area — NORTH-SOUTH AFRICA - 1*  
 (MWARA-NSA-1)

From the point 31°S 35°E, through the points 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 point 43°N 15°E; then through the points 37°N 14°E, 00° 28°E, 11°S 28°E, 20°S 35°E, to the point 31°S 35°E.

*Major World Air Route Area — NORTH-SOUTH AFRICA - 2*  
 (MWARA-NSA-2)

From the point 30°S 34°E, through the points 22°S 60°E, 10°N 52°E, 30°N 35°E, to the point 40°N 19°E; then along the border EU MWARA to the point 60°N 20°E, thence through the points 60°N 10°W, 48°N 05°W, 37°N 07°E, 00° 24°E, 30°S 24°E, to the point 30°S 34°E.

*Major World Air Area — NORTH-SOUTH AMERICA - 1*  
 (MWARA-NSAM-1)

From the point 36°S 73°W, through the points 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, 00° 93°W, to the point 36°S 73°W.

*Major World Air Route Area — NORTH-SOUTH AMERICA - 2*  
 (MWARA-NSAM-2)

From the point 34°S 74°W, through the points 36°S 52°W, 05°S 30°W, 10°N 60°W, 34°N 60°W, 48°N 75°W, 40°N 77°W, 23°N 86°W, 02°N 79°W, 20°S 50°W, to the point 34°S 74°W.

*Major World Air Route Area — SOUTH ATLANTIC*  
 (MWARA-SA)

From the point 34°S 74°W, through the points 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; then through the points 61°N 05°E, 47°N 17°W, 25°N 25°W, 03°S 40°W, to the point 34°S 74°W.

*Note \** As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-SA shall not extend into the European Area beyond a line connecting the following terminals: Algiers, Madrid, Lisbon.

*Major World Air Route Area — SOUTH PACIFIC*  
 (MWARA-SP)

From the point 22°N 158°W, through the points 22°N 156°W, 20°S 145°W, 50°S 170°W, 50°S 145°E, 38°S 145°E, 28°S 152°E, 00° 167°E, 00° 175°W, to the point 22°N 158°W.

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\* Amendment made by the 1959 Geneva Administrative Radio Conference.

## ARTICLE 2

### **Description of the Regional and Domestic Air Route Area (RDARA) Boundaries**

#### *Regional and Domestic Air Route Area - 1 (RDARA - 1)*

From the North Pole along the 15°W meridian to the point 72°N 15°W, then through the points 40°N 50°W, 30°N 39°W, 30°N 10°W, 31°N 10°W, to the point 31°N 10°E. Then along the Libya-Tunisia border to the Mediterranean, thence along the coast of Libya and Egypt to Alexandria, 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 Roumania and the U.S.S.R., thence along the border between the U.S.S.R. and the following countries: Roumania, Hungary, Czechoslovakia and Poland; along the U.S.S.R. Baltic Sea coast, to the border between Finland and the U.S.S.R. Then to the point 70°N 32°E, and along the 32°E meridian to the North Pole.

#### *Sub-Area 1A.*

From the point 65°N 26°W, and through the points 40°N 50°W, 40°N 13°W, 60°N 13°W, 60°N 26°W, to the point 65°N 26°W.

#### *Sub-Area 1B.*

From the North Pole along the 15°W meridian to the point 72°N 15°W; then through the points 65°N 26°W, 60°N 26°W, 60°N 13°W, to the point 50°N 13°W; thence east along the waters between the Channel Islands and French coastline. Thence following the north-eastern boundary of France, touching the following countries: Belgium, Luxembourg 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 coastline 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 04°E. Thence along the 04°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 to the Swiss border. 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 and Poland. To the Baltic Sea 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 point 50°N 13°W, and through the points 40°N 13°W, 40°N 50°W, 30°N 39°W, 30°N 10°W, 31°N 10°W, to the point 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 point 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 point 50°N 13°W.

*Regional and Domestic Air Route Area - 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 point 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-Area 2B.*

From the point 55°N 88°E and through the point 55°N 60°E, to the point 47°N 53°E. Thence along the east coast of the Caspian Sea to the Iranian 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 point 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 coastline 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 south coast of the Caspian Sea and thence north along the East Caspian Sea coast and through the point 47°N 53°E; to 55°N 60°E.

*Regional and Domestic Air Route Area - 3  
(RDARA - 3)*

From the North Pole to the point 55°N 60°E, thence along the 55°N parallel to 88°E. Then along the 88°E meridian 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 waters of U.S.S.R. and Japan to the point 43°N 147°E and through the point 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 point 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 points 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 point 60°N 88°E to the intersection of Mongolia-China-U.S.S.R. borders at approximately 49°N 88°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 point 43°N 147°E. Then through the point 60°N 147°E to the point 60°N 88°E.

*Regional and Domestic Air Route Area - 4  
(RDARA - 4)*

From the point 30°N 39°W, and through the points 10°N 20°W, 05°S 20°W, to the point 05°S 12°E. Thence along the northern border of the Belgian Congo, excluding Cabinda Territory, to the border between the Sudan and French Equatorial Africa. Thence north along the western border of the Sudan. Along the western border of Egypt, northwards to the Mediterranean and along the North African Mediterranean coast and Atlantic coast to the 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 point 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 the 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 sub-area at 30°N 39°W.

#### *Sub-Area 4B.*

From the point 21°N 31°W through the points 10°N 20°W, 05°S 20°W, to 05°S 12°E. Thence along the southern border of French Equatorial Africa, to the junction between Belgian Congo, the Sudan and French Equatorial Africa. Along the western border of the Sudan to the point 12°N 22°E. Thence along the Fort-Lamy parallel to the Nigerian border. Then west along this border to Zinder. From Zinder through Gao to close the sub-area at 21°N 31°W.

### *Regional and Domestic Air Route Area - 5 (RDARA - 5)*

From the point 41°N 40°E to the point 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 the Sudan to the border of Kenya. Thence east along the northern border of Kenya, and then south along the border between Kenya and Somaliland, to the East African coast at 02°S 41°E. Then through the point 02°S 73°E to 37°N 73°E. Then east along the border between Afghanistan and Pakistan, 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 point 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 the Sudan to 24°N 37°E. Then through the points 12°N 44°E, 12°N 49°E, to the point 30°N 49°E. Thence along the border between Iran and Iraq, and the border between Iraq and Turkey to 37°N 40°E.

#### *Sub-Area 5B.*

From the point 41°N 40°E to 37°N 40°E. Thence east along the borders between Turkey and Syria, and Turkey and Iraq, and along the border between Iraq and Iran to the point 30°N 49°E. Thence along the middle of the Persian Gulf to the 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 sub-area at 41°N 40°E.

#### *Sub-Area 5C.*

From the point 30°N 49°E, and through the points 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 the Sudan southwards along the western border of the Sudan to the border of Kenya. Thence along the northern border of Kenya. Then south along the border between Kenya and Somaliland to the east African coast, at the point 02°S 42°E. Then through the points 02°S 54°E, 13°N 54°E, 12°N 49°E to the point 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 sub-area.

*Regional and Domestic Air Route Area - 6  
(RDARA - 6)*

From the point 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 the point 23°N 61°E. Thence to Bombay. Then along the 73°E meridian to the point 02°S 73°E, and through the points 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 point 43°N 147°E. Thence east between the territorial waters of Japan and the U.S.S.R. and along the north-eastern and northern boundary of China, to the point 49°N 88°E.

*Sub-Area 6A.*

From the point 37°N 75°E, along the border between Pakistan and Afghanistan, and Iran and Pakistan to the 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 that between Burma and French Indo-China. Thence along the border between China and the following countries: Burma, Bhutan, Nepal, India to the point 37°N 75°E.

*Sub-Area 6B.*

From the point 49°N 88°E, along the common border between China and the U.S.S.R. to the point 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 point 20°N 113°E, and through the points 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 point 49°N 88°E.

*Sub-Area 6C.*

From the point 20°N 130°E, through the point 04°N 130°E, to 04°N 118°E. Thence along the border between North Borneo and Indonesian Borneo to the point 03°N 109°E, and through the points 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 point 02°S 92°E, and through the point 10°S 92°E, to 10°S 113°E. Then along the 113°E meridian to the border between North Borneo and Indonesian Borneo. Thence east along this border

to the point 04°N 118°E, and through the points 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 French Indo-China, and China and Burma to close the sub-area at the junction of the borders of China, India and Burma.

#### *Sub-Area 6E.*

From the point 20°N 73°E, and through the points 02°S 73°E, 02°S 92°E, to 10°N 97°E. Thence along the coasts of Burma, Pakistan and India to Calcutta. Then through the point 24°N 80°E to 20°N 73°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 west and along the boundary of Sub-Area 6D to the junction of the China-India-Burma borders.

### *Regional and Domestic Air Route Area - 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 the Sudan, and between Kenya and the following countries: the Sudan, Abyssinia and Somaliland to the point 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 points 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 point 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 the borders of Uganda, Belgian Congo and the Sudan, Thence south 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. Thence to the point 17°S 10°E, and then to close the sub-area at 05°S 10°E.

#### *Sub-Area 7C.*

From the junction of the borders of Uganda, Belgian Congo and the Sudan along the western border of Uganda and Tanganyika and then along the southern border of Tanganyika to the coast. Thence through the points 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 Somaliland. Then west along the northern borders of Kenya and Uganda to close the sub-area at the junction of the borders of Belgian Congo, the Sudan and Uganda.

*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 points 27°S 33°E, 40°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 point 17°S 10°E, and through the points 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 point 17°S 10°E.

*Regional and Domestic Air Route Area - 8*  
(RDARA - 8)

From the South Pole along the 60°E meridian to 02°S. Then through the point 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 points 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 - 9*  
(RDARA - 9)

From the South Pole along the 110°E meridian to 10°S. Then through the points 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 point 10°S 110°E, and through the points 24°S 110°E, 24°S 141°E, 10°S 141°E, to 10°S 110°E.

*Sub-Area 9B.*

From the point 00° 141°E, and through the points 24°S 141°E, 24°S 170°W, 00° 170°W, to 00° 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 point 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 - 10*  
(RDARA - 10)

*Sub-Area 10A.*

From the point 50°N 164°E to 66°N 169°W. Then along the 169°W meridian to the North Pole. Then along the 130°W meridian to 57°N. Thence through the points 57°N 150°W, 50°N 175°W, to close the sub-area at 50°N 164°E.

*Sub-Area 10B.*

From the point 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 points 48°N 127°W, 57°N 139°W, to 57°N 140°W.

*Sub-Area 10C.*

From the point 57°N 140°W, and through the points 60°N 140°W, 60°N 91°W, 48°N 91°W, 48°N 127°W 57°N 139°W, to 57°N 140°W.

*Sub-Area 10D.*

From the point 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 points 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 point 45°N 74°W, and through the point 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 points 40°N 50°W, 40°N 65°W, to close the sub-area at 45°N 74°W.

*Regional and Domestic Air Route Area - 11*  
(RDARA - 11)

*Sub-Area 11A.*

From the point 29°N 180°, along the I.T.U. boundary between Regions 2 and 3, to 50°N 164°E. Then through the points 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 at 29°N 180°.

