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FINAL ACTS

OF THE WORLD MARITIME ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1974



Published by the International Telecommunication Union GENEVA

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ABBREVIATIONS

The following abbreviations are used in the Annexes to indicate the nature of amendments made in the partial revision of the Radio Regulations and of the Additional Radio Regulations:

Symbol	Meaning
MOD	Modification
SUP	Suppression
ADD	Addition
NOC	No change

Note: If a modification affects only the drafting of a number, without changing the substance, the following symbol is used:

(MOD)

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of the World Maritime Administrative Radio Conference Geneva, 1974

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PARTIAL REVISION OF THE RADIO REGULATIONS¹

In its Recommendation No. Mar 6, the World Administrative Radio Conference to deal with Matters Relating to the Maritime Mobile Service held in Geneva in 1967, recommended:

- 1. that a World Administrative Radio Conference be convened:
 - to establish on the basis of single sideband operation a new Frequency Allotment Plan for high-frequency radiotelephone coast stations, covering the channels in the present Appendix 25 as well as the new high-frequency channels made available for maritime radiotelephony;
 - to amend the associated provisions of the Radio Regulations;
- 2. that such a conference be convened in 1973;
- 3. that the Administrative Council determine the exact date and place of such a conference, in accordance with No. 64 of the International Telecommunication Convention (Montreux, 1965);
- 4. that this Conference be preceded by a preparatory meeting, in accordance with No. 73 of that Convention.

¹ Namely the Radio Regulations, Geneva, 1959, as partially revised by the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunication purposes (Geneva, 1963), by the Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the Aeronautical Mobile (R) Service (Geneva, 1966), by the World Administrative Radio Conference to deal with Matters Relating to the Maritime Mobile Service (Geneva, 1967) and by the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971).

At its 25th Session (1970), the Administrative Council, after consulting the Members of the Union, decided, in its Resolution No. 678, that the Conference should be held at the beginning of 1974 and that the work of the preparatory meeting referred to in Recommendation No. Mar 6 should be replaced by studies carried out by the I.F.R.B. and the competent C.C.I.R. Study Groups.

At its 26th Session (1971), the Administrative Council instructed the Secretary-General to request administrations to send him their views on the contents of the agenda of this Conference and any other suggestions for the inclusion of particular items in that agenda.

At its 27th Session (1972), the Administrative Council, after examining the replies of administrations to the Secretary-General's enquiry, adopted Resolution No. 704 containing the agenda of the Conference and stipulating that it should meet on 22 April 1974 for a period not in excess of seven weeks.

* *

The World Maritime Administrative Radio Conference accordingly convened on the appointed date, considered and revised, in conformity with its agenda, the relevant parts of the Radio Regulations and of the Additional Radio Regulations. Particulars of the revision of the Radio Regulations are given in Annexes 1 to 56 hereto.

The revised provisions of the Radio Regulations shall form an integral part of the Radio Regulations which are annexed to the International Telecommunication Convention. They shall come into force on 1 January 1976, upon which date the provisions of the Radio Regulations which are cancelled or modified by this revision shall be abrogated.

* *

The delegates signing this revision of the Radio Regulations hereby declare that, should an administration make reservations concerning the application of one or more of the revised provisions of the Radio Regulations, no other administration shall be obliged to observe that provision or those provisions in its relations with that particular administration.

* *

Members of the Union shall inform the Secretary-General of their approval of the revision of the Radio Regulations by the World Maritime Administrative Radio Conference, Geneva, 1974. The Secretary-General will inform Members of the Union regarding receipt of such notifications of approval as they are received.

In witness whereof the delegates of the Members of the Union represented at the World Maritime Administrative Radio Conference, Geneva, 1974, have signed in the names of their respective countries this revision of the Radio Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to each Member of the Union.