*Sub-Area 11B.*

From the point 33°N 127°W, and through the points 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 point 29°N 106°W, and through the points 50.5°N 106°W, 50.5°N 92°W, 47°N 72°W, 45°N 72°W, 40°N 81°W, 40°N 85°W, 30°N 85°W, 25°N 96°W, to close the sub-area at 29°N 106°W.

*Sub-Area 11D.*

From the point 29°N 90°W, and through the points 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 point 39°N 125°W, and through the points 50°N 125°W, 50°N 93°W, 46°N 93°W, 42°N 86°W, 36°N 86°W, 36°N 121°W, to close the sub-area at 39°N 125°W.

*Sub-Area 11F.*

From the point 46°N 94°W, and through the points 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 point 29°N 95°W, and through the points 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 point 33°N 127°W, and through the points 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 11I.*

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

*Regional and Domestic Air Route Area - 12*  
(RDARA - 12)

*Sub-Area 12A.*

From the point 10°N 170°W, along the I.T.U. boundary between Regions 2 and 3 to 29°N 180°. Thence through the points 29°N 153°W, 10°N 153°W, to close the sub-area at 10°N 170°W.

*Sub-Area 12B.*

From the point 10°N 170°W, along the I.T.U. boundary between Regions 2 and 3, to 29°N 180°. Then through the points 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 I.T.U. boundary between Regions 2 and 3 to close the sub-area at 10°N 170°W.

*Sub-Area 12C.*

From the point 33°N 120°W, through the points 35°N 120°W, 32°N 104°W, 25°N 91°W, 23°N 83°W, 22°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 the point 20°N 91°W, and through the points 26°N 91°W, 26°N 79°W, 27°N 79°W, 27°N 76.5°W, 26°N 73°W, 17°N 58°W, to 10°N 58°W. Thence through Balboa, Canal Zone, Swan Island, and Belize to close the sub-area at 20°N 91°W.

*Sub-Area 12E.*

From the point 15°N 95°W, and through the points 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 point 04°S 93°W, and through the points 02°N 93°W, and 02°N 79°W, to Balboa, Canal Zone. Then to 13°N 77°W, and through the points 13°N 70°W, 08°N 70°W, 06°N 67°W, 01°N 66°W, to 04°S 70°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°S 81°W to close the sub-area at 04°S 93°W.

*Sub-Area 12G.*

From the point 07°N 73°W, and through the points 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 point 04°S 70°W, and through the points 05°N 70°W, 05°N 61°15'W, 08°45'N 60°W, 08°N 58°W, 08°N 54°W, 00° 44°W, 04°S 44°W, to close the sub-area at 04°S 70°W.

*Sub-Area 12I.*

From the point 25°N 70°W, through the point 25°N 35°W and along the I.T.U. boundary between Regions 1 and 2, to 00° 20°W. Thence through the points 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 point 31°N 117°W, and through the points 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 - 13  
(RDARA - 13)*

*Sub-Area 13A.*

From the point 05°S 120°W, and through the points 05°S 81°W, 19°S 81°W, 19°S 73°W, 25°S 73°W, 25°S 81°W, 57°S 81°W, to 57°S 90°W. Thence along the 90°W meridian to the South Pole. Thence along the 120°W meridian to close the sub-area at 05°S 120°W.

*Sub-Area 13B.*

From the point 29°S 111°W, and through the points 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 point 19°S 81°W, and through the points 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 points 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 point 19°S 73°W, and through the points 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 point 57°S 81°W, and through the points 25°S 81°W, 25°S 73°W, 16°S 73°W, 16°S 68°W, to 22°S 67°W. Then along the frontier between Chile and Argentina to 52°S 67°W. Then through the points 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 point 57°S 90°W to close the sub-area at 57°S 81°W.

*Sub-Area 13F.*

From the point 57°S 81°W, and through the point 32°S 81°W, to 32°S 69°W. Then along the frontier between Chile and Argentina to 52°S 67°W. Then through the points 57°S 67°W, 57°S 40°W, and along the 40°W meridian to the South Pole. Then along the 90°W meridian through the point 57°S 90°W to close the sub-area at 57°S 81°W.

*Sub-Area 13G.*

From the point 57°S 90°W, and through the point 57°S 70°W, to 52°S 70°W. Then along the frontier between Argentina and Chile to 21°S 68°W. Then through the points 21°S 62°W, 25°S 56°W, 25°S 53°W, 28°S 53°W, 29°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 point 57°S 90°W, and through the point 57°S 70°W, to 52°S 70°W. Then along the frontier between Argentina and Chile to 32°S 70°W, and through the points 34°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 13I.*

From the point 24°S 63°W, through the points 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, to close the sub-area at 24°S 63°W.

*Sub-Area 13J.*

From the point 01°S 70°W, and through the points 01°S 63°W, 03°N 63°W, 03°N 60°W, 01°S 60°W, 01°S 48°W, 03°S 48°W, 03°S 50°W, 16°S 50°W, 16°S 48°W, 20°S 39°W, 32°S 50°W, 20°S 58°W, to 10°S 66°43'W. Then along the borders between Brazil, Bolivia and Peru to 07°33'S 74°W. Then through the point 04°S 74°W, to close the sub-area at 01°S 70°W.

*Sub-Area 13K.*

From the point 04°30'N 52°W, and through the points 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 point 20°S 58°W, and through the points 20°S 53°W, 16°S 53°W, 16°S 48°W, 20°S 39°W, 34°30'S 52°40'W, 30°S 58°W, to close the sub-area at 20°S 58°W.

*Sub-Area 13M.*

From the point 00° 32°W, to 00° 20°W. Thence along the 20°W meridian to the South Pole. Thence along the 40°W meridian to the point 57°S 40°W. Thence through the points 57°S 56°W, 37°S 56°W, 20°S 38°W, 40°S 32°W, to close the sub-area at point 00° 32°W.

## Section II

### Allotment of Frequencies to the Aeronautical Mobile (R) Service

#### ARTICLE 1

##### Frequency Allotment Plan (per MWARAs, RDARAs and sub-RDARAs)

*Notes :* (a) ♦ = For exact nature of restriction refer to : col. 3 of Article 2 of the Frequency Allotment 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.

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	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	17 906.5
EU	2889 2910	3467.5 3481.5	4654.5 4689.5	5551.5	6552 6582	8871 8930.5		11 299.5		17 906.5
EU(Ext)	2910		4689.5		6582	8871		11 299.5		17 906.5
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 3446.5		5604	6627	8845.5	10 021		13 334.5	17 926.5
ME(Ext)		3404.5		5604	6627		10 021			
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	17 906.5
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

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
Pacif.-MET	2980 ♦			5574 ♦		8905 ♦				
SA	2875	3432.5			6597 6612 6679.5	8879.5 8939	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♦ 3453.5♦ 3495.5♦	4668.5♦ 4675.5♦	5499 ♦ 5544 ♦ 5589 5649 ♦	6567 ♦ 6634.5♦ 6649.5♦ 6664.5♦	8837 ♦ 8854 ♦ 8961.5♦	10 066 ♦ 10 084 ♦	11 356.5♦ 13 314.5♦		
1B	2903 2973 ♦	3418.5♦ 3474.5♦ 3495.5♦		5529	6529.5♦	8961.5♦				
IC	2973 ♦	3418.5♦ 3495.5♦			6529.5♦	8961.5♦				
1D	2973 ♦ 3015 ♦	3418.5♦ 3495.5♦	4682.5♦	5619	6529.5♦ 6544.5	8961.5♦				
1E	2861 2973 ♦ 3015 ♦	3418.5♦ 3495.5♦		5484 ♦ 5656.5♦	6604.5♦	8961.5♦				
2	2882 2924 2973 ♦ 2994 ♦ 3008 ♦	3439.5 3460.5♦ 3488.5♦ 3495.5♦	4661.5♦ 4696.5	5536.5 5596.5♦ 5664 ♦	6589.5♦ 6619.5 6642 ♦ 6657 ♦ 6672 ♦	8922 ♦ 8961.5♦	10 012 ♦ 10 030 ♦ 10 039 ♦ 10 057 ♦ 10 075 ♦ 10 093 ♦	11 290 ♦ 11 309 11 347 ♦ 11 366 ♦ 11 375.5 11 394.5♦	13 344.5	17 956.5♦
2A	2973 ♦	3404.5♦ 3495.5♦		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♦ 4682.5	5566.5 5581.5 5596.5♦ 5649 5664 ♦	6552 6589.5♦ 6642 ♦ 6657 ♦ 6672 ♦	8922 ♦ 8961.5♦	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♦ 3495.5♦	4675.5♦		6544.5 6567	8961.5♦	10 057 ♦ 10 093 ♦	11 290 ♦ 11 394.5♦		17 916.5♦

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
3B	2854 2903 ♦ 2938 2952 ♦ 2959 2973 ♦	3404.5 3495.5♦	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 6627	8913.5 8947.5♦ 8961.5♦	10 057 ♦ 10 093 ♦	11 280.5		17 916.5♦
4	2973 ♦	3495.5♦			6537 ♦	8896.5♦ 8961.5♦		11 385 ♦		17 936.5♦
4A	2973 ♦	3495.5♦		5664	6574.5	8961.5♦				
4B	2924 2973 ♦	3495.5♦		5484 5596.5	6559.5 6589.5 6642 6657 6672	8961.5♦				
5	2973 ♦	3495.5♦			6537 ♦	8896.5♦ 8961.5♦		11 385 ♦		17 936.5♦
5A	2973 ♦	3495.5♦	4682.5♦	5529		8961.5♦				
5B	2903 ♦ 2973 ♦	3495.5♦		5656.5♦	6604.5	8961.5♦				
5C	2903 ♦ 2973 ♦	3495.5♦		5656.5♦		8961.5♦				
5D	2903 ♦ 2973 ♦	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♦ 6544.5 6559.5♦ 6567 6634.5 6649.5 6679.5♦	8888 ♦ 8939 8961.5♦	10 048 ♦			
6B	2889 2910 2973 ♦	3418.5 3467.5 3495.5♦		5514 ♦ 5544 5589	6559.5♦ 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 ♦ 8961.5♦	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♦ 6642 6657 6672 ♦	8820 ♦ 8961.5♦	10 048 ♦			

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
6E	2861 2931 2945 2973	3432.5♦ 3495.5♦		5514♦ 5566.5♦ 5581.5♦ 5649	6529.5♦ 6559.5♦ 6612 6679.5♦	8961.5♦	10 048 ♦			
6F	2945 ♦ 2973 ♦	3495.5♦		6537 ♦ 6597	8837 8854 8888 ♦ 8961.5♦	10 048 ♦ 10 066		13 294.5		
7	2868 2973 ♦ 3008	3495.5♦		5499 ♦ 5544 5574 5589	6552 6649.5♦ 8947.5♦ 8961.5♦	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 ♦ 6627 6664.5 6679.5♦	8913.5 8961.5♦				
7C	2973 ♦	3495.5♦			6597 ♦	8961.5♦				
7D	2834 2938 2973 ♦ 2994	3439.5 3460.5 3495.5♦	4696.5	5484 5649 5664	6567 ♦ 6597 ♦ 8922 8961.5♦	8871 8922 8961.5♦				
7E	2882 2896 2917 2952 2973 ♦	3425.5 3432.5 3453.5 3495.5♦	4682.5	5491.5	6567 ♦ 6582 6597 ♦ 6679.5♦	8879.5 8930.5 8961.5♦	10 039 10 075	11 328		
8A	2973 ♦	3495.5♦		5499 ♦	6649.5♦	8947.5♦ 8961.5♦		11 318.5♦		
9	2854 2973 ♦ 3008 ♦	3404.5 3495.5♦		5484 5514 5564	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♦	4654.5♦	5589	6612 ♦ 6649.5♦ 6664.5♦	8939 8961.5♦				
9B	2861 2973 ♦ 3015	3460.5 3495.5♦	4654.5♦	5599 ♦ 5544 5526.5 6664.5♦	6529.5 6612 ♦ 6634.5 6664.5♦	8913.5 8961.5♦	10 093 ♦	11 309 11 394.5		
9C	2973 ♦	3495.5♦			8961.5♦					
9D	2875 2903 2910 2917 2931 2938 2973 ♦ 3008 ♦	3418.5 3432.5 3446.5 3474.5 3481.5 3495.5♦	4654.5♦ 4661.5 4675.5 4682.5 4696.5	5499 ♦ 5529 5565.5 5619 5656.5	6537 6567 6589.5 6612 ♦ 6642 6657 6664.5♦ 6672	8888 8961.5♦ 10 057 ♦ 10 093 ♦	10 021 11 290 11 328			

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
9E	2889 2896 2952 2966 2973 ♦	3467.5 3495.5♦	4654.5♦	5551.5	6544.5 6612.5♦ 6649.5♦ 6664.5♦	8961.5♦	10 057.5♦ 10 093.5♦			
10A	2931	3411.5	4668.5	5544	6567	8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
10B	2917 2973 ♦			5461.5♦	6597	8896.5 8961.5♦		11 328 ♦ 11 375.5	13 294.5♦	17 936.5♦ 17 956.5♦
10C	2861 ♦ 2952 ♦	3474.5	4689.5	5499 5514	6582 6627	8961.5♦	10 057	11 328 ♦ 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♦		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 ♦ 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 ♦ 11 394.5	13 294.5♦	17 936.5♦ 17 956.5♦
11F	2854	3453.5		5476.5♦ 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♦ 17 956.5♦
11H	2959	3495.5		5469 ♦ 5484	6657	8961.5♦	10 030	11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
12A		3453.5			6649.5	8961.5♦		11 328 ♦		
12C	2875	3411.5 3460.5♦	4661.5 4675.5	5454 ♦ 5536.5 5649 5664	6544.5♦ 6552 6582 6604.5	8922 8961.5♦		11 328 ♦ 11 385	13 294.5♦	17 936.5♦ 17 956.5♦
12D	2861 ♦ 2903 ♦ 2938 ♦ 2973 ♦		4689.5	5461.5♦ 5499 5514	6537 6597 6619.5 6634.5	8837 8961.5♦		11 328 ♦ 11 366	13 294.5♦	17 936.5♦ 17 956.5♦
12E	2882 3001			5521.5	6612	8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦

Bands Mc/s	3	3.5	4.7	5.6	6.6	9	10	11.3	13.3	18
Areas	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s	kc/s
12F		3446.5 3467.5		5476.5♦ 5589 5634	6529.5 6589.5 6627 6672	8939 8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
12G	2980		4682.5	5491.5 5544	6642 6657	8961.5♦	10 057	11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
12H		3481.5		5529	6574.5	8930.5 8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
12J	2952 ♦	3425.5♦		5619		8961.5♦	10 021	11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13C	2917	3453.5		5596.5 5656.5	6604.5	8896.5 8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13D	2994	3495.5		5469 ♦	6619.5	8961.5♦	10 066	11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13E	2924 3015	3439.5	4654.5	5454 ♦ 5664	6627	8913.5 8961.5♦	10 039	11 328 ♦ 11 356.5	13 294.5♦	17 936.5♦ 17 956.5♦
13F	2861 2938 ♦	3446.5	4675.5 4689.5		6559.5	8837 8961.5♦		11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13G	2868 2952 3008 ♦	3425.5♦	4668.5	5491.5 5544	6552 6642	8862.5 8961.5♦		11 309 11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13H	2938 ♦ 2980 3008 ♦	3481.5	4682.5	5551.5 5604 5619		8947.5 8961.5♦	10 075	11 328 ♦ 11 394.5	13 294.5♦	17 936.5♦ 17 956.5♦
13I	2987	3411.5 3474.5		5649	6582	8961.5♦	10 030	11 328 ♦	13 294.5♦	17 936.5♦ 17 956.5♦
13J	2854 2959	3488.5		5484 5536.5	6544.5 6627 6649.5	8956 ♦ 8961.5♦	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♦ 11 328 ♦ 11 375.5	13 294.5♦	17 936.5♦ 17 956.5♦
13L	2882 2931 2973	3418.5		5461.5♦ 5656.5♦	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 (unless otherwise indicated):

A1 emissions:

Ground station 1.0 kilowatt radiated (peak),  
Aircraft 50 watts radiated (peak).

A3 emissions:

Ground station 4.0 kilowatts radiated (peak), 100% modulated,  
Aircraft 200 watts radiated (peak), 100% modulated.

Hours: H 24 unless otherwise indicated.

- (2) A frequency allotted 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 there being no interference with the primary allotment.
- (3) A "shared channel" is a channel allotted in common to adjacent areas within interference distance of each other and its use is subject to agreement between the administrations concerned.

### (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 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, EU (Ext). 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.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
2945	MWARA: NA, SP. 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. 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 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.
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: FE1, NA, NP. 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 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.
3008	RDARA: 2, 3, 7, 9A, 9D, 10D, 13G, 13H.	2 and 3 shared. 9A and 9D shared. 13G and 13H 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.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
3023.5	World-wide.	<p>Authorized for world-wide use for the (R) and (OR) services as follows:</p> <p>(1) aboard aircraft for:</p> <ul style="list-style-type: none"> <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> <p>(2) at aeronautical stations for aerodrome and approach control under the following conditions:</p> <ul style="list-style-type: none"> <li>(a) for approach control with power limited to a value that will produce <math>20 \mu\text{V/m}</math> at 100 km and in any case no more than 20 watts in the antenna circuit,</li> <li>(b) for aerodrome control with the power limited to a value that will produce <math>20 \mu\text{V/m}</math> at 40 km and in any case no more than 20 watts in the antenna circuit,</li> <li>(c) special attention must be given in each case to the type of antenna used in order to avoid harmful interference,</li> <li>(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;</li> </ul> <p>(3) for intercommunication between mobile stations engaged in co-ordinated search and rescue operations at the scene of a disaster;</p> <p>(4) the specific application of this frequency for the above purposes may be decided at regional aeronautical conferences;</p> <p>(5) This channel may be used for A1 or A3 emission in accordance with special arrangements. It shall not be subdivided.</p>
3404.5	MWARA: ME, ME(Ext). NSAM2. RDARA: 2A, 3B, 9.	2A on day-time basis.
3411.5	MWARA: NSA1. RDARA: 6, 10A, 12C, 13I.	
3418.5	RDARA: 1B, 1C, 1D, 1E, 6B, 9D, 11E, 13L.	1B, 1C, 1D and 1E shared. 1B and 1E to be used East of $11^\circ$ West.
3425.5	RDARA: 1, 3C, 6D, 7E, 12J, 13G.	1 to be used East of $11^\circ$ West. 3C on day-time basis. 12J, 13G: night-time protection of 12 db.
3432.5	MWARA: CEP, SA. 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. 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 $11^\circ$ 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 $11^\circ$ West.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
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.
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 communication 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 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, 9B, 9D and 9E 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 6D 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, EU (Ext). 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.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
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 9D shared.
5506.5	MWARA: CWP, NSA2. RDARA: 11D, 13K.	
5514	RDARA: 2A, 2C, 6A, 6B, 6E, 9, 10C, 12D.	2A and 2C shared. 6A, 6B and 6E 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.
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 Major World Air Routes traversing the Pacific Ocean Areas and for ground to air meteorological broadcasts in the European Major World Air Route Area.
5581.5	MWARA: NSAM2. RDARA: 3, 6A, 6E.	6A and 6E 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, ME (Ext). RDARA: 13H.	
5611.5	MWARA: FE2, Na(Ext).	
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, 5C and 5D shared. 13L reduced power nearest boundary 13C.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
5664	RDARA: 2, 3, 4A, 7D, 9, 10D, 12C, 13E.	2 and 3 shared.
5671.5	MWARA: FE1, NA.	
5680	World-wide	<p>Authorized for world-wide use for the (R) and (OR) services as follows:</p> <p>(1) aboard aircraft for:</p> <ul style="list-style-type: none"> <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> <p>(2) at aeronautical stations for aerodrome and approach control under the following conditions:</p> <ul style="list-style-type: none"> <li>(a) for approach control with power limited to a value that will produce 20 <math>\mu</math>V/m at 100 km and in any case no more than 20 watts in the antenna circuit,</li> <li>(b) for aerodrome control with the power limited to a value that will produce 20 <math>\mu</math>V/m at 40 km and in any case no more than 20 watts in the antenna circuit,</li> <li>(c) special attention must be given in each case to the type of antenna used in order to avoid harmful interference,</li> <li>(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;</li> </ul> <p>(3) for intercommunication between mobile stations engaged in co-ordinated search and rescue operations at the scene of a disaster;</p> <p>(4) the specific application of this frequency for the above purposes may be decided at regional aeronautical conferences;</p> <p>(5) this channel may be used for A1 or A3 emission, in accordance with special arrangements. It shall not be subdivided.</p>
6529.5	RDARA: 1B, 1C, 1D, 3B, 6A, 6E, 7B, 9B, 11C, 12F, 13L.	1B to be used East of 11° West. 1B, 1C and 1D shared. 6A and 6E 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, 6B and 6E shared.
6567	MWARA: NSAM2. RDARA: 1, 3A, 6A, 7D, 7E, 9D, 10A.	1 to be used East of 11° West. 7D and 7E shared.
6574.5	RDARA: 2A, 4A, 6B, 9, 11D, 12H.	
6582	MWARA: EU, EU (Ext). RDARA: 6, 7E, 10C, 12C, 13I.	
6589.5	RDARA: 2, 3, 4B, 6D, 9D, 11E, 12F, 13K.	2 and 3 shared.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
6597	MWARA: SA. RDARA: 2B, 6F, 7B, 7C, 7D, 7E, 10B, 12D.	7B, 7C, 7D and 7E 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.
6612	MWARA: CEP, SA. RDARA: 2A, 2C, 3B, 6E, 9A, 9B, 9D, 9E, 10E, 12E.	2A and 2C shared. 9A, 9B, 9D and 9E shared.
6619.5	RDARA: 2, 6C, 6D, 11B, 12D, 13D.	6C and 6D shared.
6627	MWARA: ME, 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 East 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, 9B, 9D and 9E shared.
6672	RDARA: 2, 3, 4B, 6C, 6D, 9D, 11E, 12F.	2 and 3 shared. 6C and 6D shared.
6679.5	MWARA: SA, CEP. RDARA: 3B, 6A, 6E, 7B, 7E, 9, 10E.	6A and 6E shared. 7B and 7E shared.
8820	MWARA: NSA1, NSAM1. RDARA: 6C, 6D.	6C and 6D 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. The use of this frequency in this area East of 65° East is on primary basis and West of 65° East on a secondary basis.
8837	RDARA: 1, 6F, 12D, 13F.	1 to be used East of 11° West.
8845.5	MWARA: ME, NSAM2, SP. RDARA: 3B.	
8854	RDARA: 1, 6F, 11D, 13K.	1 to be used East of 11° West.
8862.5	MWARA: CWP, NA. RDARA: 7, 13G.	
8871	MWARA: EU, EU (Ext), FE2, NSAM2. RDARA: 7D.	
8879.5	MWARA: CEP, FE1, SA. RDARA: 7E, 10E.	
8888	MWARA: NA. RDARA: 6A, 6F, 9D, 13L.	6A and 6F shared.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
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.
8913.5	MWARA: NA. RDARA: 3C, 7B, 9B, 13E.	
8922	RDARA: 2, 3, 7D, 9, 12C, 13L.	2 and 3 shared.
8930.5	MWARA: CEP, EU, FE1. RDARA: 7E, 12H.	
8939	MWARA: NP, SA. RDARA: 6A, 9A, 12F.	
8947.5	MWARA: NA(Ext). RDARA: 3B, 3C, 7, 8A, 9, 13H.	3B and 3C shared. 7, 8A and 9 shared.
8956	MWARA: NSA2. RDARA: 6B, 11B, 13J, 13K.	6B to be used East of 90° East. 13J and 13K 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, 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. RDARA: 6A, 6D, 6E, 6F.	6A, 6D, 6E and 6F shared.
10 057	RDARA: 2, 3A, 3C, 9D, 9E, 10C, 12G.	2, 3A and 3C shared. 9D and 9E 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 3C shared. 9B, 9D and 9E 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, EU (Ext). 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 13K shared.
11 328	RDARA: 3, 7E, 9D, 10, 11, 12, (except 12B and 12D), 13 (except 13A, 13B and 13M)	10, 11, 12 and 13 shared. To be used in 10A, 10B, 10C and 10D on a basis non-interference to area 3.