Done at Geneva, 8 June 1974

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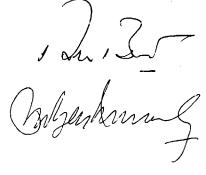
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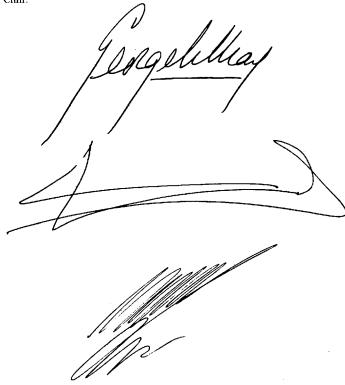
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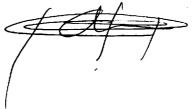
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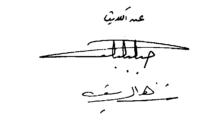
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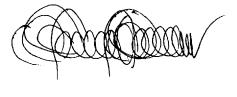
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ANNEX 1

Revision of Article 1 of the Radio Regulations

Article 1 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 3 by the following new text:

MOD 3

General Network of Telecommunication Channels. The whole of the existing telecommunication channels open to public correspondence, with the exception of the telecommunication channels of the mobile service, of the maritime mobile-satellite service and of the fixed-satellite service when used for connection between one or more earth stations and a satellite used for the maritime mobile-satellite service.

Replace Regulation No. 14 by the following new text:

MOD 14 Radiotelegram: A telegram, originating in or intended for a mobile station or a mobile earth station in the maritime mobile-satellite service, transmitted on all or part of its route over the radiocommunication channels of a mobile service or of the maritime mobile-satellite service.

After Regulation No. 14 add the following new Regulation:

ADD 14A Radiotelex Call: A telex call, originating in or intended for Mar2 a mobile station or a mobile earth station transmitted on all or part of its route over the radiocommunication channels of the maritime mobile service or the maritime mobile-satellite service.

Replace Regulation No. 18 by the following new text:

MOD 18 Radiotelephone Call: A telephone call, originating in or in-Mar2 tended for a mobile station or a mobile earth station in the maritime mobile-satellite service, transmitted on all or part of its route over the radiocommunication channels of a mobile service or of the maritime mobile-satellite service.

Replace Regulation No. 36 by the following new text:

MOD 36 Maritime Mobile Service: A mobile service between coast

Mar2 stations and ship stations, or between ship stations, or between
associated on-board communication stations (see No. 39A); survival
craft stations may also participate in this service.

Replace Regulation No. 37 by the following new text:

(MOD) 37

Port Operations Service: A maritime mobile service in or near a port, between coast stations and ship stations, or between ship stations, in which messages are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons. Messages which are of a public correspondence nature shall be excluded from this service.

After Regulation No. 37 add the following new Regulation:

ADD 37A Ship Movement Service: A maritime mobile safety service, other than a port operations service, between coast stations and ship stations, or between ship stations, in which messages are restricted to those relating to the movement of ships. Messages which are of a public correspondence nature shall be excluded from this service.

After Regulation No. 39 add the following new Regulation:

ADD 39A On-Board Communication Station: A low-powered mobile station in the maritime mobile service intended for use for internal communications on board a ship, or between a ship and its lifeboats and liferafts during lifeboat drills or operations, or for communication within a group of vessels being towed or pushed, as well as for line handling and mooring instructions.

After Regulation No. 60 add the following new Regulation:

ADD 60A Radar beacon (racon): In the maritime radionavigation service, a receiver-transmitter device which, when triggered by a surface search radar, automatically returns a distinctive signal which can appear on the display of the triggering radar, providing range, bearing and identification information.

After Regulation No. 84AGC add the following new Regulation:

ADD **84AGCA** Ship Earth Station: A mobile earth station in the maritime Mar2 mobile-satellite service located on board ship.