## (R) FREQUENCY PLAN

Frequency kc/s 1	Authorized area of use 2	Remarks 3
11 337.5	MWARA: NSAM2. RDARA: 6.	
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: NP, SA.	
13 284.5	MWARA: FE2, NA.	
13 294.5	RDARA: 6F, 10, 11, 12C, 12D, 12E, 12F, 12G, 12H, 12J, 13 (except 13A, 13B and 13M)	10, 11, 12C, 12D, 12E, 12F, 12G, 12H, 12J and 13 shared.
13 304.5	MWARA: CEP, NSA1. 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: FE1, NA.	
13 334.5	MWARA: CEP, ME, NSA2.	
13 344.5	MWARA: NSAM2, SP. RDARA: 2.	
13 354.5	MWARA: CWP, NA(Ext).	
17 906.5	MWARA: CWP, EU, EU(Ext), NP.	
17 916.5	MWARA: NSAM1, NSAM2. RDARA: 3A, 3C.	3A and 3C shared.
17 926.5	MWARA: CEP, ME 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, 12D, 12E, 12F, 12G, 12H, 12J and 13 shared.
17 946.5	MWARA: NSA1, SA, 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, 12D, 12E, 12F, 12G, 12H, 12J and 13 shared.
17 966.5	MWARA: FE1, FE2, NA(Ext).	

## PART III

### **Technical and Operational Principles for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service**

#### **Section I. Available Frequency Bands and Channels**

##### **1. Bands.**

The frequency bands available to the (OR) service fall into three distinct categories, i.e.,

- a)* bands allocated exclusively to the aeronautical mobile (OR) service,
- b)* bands which specifically provide for the aeronautical mobile (OR) service, but which are shared with other services, and
- c)* bands for the general mobile services, from which the aeronautical mobile (OR) service is not specifically excluded.

##### **2. Assignable Frequencies.**

###### **A. Exclusive Bands.**

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

###### **B. Shared Bands.**

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

###### **C. Channels Common to (R) and (OR) Services.**

The channels common to the (R) and (OR) services, centred at 3 023·5 and 5 680 kc/s are authorized for world-wide use as laid down in No. 3 of Section II of Part I.

##### **3. Selection of Frequencies.**

###### **A. Exclusive Bands.**

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 world-wide basis. Excess requirements in respect of Region 1 were met, as far as possible, from the band 3 900 to 3 950 kc/s allocated exclusively to the (OR) service in that region.

###### **B. Shared Bands.**

The balance of the requirements was accommodated to the maximum extent in the bands mentioned in Nos. 1b) and 1c) of Section I in that order of preference.

## Section II. Adaptation of Technical Principles

### *1. Division of Channels.*

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

### *2. Modification of Class of Emission.*

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

### *3. Allotment of Adjacent (OR) Channels.*

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

### *4. Protection Ratios and Sharing.*

- a) In areas where it was found necessary to secure a greater repetition of assignments, the same frequency has been allotted to more than one requirement of an administration even though this may result in a reduction of the protection ratio between the emissions of the stations concerned.
- b) In certain areas where peaks of requirements occur, protection ratios may be lowered by agreement between the countries concerned.
- c) Certain assignments have been repeated where there is a strong probability of interference between stations of different administrations. This was done in the belief that the working time of any one of the stations so treated would be intermittent. In these cases each station has an equal right to use the frequency, and no one station or group of stations is given priority.
- d) A number of frequencies were assigned on a "secondary" basis. In such cases, a station having the use of a frequency as a "primary" assignment is protected from any other station using the same frequency as a "secondary" assignment by the following provisions:
  - a station using a frequency on a secondary basis must be inferior in power to the station operating on a primary basis,
  - such a station must be distant from the station operating on a primary basis by not less than half of the repetition distance required for a protection ratio of 20 db.

### *5. Limitation of Power.*

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

## PART IV

### **Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2505 and 23 350 kc/s**

1. In this plan the following abbreviations have been used:

*(a) Alphabetical List of Country Designations*

AFS	Union of South Africa
AGL	Angola
ALB	Albania (People's Republic of)
ALS	State of Alaska, United States of America
ARG	Argentine Republic
ARS	Saudi Arabia
ATN	Netherlands Antilles
AUS	Australia (Commonwealth of)
AUT	Austria
AZR	Azores
B	Brazil
BER	Bermuda
BLR	Bielorussian Soviet Socialist Republic
BOL	Bolivia
BUL	Bulgaria (People's Republic of)
CAF	Central African Republic
CAN	Canada
CAR	Caroline Islands
CBG	Cambodia
COG	Republic of Congo
CHL	Chile
CHN	China
CLM	Colombia (Republic of)
CLN	Ceylon
CME	Cameroon (State of) (under French trusteeship)
CPV	Cape Verde Islands
CTI	Republic of Ivory Coast
CTR	Costa Rica
CUB	Cuba
CYP	Cyprus
D	Germany
DAH	Dahomey (Republic of)
DNK	Denmark
DOM	Dominican Republic

E	Spain
EGY	United Arab Republic (Egyptian Region)
EQA	Ecuador
ETH	Ethiopia
F	France and Algeria
FJI	Fiji Islands
FNL	Finland
G	United Kingdom of Great Britain and Northern Ireland
GAB	Republic of Gabon
GDL	Guadeloupe (French Department of)
GIB	Gibraltar
GNP	Portuguese Guinea
GRC	Greece
GRL	Greenland
GTM	Guatemala
GUB	British Guiana
GUF	Guiana (French Department of)
HKG	Hongkong
HND	Honduras (Republic of)
HOL	Netherlands
HTI	Haiti (Republic of)
HVO	Republic of Upper Volta
HWA	State of Hawaii, United States of America
I	Italy
IND	India
INP	Portuguese India
INS	Indonesia (Republic of)
IOB	British West Indies
IRN	Iran
IRQ	Iraq
ISL	Iceland
ISR	Israel (State of)
J	Japan
JON	Johnston Island
KEN	Kenya
LAO	Laos
LBN	Lebanon
LBY	Libya
MAC	Macao
MDG	Madagascar (Madagascan Republic)
MDW	Midway Island
MEX	Mexico
MLA	Malaya
MLI	Mali Federation

MLT	Malta
MOZ	Mozambique
MRA	Mariana Islands
MRC	Morocco (Kingdom of)
MRL	Marshall Islands
MRT	Martinique (French Department of)
MTN	Islamic Republic of Mauretania
NCG	Nicaragua
NCL	New Caledonia and Dependencies
NGN	Netherlands New Guinea
NGR	Republic of Niger
NHB	New Hebrides (Archipelago) (British-French Condominium)
NOR	Norway
NZL	New Zealand
OCE	French Polynesia
PAK	Pakistan
PAP	Papua (Territories of)
PHL	Philippines (Republic of the)
PNR	Panama (Republic of)
PNZ	Panama Canal Zone
POL	Poland (People's Republic of)
POR	Portugal
PRG	Paraguay
PRU	Peru
PTR	Puerto Rico
REU	Réunion (French Department of)
RHS	Southern Rhodesia
ROU	Roumanian People's Republic
S	Sweden
SLV	El Salvador (Republic of)
SMB	British Somaliland
SMF	French Somaliland
SNG	Singapore
STP	S. Tomé and Principe
SUI	Switzerland
SUR	Surinam
SYR	United Arab Republic (Syrian Region)
TCD	Republic of Chad
TCH	Czechoslovakia
TGO	Republic of Togo
TMP	Portuguese Timor
TUN	Tunisia
UKR	Ukrainian Soviet Socialist Republic

<b>URG</b>	Uruguay
<b>URS</b>	Union of Soviet Socialist Republics
<b>URS-AM</b>	Union of Soviet Socialist Republics—Middle Asia
<b>URS-C</b>	Union of Soviet Socialist Republics—Caucasus
<b>URS-E</b>	Union of Soviet Socialist Republics—Europe
<b>URS-SEO</b>	Union of Soviet Socialist Republics—Siberia and Far East
<b>USA</b>	United States of America (The 48 contiguous States of the) (excludes the States of Alaska and Hawaii)
<b>VEN</b>	Venezuela
<b>VTN</b>	Viet-Nam
<b>WAK</b>	Wake Island
<b>YUG</b>	Yugoslavia

*(b) Other abbreviations*

N = North      S = South      E = East      W = West

Example : “ N-46°N ” means “ North of 46° North ”

“ 55°W-64°W and N-7°S ” means “ Between 55° West and 64° West and  
North of 7° South ”

W = watts      kW = kilowatts

Example : “ CUB (500 W) ” means “ Cuba power limited to 500 watts delivered to the  
antenna ”

(6) means “ French Stations ”      (7) means “ USA stations ”

(81) means “ East Germany ”

■ means “ Networks of the French Community ”

## 2. (OR) FREQUENCY PLAN

### A. Exclusive Bands

REGION 1

BAND 3025-3155 kc/s

3032	3039	3046	3053	3060	3067
CAF ■ COG ■ CTI ■ DAH ■ EGY F ■ GAB ■ HVO ■ IRQ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR POL SMF (350 W) ■ TCD ■ TUN URS-E URS-SEO (1 kW)	ARS BLR CAF ■ COG ■ CTI ■ DAH ■ F ■ EGY F ■ GAB ■ HVO ■ ISR MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ NOR SMF ■ TCD ■ TUN URS-AM (500 W) URS-C YUG	CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MTN ■ NGR ■ POR SMF ■ TCD ■ TCH URS-E URS-SEO (1 kW)	ALB AZR CAF ■ COG ■ CTI ■ COG ■ DAH ■ DNK Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ POR TCD ■ TCH UKR URS-SEO (1 kW)	AZR CAF ■ COG ■ CTI ■ D DAH ■ E GAB ■ GRC HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ SYR TCD ■ URS-AM URS-E URS-SEO (1 kW)	D ETH POR ROU S SYR URS-AM (1 kW) URS-E

3074	3081	3088	3095	3102	3109
AGL AZR BUL CPV EGY F (except Algeria) ■ G GIB GNP MOZ POR ROU S STP TUN URS-AM (1 kW) URS-E	ARS AZR CYP D EGY FNL G KEN LBY MLT POR ROU SMB URS-E URS-SEO (1 kW)	AFS D EGY G GRC (250 W) POR SUI (200 W) URS-AM (1 kW) URS-E	ARS (2.5 kW) CYP EGY F (except Algeria) ■ G GRC (250 W) POR SUI (200 W) URS-AM (1 kW) URS-E	AFS BLR D (81) EGY ETH G GIB KEN LBY MLT POL RHS SMB URS-AM (1 kW) URS-C URS-SEO (1 kW)	AFS D (81) EGY G I MRC (7) S URS-E

## REGION 1

BAND 3025-3155 kc/s

3116	3123	3130	3137	3144	3151
AFS D (81) EGY F (Algeria) ■ G TCH TUN URS-AM (1 kW) URS-C URS-E URS-SEO (1 kW)	EGY G (N) HOL I MRC (7) UKR URS-E URS-SEO (N-46° N & W-170° E)	EGY G (N) GRG HOL HOL URS-E URS-SEO (1 kW)	BUL E (500 W) EGY HOL URS-AM (1 kW) URS-C URS-E URS-SEO (1 kW)	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN UKR URS-C URS-E URS-SEO (1 kW) YUG	BUL CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN URS-E URS-SEO (1 kW)

## REGION 2

BAND 3025-3155 kc/s

3032	3039	3046	3053	3060	3067
ALS ARG B (42° W-51° W & N-9° S) CAN* CLM DOM (250 W) GRL HWA SLV (250 W) USA	ALS ARG (S-43° S) B BER (7) CAN* GDL ■ GRL HWA MRT ■ NCG USA	ARG CAN CLM (S-5° N) CTR (250 W) HTI (250 W) HWA MEX	ALS ARG B (55° W-64° W & N-7° S) CAN (E-98° W) CUB GTM (250 W) HWA PNR (250 W) USA (W-98° W)	B CAN CHL (N-41° S) (300 W) CHL (S-41° S) GDL ■ HWA MEX MRT ■	ALS ARG (S-34° S) B (12°-21° S & 46°-53° W) BER (7) CAN* CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNR (250 W) PNZ PRU (250 W) PTR USA

\* See note \*, page 53.

## REGION 2

BAND 3025-3155 kc/s

3074	3081	3088	3095	3102	3109
ALS ARG B (E-42° W & N-10° S) BER (7) CAN <sup>a</sup> CLM (N-4° N) GRL GTM (250 W) HTI (250 W) USA	ARG (S-43° S) B (10° S-18° S & E-43° W) CAN CUB GUF ■ HWA PRG (250 W) PRU (250 W) SLV (250 W) URG (250 W) VEN (250 W)	ALS B <sup>1</sup> BER (7) CAN <sup>a</sup> CHL (N-31° S) (300 W) CHL (S-31° S) CUB (Guantnamo) (7) GRL HWA PNZ PTR USA	ARG (S-28° S) B (42° W-57° W & N-9° S) CAN CTR (250 W) DOM (250 W) HWA MEX PRU (250 W)	ALS B BER (7) CAN <sup>a</sup> CHL (N-36° S) (300 W) CHL (S-36° S) GDL ■ GRL HND MRT ■ USA	ALS B (40°-50°W & 9°-17° S) B (S-17° S) (350 W) BER (7) CAN <sup>a</sup> CHL CUB (Guantnamo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA

3116	3123	3130	3137	3144	3151
B (E-46° W & 18°-24° S) B (S-24° S) (350 W) CAN CHL CTR (250 W) DOM (250 W) EQA (250 W) MEX VEN (250 W)	ALS ARG (S-35° S) B (E-43° W & 10°-18° S) CAN BER (7) BOL CAN <sup>a</sup> GRL GUB (7) HWA USA	ATN BOL (250 W) CAN CHL (S-14° S) CHL (N-41° S) (300 W) CUB EQA (250 W) GTM (250 W) HWA URG	ALS B (E-46° W & 18°-24° S) B (S-24° S) (350 W) BER (7) CAN <sup>a</sup> CHL DOM (250 W) EQA (250 W) GRL GTM (250 W) HWA PRG (250 W) USA VEN (250 W)	ALS B (E-42° W & N-10° S) BER (7) CAN <sup>a</sup> GRL GUB (7) HWA IBO (7) PNZ PTR USA	ARG { B } BOL { CAN CHL } CLM { DOM (250 W) EQA (250 W) MEX PRG (250 W) PRU (250 W) URG } VEN (250 W)

<sup>1</sup> With night use limited to 7° to 16° S and W of 56° W.<sup>a</sup> Aircraft only.<sup>2</sup> Canada will use this frequency only on a basis of non-interference to stations in the United States of America operating on the same frequency.

## REGION 3

BAND 3025-3155 kc/s

3032	3039	3046	3053	3060	3067
AUS (500 W) CAR (7) CBG (350 W) CHN (Region 5) (3 kW) IND (350 W) JON LAO (350 W) MDW MRA (7) MRL (7) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PHL (Puerto Princesa) (300 W) VTN (350 W) WAK	AUS (S) (500 W) CBG (250 W) CHN (Region 8) (3 kW) IND (350 W) INS (500 W) LAO (250 W) NCL (250 W) ■ NGN (500 W) NHB (250 W) NZL (1 kW) OCE (250 W) ■ PHL Aparri (200 W) VTN (250 W)	AUS (S) (500 W) CBG (250 W) CHN (Region 5) (500 W) FJI (1 kW) INS (500 W) IRN (250 W) LAO (250 W) NCL (250 W) ■ NHB (250 W) NZL (1 kW) OCE (250 W) ■ PAK (250 W) PHL (Mindoro) (200 W) US Pacific except Philippines & Japan (1 kW) VTN (250 W)	AUS (500 W) CAR (7) CHN (Region 6) (3 kW) FJI (1 kW) IND (350 W) INS (500 W) IRN (250 W) LAO (250 W) NCL (250 W) ■ MDW MRA (7) MRL (7) NZL (1 kW) PHL (Zamboanga) (300 W) VTN (Saigon) (250 W) WAK	AUS (500 W) INS (500 W) JON MDW PHL (Baler) (200 W) VTN (Hanoi) (500 W) JON MDW MRA (7) MRL (7) NZL (1 kW) PHL (Zamboanga) (300 W) VTN (Saigon) (250 W) WAK	AUS (500 W) CAR (7) CBG (350 W) INS (500 W) IRN (350 W) J (1 kW) JON LAO (350 W) MDW MRA (7) MRL (7) (1 kW) PHL (Manila) (7) (1 kW) RYUKYU (7) (1 kW) VTN (350 W) WAK
3074	3081	3088	3095	3102	3109
AUS (5 kW) CAR (7) CHN (Region 7) (3 kW) CLN (2.5 kW) HKG (2.5 kW) JON MDW MLA (2.5 kW) MRA (7) MRL (7) PAK (E) (500 W) PAK (Karachi) (500 W) PHL (Manila) (7) SNG (2.5 kW) WAK	AUS (5 kW) CHN (Region 2) (3 kW) CLN (2.5 kW) FJI (1 kW) HKG (2.5 kW) MLA (2.5 kW) NZL (1 kW) PHL (Labo) (200 W) SNG (2.5 kW)	AUS (1 kW) CAR (7) J JON MDW MRA (7) MRL (7) MLA (2.5 kW) NZL (1 kW) PHL (7) WAK	AUS (5 kW) CHN (Region 2) (3 kW) CLN (2.5 kW) FJI (1 kW) HKG (2.5 kW) MLA (2.5 kW) NZL (1 kW) PAK (E) (250 W) PHL (Cebu) (200 W) SNG (2.5 kW)	AUS (500 W) CAR (7) (1 kW) CHN (Region 7) (3 kW) CLN (2.5 kW) HKG (2.5 kW) J (1 kW) JON (1 kW) MDW (1 kW) MLA (2.5 kW) MRA (7) (1 kW) MRL (7) (1 kW) PAK (250 W) PHL (7) (1 kW) SNG (2.5 kW) WAK (1 kW)	AUS (S) (500 W) CAR (7) (1 kW) CHN (Region 3) (3 kW) CHN (7) (1 kW) INS (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) PAK (W) (250 W) PHL (7) (1 kW) WAK (1 kW)
3116	3123	3130	3137	3144	3151
AUS (500 W) CLN (2.5 kW) HKG (2.5 kW) MLA (2.5 kW) PHL (Cagayan) (400 W) PHL (Misamis) (400 W) SNG (2.5 kW)	AUS (S) (500 W) CAR (7) (1 kW) CHN (Region 1) (3 kW) CHN (7) (1 kW) FJI (1 kW) INS (500 W) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NGN (500 W) NZL (1 kW) PAK (350 W) PHL (7) (1 kW) WAK (1 kW)	AUS (S) (500 W) CHN (Region 4) (3 kW) INS (500 W) NCL (1 kW) ■ NHB (1 kW) NZL (1 kW) OCE (1 kW) ■ PAK (Karachi) (1.5 kW) PHL (Cebu) (300 W)	AUS (S) (5 kW) CAR (7) CHN (Region 6) (3 kW) INP (100 W) JON MDW MRA (7) MRL (7) PHL (Cebu) (400 W) PHL (7) (1 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (1 kW) CHN (7) (1 kW) J (1 kW) JON (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) PHL (7) (1 kW) WAK (1 kW)	AUS (500 W) CHN (Region 4) (3 kW) NGN (500 W) PHL (Cagayan) (400 W) PHL (Misamis) (400 W)

## REGION 1

BAND 4700-4750 kc/s

4703.5	4710.5	4717.5	4724.5	4731.5
AFS ARS CYP EGY G GIB KEN LBY MLT POL SMB URS-C URS-SEO	AFS ARS CYP D EGY G KEN LBY MLT MRC (7) SMB URS-AM URS-E YUG	AGL ALB AZR CME (Douala) (750 W) ■ CPV GNP HOL ISR (250 W) MOZ POR SMF ■ STP TCD (Ft.Lamy) (1 kW) ■ TUN UKR URS-AM URS-E URS-SEO	AGL AZR CME (Douala) (750 W) ■ CPV D EGY GNP I MOZ POR SMF ■ STP TCD (Ft. Lamy) (1 kW) ■ URS-C URS-E URS-SEO	AFS BUL CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ S SMF ■ TCD ■ TCH TUN URS-C URS-E

◆  
F (Algeria) (300 W) ■  
F (S) (300 W) ■  
I  
MDG (300 W) ■

◆  
F (Algeria) (100 W) ■  
F (Côte Occ.)  
(100 W) ■  
MDG (100 W) ■

4738.5	4745.5
AFS AUT AZR BLR BUL CAF ■ COG ■ CTI ■ D DAH ■ EGY ETH (500 W) F (except Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ NOR POR TCD ■ URS-AM URS-C	CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ EGY F (Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ SUI TCD ■ TGO ■ TUN URS-SEO

◆  
I (S)  
POR (400 W)

♦ On a secondary basis.