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ANNEX 2

Revision of Article 5 of the Radio Regulations

Article 5 of the Radio Regulations shall be amended as follows:

Section IV. Table of Frequency Allocations 10 kHz to 275 GHz

Replace Regulation No. 167 by the following new text:

MOD 167 Only classes A1 or F1, A4 or F4 emissions are authorized in the band 90-160 kHz for stations of the fixed service and in the band 110-160 kHz for stations of the maritime mobile service. Exceptionally, class A7J emissions are also authorized in the band 110-160 kHz for stations of the maritime mobile service.

In the Table of Frequency Allocations, replace the provisions for the band 1605-2000 kHz by the following:

kHz (Mar2)

	Allocation to Services	
Region 1	Region 2	Region 3
1 605 — 2 000	1 605 — 1 800	1 605 — 1 800
Fixed	FIXED	Fixed
MOBILE except	MOBILE	Mobile
aeronautical mobile	Aeronautical radionavigation	
	Radiolocation	
		197
	1 800 — 2 000	
	Amateur	•
	FIXED	
	Mobile excep	pt aeronautical mobile
	Radionavig	ATION
192 193 194 195 1954	198	

NOC 192 - 195

After Regulation No. 195 add the following new Regulation:

ADD 195A

195A The countries of the European Maritime Area use radiodetermination systems the Mar2 establishment and operation of which are covered by special arrangements between administrations having services which may be affected.

Delete Regulation No. 196.

NOC 197, 198

In the Table of Frequency Allocations, replace the provisions for the band 2000-2194 kHz by the following:

kHz (Mar2)

	Allocation to Services	
Region 1	Region 2	Region 3
2 000 — 2 045	2 000 - 2 065	
Fixed		
MOBILE except aeronautical mobile		
193 195A		
2 045 — 2 065	Fixed	
METEOROLOGICAL AIDS FIXED	MOBILE	
MOBILE except aeronautical mobile		
193 195A		
2 065 — 2 170	2 065 — 2 107	
FIXED	MARITIME MOBIL	Æ
MOBILE except	200	
aeronautical mobile (R)	2 107 — 2 170	
	FIXED	
193 195A	Mobile	
2 170 — 2 194		
	MOBILE (distress and calling)	
•	201 201A	

NOC 200, 201, 201A

In the Table of Frequency Allocations, replace the provisions for the band 2194-2850 kHz by the following:

kHz (Mar2)

	Allocation to Services	
Region	Region 2	Region 3
2 194 – 2 300	2 194 — 2 300	
FIXED MOBILE except aeronautical mobile (R)	Fixed Mobile	
193 195A		
2 300 - 2 498	2 300 — 2 495	
FIXED	Fixed	
MOBILE except aeronautical mobile (R)	Mobile	
Broadcasting 202	Broadcasting	202
193 195A	2 495 — 2 505	
2 498 — 2 502		
STANDARD FREQUENCY	STANDARD FREQUENCY	
203 203A		
2 502 — 2 625	203 203A	
FIXED	2 505 — 2 625	
MOBILE except aeronautical mobile (R)	FIXED	
193 195A	Mobile	•
2 625 - 2 650	2 625 — 2 850	
MARITIME MOBILE		
Maritime radionavigation		
175 195A	FIXED	
2 650 — 2 850	MOBILE	
FIXED	•	
MOBILE except aeronautical mobile (R)		
195A 205		

NOC 175, 202, 203, 203A, 205

In the Table of Frequency Allocations, replace the provisions for the band 2850-3025 kHz by the following:

kHz (Mar2)

÷		Allocation to Services	
	Region 1	Region 2	Region 3
MOD	2850 — 3025	•	
	/	AERONAUTICAL MOBILE (R)	
	2	01A 205 A	,

After Regulation No. 205 add the following new Regulation:

ADD 205A The frequencies 3 023.5 kHz and 5 680 kHz may also be used, in accordance with Mar2 Nos. 1326C and 1353B respectively, by stations of the maritime mobile service engaged in coordinated search and rescue operations.