## REGION 2

BAND 4700-4750 kc/s

4703.5	4710.5	4717.5	4724.5	4731.5	
B (E-57° W) CAN CHL (N-33° S) (300 W) CHL (S-33° S) DOM (250 W) EQA (250 W) HWA MEX	ALS B (E-46° W & 3° S-13° S) (300 W) BER (7) CAN * CHL (S-41° S) CUB (Guanta- namo) (7) GRL GUB (7) IOB (7) PNZ PRG (250 W) PRU (250 W) PTR URG (100 W) USA	ARG BER (7) CAN * CLM GRL HWA USA	ALS (1 kW) ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	ALS BER (7) CAN * CUB (750 W) GDL ■ GRL GUF ■ HWA MRT ■ NCG (300 W) PRU (250 W) URG USA (except E-98° W & S-36° N)	
		4738.5	4745.5		
		ARG (S-45° S) B BOL (250 W) CAN GDL (300 W) ■ HWA MEX MRT (300 W) ■	BER (7) CAN * CHL GRL HND (300 W) HWA PRG (100 W) URG (100 W) USA (except Florida) USA (Florida) (300 W) ■ VEN (250 W)		

\* See note \*, page 53.

## REGION 3

BAND 4700-4750 kc/s

4703.5	4710.5	4717.5	4724.5	4731.5
AUS (S) (500 W) CAR (7) CHN (Region 2) (1 kW) CLN (2.5 kW) FJI (1 kW) HKG (2.5 kW) INP (100 W) JON MAC (100 W) MDW MLA (2.5 kW) MRA (7) MRL (7) NZL (1 kW) PAK (E & N-W) (400 W) PHL (S) (400 W) SNG (2.5 kW) TMP (100 W) WAK	AUS (500 W) CAR (7) (5 kW) CBG (1 kW) CHN (7) (5 kW) FJI (1 kW) IND (350 W) INS (500 W) J (5 kW) JON (5 kW) LAO (1 kW) MDW (5 kW) MRA (7) (5 kW) MRL (7) (5 kW) NZL (1 kW) PHL (7) (5 kW) VTN (1 kW) WAK (5 kW)	AUS (5 kW) CLN (2.5 kW) HKG (2.5 kW) JON MDW MLA (2.5 kW) MRA (7) MRL (7) PAK (E) (400 W) (1.5 kW) PAK (Karachi) (300 W) SNG (2.5 kW) WAK	AUS (S) (except Brisbane) (500 W) CAR (7) (3 kW) CBG (1 kW) CHN (7) (3 kW) INP (100 W) INS (W-Java) (1 kW) J (3 kW) JON (3 kW) LAO (1 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PAK (400 W) PHL (7) (3 kW) TMP (100 W) VTN (1 kW) WAK (3 kW)	AUS (S) (500 W) CHN (3 kW) IND (except Sadhiya) (350 W) INS (1 kW) JON MDW MRA (7) MRL (7) NCL (500 W) ■ NGN (1 kW) NHB (500 W) OCE (500 W) ■ WAK

4738.5	4745.5
AUS CAR (7) (1 kW) CHN (Regions 4, 5 & 6) (3 kW) FJI IND (S-30° N & W-90° E) (350 W) J (1 kW) JON MDW MLA (2.5 kW) MRA (7) (1 kW) MRL (7) NZL SNG (2.5 kW) WAK	AUS (5 kW) CBG (500 W) FJI (1 kW) IND (350 W) IRN (500 W) JON LAO (500 W) MDW MRA (7) MRL (7) NZL (1 kW) PHL (N) (400 W) VTN (500 W) WAK

## REGION 1

BAND 5680-5730 kc/s

5688	5695.5	5703	5710.5	5718	5725.5
AGL	AFS	AZR	AFS	AFS	AFS
ALB	ARS (W-55° E)	BLR	CAF ■	AUT	CAF (750 W) ■
AZR	(500 W)	CAF ■	CME ■	BUL	CME (750 W) ■
BLR	CAF (S-5° N)	CME ■	COG ■	CAF ■	COG (750 W) ■
CPV	(750 W) ■	COG ■	CTI ■	CME ■	CTI (750 W) ■
D	CME (Douala)	CTI ■	DAH ■	COG ■	DAH (750 W) ■
EGY	(750 W) ■	DAH ■	F ■	CTI ■	EGY
G	COG (750 W) ■	E	GAB ■	D	GAB (750 W) ■
GNP	CTI (750 W) ■	EGY	GRC (100 W)	DAH ■	HVO (750 W) ■
MOZ	CYP	GAB ■	HVO ■	EGY	I
POR	EGY	HOL	IRQ	F ■	ISL
STP	G	HVO ■	MDG ■	GAB ■	MDG (N-20° S)
URS-AM (500 W)	GAB (750 W) ■	MDG ■	MLI ■	HVO ■	(750 W) ■
URS-C (500 W)	GIB	MLI ■	MRC (6)	MDG ■	MLI (750 W) ■
URS-E (500 W)	HVO (W-0°) ■	MTN ■	MTN ■	MLI ■	MTN (750 W) ■
URS-SEO (500 W)	(750 W)	NGR ■	NGR ■	MRC (6)	NGR (750 W) ■
	IRQ	POR (100 W)	NOR	MTN ■	S
	KEN	SMF ■	POL	NGR ■	TCD (S-12° N)
	LBY	TCD ■	REU ■	REU ■	(750 W) ■
	MDG (N-20° S)	TGO ■	SMF ■	SMF ■	UKR
	(750 W) ■	URS-E	SYR	TCD ■	URS-C (1 kW)
	MLI (W-0°)	URS-SEO (1 kW)	TCD ■	TGO ■	URS-E
	(750 W) ■	YUG	TUN	TUN	♦
	MLT	♦	URS-AM	URS-AM	F (Algeria)
	MTN (750 W) ■	F (Oran)	(50 W)	URS-C	(300 W) ■
	SMB	(300 W) ■		URS-E	MRC (6)
	TCH	MRC (6)		URS-SEO	(300 W)
	URS-E	(300 W)		(50 W)	POR (400 W)
	URS-SEO (1 kW)				

♦ On a secondary basis.

## REGION 2

BAND 5680-5730 kc/s

5688	5695.5	5703	5710.5	5718	5725.5
ATN (500 W)	ALS (1 kW)	ARG	ALS	B	ALS
ARG (S-36° S)	ARG (S-41° S)	BOL (250 W)	B (E-55° W)	CAN	B (except
CAN	BER (7)	CAN	CAN *	CHL (N-41° S)	N-8° S &
EQA (250 W)	BOL	CLM	CHL	(300 W)	W-47° W)
MEX	CAN *	MEX	CLM	CHL (S-41° S)	(350 W)
PRG (250 W)	GRL		GDL (300 W) ■	CUB (400 W)	BER (7)
	USA		GRL		CAN *
	VEN (N-5° N)		MRT (300 W) ■		CHL
	(250 W)		USA		CUB (Guanta-
					namo) (7)
					GRL
					GUB (7)
					IOB (7)
					PNZ
					PTR
					URG (100 W)
					USA

\* See note \*, page 53.

## REGION 3

BAND 5680-5730 kc/s

5688	5695.5	5703	5710.5	5718	5725.5
AUS (500 W) CHN (Regions 4-5 & 6) (1 kW) IND (S-30° N) (350 W) INS (Java & Sumatra) (1 kW) MRA (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (S) (400 W) WAK (1 kW)	AUS (5 kW) CLN (2.5 kW) FJI (1 kW) HKG (2.5 kW) MLA (2.5 kW) NZL (1 kW) PAK (500 W) SNG (2.5 kW)	AUS (S) (500 W) FJI (1 kW) IND (350 W) INS (500 W) IRN (500 W) MAC (100 W) NZL (1 kW) PHL (Cebu) (400 W) PHL (N) (400 W)	AUS (S) (500 W) CHN (3 kW) INP (100 W) MLA (2.5 kW) PHL (S) (400 W) SNG (2.5 kW) TMP (100 W)	AUS (5 kW) CAR (7) (1 kW) CBG (500 W) CHN (7) (1 kW) FJI (1 kW) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NZL (1 kW) PAK (Karachi) PHL (7) (1 kW) VTN (500 W) WAK (1 kW)	AUS (1 kW) CAR (7) (1 kW) CBG (500 W) CHN (7) (1 kW) IND (350 W) J (1 kW) JON (1 kW) LAO (500 W) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (1 kW) VTN (500 W) WAK (1 kW)

## REGION 1

BAND 6685-6765 kc/s

6685 (A1)	6687.5 (A1)	6693	6700.5	6708	6715.5
AGL ARS (S-20° N) CPV D (81) GNP MOZ NOR POR STP SUI URS-AM URS-C URS-SEO	AFS ALB AZR EGY FNL G YUG	ARS BUL CYP EGY G GIB KEN LBY MLT SMB URS-SEO	ARS (2.5 kW) CYP D EGY G GIB KEN LBY MLT SMB SMB URS-SEO (1 kW)	AFS CYP EGY G KEN LBY MLT SMB URS-E URS-SEO (1 kW) YUG	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ ISR (250 W) MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS

## REGION 1

BAND 6685-6765 kc/s

6723	6730.5	6738	6745.5	6753	6760.5
AFS EGY (1 kW) HOL MRC (7) URS-C (1 kW) URS-E  ♦ I (100 W)	AGL AZR CPV DNK (300 W) D ETH GNP ISL MOZ POR ROU STP SYR (300 W) URS-AM (500 W)	EGY (1 kW) G MRC (6) TCH URS-C (1 kW)	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY F ■ FNL GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ POL REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E URS-SEO	CAF ■ CME ■ COG ■ CTI ■ DAH ■ EGY (500 W) F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-E	ARS (S-20° N) BLR CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ MTN ■ NGR ■ TCD ■ TGO ■ TUN UKR URS-AM (1 kW) URS-C

♦ On a secondary basis.

## REGION 2

BAND 6685-6765 kc/s

6685 (A1)	6687.5 (A1)	6693	6700.5	6708	6715.5
B CAN MEX	ALS NCG (300 W) URG (1 kW) USA	ARG CAN GDL ■ GUF ■ MEX MRT ■	ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B CAN CUB	B CAN MEX
6723	6730.5	6738	6745.5	6753	6760.5
ALS ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	ALS ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	ALS BER (7) CHL CLM (100 W) HND HWA URG (100 W) USA	BOL CAN CHL (S-33° S) (100 W) CUB GDL (100 W) ■ GUF (100 W) ■ MRT (100 W) ■	B CAN CHL (S-41° S) (300 W) MEX	ALS ARG ATN BER (7) HWA USA

\* See note \*, page 53.

## REGION 3

BAND 6685-6765 kc/s

6685 (A1)	6687.5 (A1)	6693	6700.5	6708	6715.5
AUS (500 W) CBG (500 W) CLN HKG LAO (500 W) MLA SNG VTN (500 W)	AUS (S) (500 W) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (350 W) J (3 kW) JON (3 kW) MDW (3 kW) MRA (7) (3 kW) MRL (7) (3 kW) NCL (500 W) ■ NHB (500 W) OCE (500 W) ■ PHL (7) (3 kW) WAK (3 kW)	AUS (5 kW) CLN FJI (1 kW) HKG IND (N-25° N & E-75° E) MLA NZL (1 kW) SNG	AUS (5 kW) CLN (2.5 kW) HKG (2.5 kW) MLA (2.5 kW) PAK (400 W) PHL (S) (400 W) SNG (2.5 kW)	AUS (S)-(500 W) CLN (250 W) FJI (1 kW) INS (1 kW) MAC (100 W) NGN (1 kW) NZL (1 kW) PAK (1 kW)	AUS (except Darwin) (500 W) CHN (Regions 4, 5 & 6) (1 kW) FJI (1 kW) INS (Java) INP (100 W) NZL (1 kW) PHL (S) (400 W) TMP (100 W)
6723	6730.5	6738	6745.5	6753	6760.5
AUS (except Pt. Moresby) (1 kW) CAR (7) (3 kW) CHN (7) (3 kW) FJI (1 kW) IND (500 W) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2.5 kW) MRA (7) (3 kW) MRL (7) (3 kW) NZL (1 kW) PHL (7) (3 kW) SNG (2.5 kW) WAK (3 kW)	AUS (except Pt. Moresby) (5 kW) CAR (7) (3 kW) CHN (7) (3 kW) IND (S-30° N) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2.5 kW) MRA (7) (3 kW) MRL (7) (3 kW) PAP (Pt. Moresby) (500 W) PHL (7) (3 kW) SNG (2.5 kW) WAK (3 kW)	AUS (1 kW) CLN (2.5 kW) CHN (3 kW) MLA (2.5 kW) NCL (1 kW) ■ IND (500 W) J (3 kW) JON (3 kW) MDW (3 kW) MLA (2.5 kW) MRA (7) (3 kW) MRL (7) (3 kW) PAP (Pt. Moresby) (500 W) PHL (7) (3 kW) SNG (2.5 kW) WAK (3 kW)	AUS (except Darwin) (5 kW) CBG (500 W) FJI (1 kW) IND (500 W) IRN (500 W) OCE (1 kW) ■ PAK (Karachi) (400 W) SNG (2.5 kW)	AUS (except Brisbane & Pt. Moresby) (500 W) CAR (7) (1 kW) CBG (1 kW) CHN (7) (1 kW) IND (except Sadhiya) (500 W) INS (Java) (500 W) J (1 kW) JON (1 kW) LAO (1 kW) MDW (1 kW) MRA (7) (1 kW) MRL (7) (1 kW) NCL (1 kW) ■ NHB (1 kW) NZL (500 W) OCE (1 kW) ■ PHL (Cebu) (400 W) VTN (1 kW) WAK (1 kW)	AUS (except Darwin) (500 W) CAR (7) CHN (Regions 4, 5 & 6) (1 kW) INP (100 W) J JON MDW MLA (1 kW) MRA (7) MRL (7) SNG (1 kW) TMP (100 W) WAK

## REGION 1

BAND 8965-9040 kc/s

8967	8975.5	8984	8992.5	9001
AFS ARS CYP D EGY G GIB KEN LBY MLT SMB	AFS AZR ISR (100 W) MRC (7) (1 kW) URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ LBN MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM	AGL AZR CPV GNP MOZ POL (500 W) POR STP URS-E URS-SEO (50 W)	BLR CAF ■ CME ■ COG ■ EGY GAB ■ HOL MDG ■ NOR REU ■ TCD ■  ♦ CTI (300 W) ■ DAH (300 W) ■ F (Oran) (100 W) ■ HVO (300 W) ■ MRC (6) (300 W) MLI (300 W) ■ MTN (300 W) ■ NGR (300 W) ■ TUN (100 W)

9009.5	9018	9026.5	9035
BUL CAF (500 W) ■ CME (500 W) ■ COG (500 W) ■ G GAB (500 W) ■ MDG (500 W) ■ REU (500 W) ■ TCD (500 W) ■ URS-SEO YUG  ♦ CTI ■ DAH ■ HVO ■ MLI ■ MTN ■ NGR ■	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN UKR	COG (Brazzaville) (400 W) ■ D EGY MLI (Dakar) (400 W) ■ MDG (400 W) ■ REU (400 W) ■ TCH URS-AM URS-C  ♦ MRC (6) (Rabat) (300 W)	DNK I MRC (7) POL

♦ On a secondary basis.

## REGION 2

BAND 8965-9040 kc/s

8967	8975.5	8984	8992.5	9001
B CAN HWA MEX	ARG ATN USA (1 kW)	ALS ARG BER (7) CUB (Guanta-namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CAN CHL GDL ■ GUF ■ MEX MRT ■	ALS B CUB (300 W) USA

  

9009.5	9018	9026.5	9035
B CAN MEX VEN (250 W) *	ALS BOL CHL (S-41° S) (300 W) CUB HWA	ALS ARG BER (7) CAN (1 kW) <sup>1</sup> CUB (Guanta-namo) (7) GRL (750 W) GUB (7) IOB (7) PNZ PTR USA	ALS CAN <sup>1</sup> CHL CLM (300 W) URG (100 W) USA

<sup>1</sup> See note \*, page 53.

\* Aircraft only.

## REGION 3

BAND 8965-9040 kc/s

8967	8975.5	8984	8992.5	9001
AUS CLN FJI HKG MDW MLA NZL SNG	AUS CBG CLN LAO MRL (7) VTN WAK	AUS (500 W) CBG LAO MRL (7) VTN WAK	FJI IND PHL NZL	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL WAK

9009.5	9018	9026.5	9035
FJI INS IRN NGN NZL	AUS (Darwin) (500 W) CHN JON (1 kW) MLA NCL ■ NHB OCE ■ PAK (W) SNG	AUS (500 W) CAR (7) CHN (7) HKG INP J JON MDW MLA MRA (7) MRL (7) PHL (7) SNG WAK	CAR (7) CHN (N) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHL (7) TMP WAK

## REGION 1

BAND 11 175-11 275 kc/s

11 180.5	11 190	11 199.5	11 209	11 218.5	11 228
AGL	CAF ■	ARS	CAF ■	AUT	D
AZR	CME ■	CYP	CME ■	CAF ■	MRC (7)
CPV	COG ■	D	COG ■	CME ■	YUG (A3 only)
EGY	CTI ■	EGY	CTI ■	COG ■	
GNP	DAH ■	G	DAH ■	CTI ■	
MOZ	F (Algeria) ■	GIB	F ■	D	
NOR	GAB ■	KEN	GAB ■	DAH ■	
POL	HVO ■	LBY	HVO ■	F ■	
POR (250 W)	ISR (100 W)	MLT	MDG ■	GAB ■	
STP	MDG ■	SMB	MLI ■	HVO ■	
	MLI ■		MRC (6)	MDG ■	
	MRC (6)		MTN ■	MLI ■	
	MTN ■		NGR ■	MRC (6)	
	NGR ■		REU ■	MTN ■	
	REU ■		SMF ■	NGR ■	
	SMF ■		TCD ■	REU ■	
	TCD ■		TGO ■	SMF ■	
	URS		TUN	TCD ■	
			URS-SEO	TGO ■	
				TUN	

11 237.5	11 247	11 256.5	11 266	11 273 (A1)
AFS URS	CYP (500 W) DNK EGY G GIB LBY MLT URS-AM URS-SEO	ETH (100 W) HOL UKR URS-AM URS-C URS-E URS-SEO	AZR D MRC (7) POR URS-E (500 W)	BUL ROU URS-AM URS-C URS-E
♦  CTI (500 W) ■ DAH (500 W) ■ F (Algeria) (500 W) ■ HVO (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ TUN (500 W)			♦  EGY (300 W)	♦  CAF (500 W) ■ COG (500 W) ■ CTI (500 W) ■ DAH (500 W) ■ F (Algeria) (500 W) ■ GAB (500 W) ■ HVO (500 W) ■ MDG (500 W) ■ MLI (500 W) ■ MRC (6) (500 W) MTN (500 W) ■ NGR (500 W) ■ REU (500 W) ■ TCD (500 W) ■

♦ On a secondary basis.

## REGION 2

BAND 11 175-11 275 kc/s

11 180.5	11 190	11 199.5	11 209	11 218.5	11 228
ALS ARG ATN CLM USA	CAN (1 kW) CHL MEX	B BER (7) HWA USA	ARG CAN CUB	ALS ARG BER (7) CAN * GDL ■ GRL GUF ■ HWA MRT ■ USA	ALS BER (7) CAN * CHL CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA
11 237.5	11 247	11 256.5	11 266	11 273 (A1)	
ARG BER (1 kW) (7) CAN (1 kW) MEX	B CAN (350 W) MEX (400 W)	B USA	ALS ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) IOB (7) PNZ PTR USA	B CAN MEX (400 W)	

\* See note \*, page 53.

## REGION 3

BAND 11 175-11 275 kc/s

11 180.5	11 190	11 199.5	11 209	11 218.5	11 228
CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS	AUS CLN HKG MDW MLA SNG	AUS CBG LAO LAO VTN	CBG LAO MDW NCL ■ NHB OCE ■ VTN	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK PHL (7) WAK
11 237.5	11 247	11 256.5	11 266	11 273 (A1)	
AUS (500 W) PHL		AUS CLN HKG MLA SNG	CHN (N-30° N) INS	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK	PHL

## REGION 1

BAND 13 200-13 260 kc/s

13 205.5	13 215.5	13 225.5	13 235.5	13 245.5	13 255.5
ARS CYP D EGY G GIB KEN LBY MLT SMB	D EGY MRC (7)  CAF (Bangui) (1 kW) ■ CME (Douala) (1 kW) ■ COG (Brazzaville) (1 kW) ■ MDG (1 kW) ■ MLI (Dakar) (1 kW) ■ REU (1 kW) ■	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F (Alge- ria) ■ GAB ■ HVO ■ MDG ■ (300 W) MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS	AUT CAF ■ CME ■ COG ■ CTI ■ DAH ■ D ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (100 W)	CAF (Bangui) (750 W) ■ CME (Douala) (750 W) ■ COG (Brazzaville) (750 W) ■ MDG (750 W) ■ MLI (Dakar) (1 kW) ■ POL REU (750 W) ■ URS	AGL AZR CPV GNP HOL MOZ NOR POR ROU STP

♦ On a secondary basis.

## REGION 2

BAND 13 200-13 260 kc/s

13 205.5	13 215.5	13 225.5	13 235.5	13 245.5	13 255.5
ALS ARG ATN (300 W) HWA (1 kW) MEX	ALS ARG (300 W) BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B CAN (350 W) CUB (350 W)	ALS ARG (300 W) BER (300 W) (7) CAN (400 W) * CUB (Guanta- namo) (7) GDL ■ GRL (300 W) GUB (7) GUF ■ IOB (7) MRT ■ PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) * USA	ARG CAN HWA MEX

\* See note \*, page 53.

## REGION 3

BAND 13 200-13 260 kc/s

13 205.5	13 215.5	13 225.5	13 235.5	13 245.5	13 255.5
AUS CLN HKG JON (1 kW) MDW (1 kW) MLA SNG	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PAK WAK	AUS (500 W) CBG (100 W) LAO (100 W) VTN (100 W)	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL WAK	IND JON MDW NGN

## REGION 1

BAND 15 010-15 060 kc/s

15 016	15 026	15 036	15 046	15 056
D MRC (7)	AGL AZR CPV GNP MOZ STP URS	CAF ■ CME ■ COG ■ CTI ■ DAH ■ GAB ■ HVO ■ MDG ■ MLI ■ MTN ■ NGR ■ REU ■ TCD ■ URS	ETH (250 W) G	AFS MRC (7) NOR

♦ On a secondary basis.

◆  
F (Algeria)  
(200 W) ■  
MRC (6) (200 W)

## REGION 1

BAND 15 060-15 100 kc/s

15 066	15 076	15 086	15 092.5 (A1)	15 096.5 (A1)
CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN URS-AM (50 W) URS-SEO	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MRC (6) MLI ■ MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	DNK POL (500 W) URS	G URS-SEO	HOL

## REGION 2

BAND 15 010-15 100 kc/s

15 016	15 026	15 036	15 046	15 056
ALS ARG (S-30° S) (300 W) BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL MEX (N-19° N) (400 W)	B CAN GRL MEX (N-19° N) (300 W)	ALS (1 kW) ARG CUB (300 W)	ALS ARG (300 W) BER (7) USA
15 066	15 076	15 086	15 092.5 (A1)	15 096.5 (A1)
BER (7) CHL (300 W) CUB (Guanta- namo) (7) GUB (7) IOB (7) PNZ PTR USA	ALS ARG (300 W) USA	B (S-5° S & E-55° W) (300 W) HWA (1 kW) MEX	B MEX (N-19° N) (300 W)	ALS ARG (300 W) ATN USA

\* See note \*, page 53.

## REGION 3

BAND 15 010-15 100 kc/s

15 016	15 026	15 036	15 046	15 056
CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INP MAC TMP	—	AUS PAK	CAR (7) CHN (7) IND J JON MDW MRA (7) MRL (7) PHL (7) WAK
15 066	15 076	15 086	15 092.5 (A1)	15 096.5 (A1)
AUS CBG (50 W) <sup>1</sup> LAO (50 W) <sup>1</sup> VTN (50 W) <sup>1</sup>	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) MRL (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (50 W)	PHL (300 W)	INS  ♦ CHN (250 W)

<sup>1</sup> Aircraft only.

♦ On a secondary basis.

## REGION 1

BAND 17 970-18 030 kc/s

17 975 (A1)	17 983.5	17 993.5	18 003.5	18 013.5	18 023.5
AGL AZR CPV D GNP I MOZ MRC (7) STP URS (50 W)	ARS CYP D EGY G GIB KEN LBY MLT SMB	AUT CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	POL URS	CAF ■ CME ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MRC (7) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	URS

## REGION 2

BAND 17 970-18 030 kc/s

17 975 (A1)	17 983.5	17 993.5	18 003.5	18 013.5	18 023.5
ALS ARG (300 W) BER (7) CAN * GRL HWA (1 kW) USA	ALS B	ALS ARG GDL ■ GUF ■ MRT ■	ARG MEX	ALS BER (7) CAN * CHL (300 W) CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	B BER (1 kW) (7) CAN (1 kW) * GRL (1 kW) USA (1 kW)

\* See note \*, page 53.

## REGION 3

BAND 17 970-18 030 kc/s

17 975 (A1)	17 983.5	17 993.5	18 003.5	18 013.5	18 023.5
INP MAC TMP	AUS CLN HKG MLA PAK SNG	CAR (7) CBG CHN (7) J JON LAO MDW MRA (7) NCL ■ NHB OCE ■ PHL (7) VTN WAK	AUS (400 W)	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK	INS

## REGION 1

BAND 3900-3950 kc/s

3904	3911	3918	3925	3932
AFS CAF ■ CME ■ COG ■ CTI ■ D DAH ■ EGY F (Algeria) ■ GAB ■ HVO ■ ISL MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ TUN URS-AM URS-E URS-SEO (1 kW) YUG	BLR (500 W) CAF ■ COG ■ CTI ■ DAH ■ EGY F (except Algeria) ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ TCD ■ URS-E URS-SEO YUG	AFS ALB EGY F ■ G MRC (6) UKR (500 W) URS-AM URS-E URS-SEO	AZR D EGY F (except Algeria) ■ G MLT POR URS-E URS-SEO	AFS AUT CAF ■ CME ■ COG ■ CTI ■ D (81) DAH ■ F (Algeria) ■ G GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN URS-E URS-SEO

◆ ROU (W-25° E)  
(100 W)

  

3939	3946
D (81) E (500 W) G (N-52° N) GRC (250 W) POL URS-C URS-SEO	AFS F ■ GRC (250 W) MRC (6) NOR POL URS-E URS-SEO

◆ On a secondary basis.

**B. Shared Bands \***

REGION 1

BAND 3155-3200, 3200-3230 &amp; 3800-3900 kc/s

3861	3867	3873	3874	3879	3891	3897	
CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	G MLT	CAF ■ COG ■ CTI ■ D DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HOL HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ SMF ■ TCD ■ TGO ■ TUN	AGL CPV F (except Algeria) ■ GNP MOZ NOR POR STP	G MLT	

REGION 2

BAND 2505-2850, 3155-3200 &amp; 3200-3230 kc/s

By regional agreements

REGION 3

BAND 3155-3200, 3200-3230 &amp; 3900-3950 kc/s

3155-3200 By regional agreements				
A	B	C	D	E
AUS (5 kW) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1kW) ■ PHL (N) (300 W) VTN (1 kW)	AUS (500 W) CLN (2.5 kW) HKG (2.5 kW) MLA (2.5 kW) PHL (S) (300 W) SNG (2.5 kW)	AUS (S) (500 W) INP (100 W) MAC (100 W) PHL (S) (300 W) TMP (100 W)	AUS (500 W) CBG (1 kW) LAO (1 kW) NCL (1 kW) ■ NHB (1 kW) OCE (1 kW) ■ PHL (N) (300 W) VTN (1 kW)	AUS (500 W) CLN (2.5 kW) HKG (2.5 kW) MLA (2.5 kW) PHL (S) (300 W) SNG (2.5 kW)
3200-3230 By regional agree- ments	3900 — 3950			
	3920	3923	3930	3937
AUS (500 W) PHL (N) (300 W)	AUS	PHL (S) (300 W)	AUS PHL (S) (300 W)	AUS PHL (N) (300 W)

\* Assignments in accordance with I.T.U. Regional Lists.

## C. Shared Bands (Frequencies not allotted)

REGION 1

BAND 4750-4850. kc/s

A	B	C	D	E
EGY G MLT ROU (Bucarest) (500 W)	G I MRC (6)	EGY F (Algeria) ■ G YUG	EGY F (except Algeria) ■ MRC (6)	F ■ MRC (6) S TUN

REGION 2

BAND 4438-4650 kc/s

A	B	C	D	E
ARG (S-45° S) B CAN MEX	ALS ARG BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	ALS ARG B (N-10° S & E-50° W) CLM USA	B (except S-Rio Grande) CAN CHL CUB (E-Santa Clara) (500 W) MEX	B CAN CHL (S-35° S) MEX

F	G
ALS ARG BER (7) CAN * CUB (Guanta- namo) (7) GUB (7) HWA IOB (7) PNZ PTR USA	ALS ARG B (N-15° S) GDL ■ HWA MRT ■ NCG USA

\* See note \*, page 53.

## REGION 1

BAND 5430-5480 kc/s

A	B	C
AZR EGY HOL POR YUG	CAF ■ CME ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ REU ■ ROU (100 W) SMF ■ TCD ■ TGO ■ TUN	G I (S-40° N) (100 W) SUI
F (Algeria) (100 W) ■ F (S & W) (100 W) ■ MRC (6) (100 W) TUN (100 W)		

♦ On a secondary basis.

## REGION 3

BAND 5430-5480 kc/s

A	B	C
AUS CLN FJI HKG MLA NZL PAK PHL(S) SNG	CBG (500 W) IND (500 W) INS (500 W) LAO (500 W) MAC (100 W) NCL (500 W) ■ NHB (500 W) OCB (500 W) ■ PHL (200 W) TMP (100 W) VTN (500 W)	AUS (500 W) CAR (7) CHN (1 kW) INP (100 W) J JON MDW MRA (7) MRL (7) PHL (7) WAK

## REGION 1

BAND 23 200-23 350 kc/s

A	B	C	D	E
CAF ■ COG ■ CTI ■ DAH ■ F ■ GAB ■ HVO ■ MDG ■ MLI ■ MRC (6) MTN ■ NGR ■ SMF ■ TCD ■ TUN	HOL	D MRC (7)	F ■	D MRC (7)

## REGION 2

BAND 23 200-23 350 kc/s

A	B	C	D	E	F
ARG	ALS ATN HWA SUR	ALS BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	ALS HWA	ALS BER (7) CAN * CUB (Guanta- namo) (7) GRL GUB (7) HWA IOB (7) PNZ PTR USA	CHL HWA

\* See note <sup>3</sup>, page 53.

## REGION 3

BAND 23 200-23 350 kc/s

A	B	C	D	E	F
CBG LAO VTN	INS JON MDW	CAR (7) CHN (7) J JON MDW MRA (7) MRL (7) PHL (7) WAK			