In the Table of Frequency Allocations, replace the provisions for the band 4063-4438 kHz by the following:

kHz (Mar2)

Allocation to Services			
Region 1	Region 2	Region 3	
063 - 4 438			
	MARITIME MOBILE		
	208 209 209A		

MOD

NOC 208, 209

After Regulation No. 209 add the following new Regulation:

ADD 209A For the use of carrier frequency 4 136.3 kHz (as from 1 January 1978 to be replaced by carrier frequency 4 125 kHz) in the zone of Regions 1 and 2 south of latitude 15° N, including Mexico, and in the zone of Region 3 south of latitude 25° N, see No. 135 IE.

In the Table of Frequency Allocations, replace the provisions for the band 5480-5730 kHz by the following:

kHz (Mar2)

	Allocation to Services		
Region I	Region 2	Region 3	
5 480 — 5 680	AERONAUTICAL MOBILE (R) 201A 205A		
5 680 — 5 730	AERONAUTICAL MOBILE (OR) 201A 205A		

In the Table of Frequency Allocations, replace the provisions for the band 6 200-6 525 kHz by the following:

kHz (Mar2)

Allocation to Services		
Region 1	Region 2	Region 3
6 200 — 6 525		***
. M	ARITIME MOBILE	
. 2	II 211A	

NOC 21

MOD

After Regulation No. 211 add the following new Regulation:

ADD 211A For the use of carrier frequency 6 204 kHz (as from 1 January 1978 to be replaced by carrier frequency 6 215.5 kHz) in the zone of Region 3 south of latitude 25° N, see

Replace Regulation No. 213 by the following new text:

MOD 213

Between 8 435.4 and 8 476 kHz, 8 615 and 8 704.4 kHz, 8 745 and 8 815 kHz,

Mar2

12 652.3 and 12 714 kHz, 12 925 and 13 070.8 kHz, 13 130 and 13 200 kHz, 16 859.4

and 16 952 kHz, 17 160 and 17 196.9 kHz and between 17 290 and 17 360 kHz, the

U.S.S.R. will meet their special requirements for the fixed service with due regard to
technical provisions (power, location, antenna, etc.) with a view to minimizing the
possibility of harmful interference to the maritime mobile service. Coast stations in the
maritime mobile service will also have due regard to technical provisions (power, location, antenna, etc.) with a view to minimizing the possibility of harmful interference to
the fixed service in the U.S.S.R. The International Frequency Registration Board will be
consulted regarding this subject.

Replace Regulation No. 273 by the following new text:

MOD 273 In this band, the frequency 121.5 MHz is the aeronautical emergency frequency and Mar2 where required the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz; mobile stations of the maritime mobile service may communicate on these frequencies for safety purposes with stations of the aeronautical mobile service.

In the Table of Frequency Allocations, replace the provisions for the band 150.05-174 MHz by the following:

MHz (Mar2)

· · · · · · · · · · · · · · · · · · ·	Allocation to Service	es
Region 1	Region 2	Region 3
150.05 — 151	150-05 — 174	150.05 — 170
FIXED	FIXED	FIXED
MOBILE except aeronautical mobile (R)	MOBILE	MOBILE
RADIO ASTRONOMY		
233B 285 286A		
151 – 153	7	
FIXED		
MOBILE except aeronautical mobile (R)		·
RADIO ASTRONOMY		
Meteorological Aids		
233B 285 286A		
153 — 154		
Fixed		
MOBILE except aeronautical mobile (R)		
Meteorological Aids		
285		
154 — 156		
Fixed		
MOBILE except aeronautical mobile (R)		
285		
156 – 174		201A 287 290
Fixed		170 — 174
MOBILE except		FIXED
aeronautical mobile		MOBILE
201A 285 287 288	201A 233A 287	BROADCASTING

NOC 233A, 233B, 285, 286A

Replace Regulation No. 287 by the following new text:

MOD 287 Mar2 The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. Administrations shall ensure that a guard-band on each side of the frequency 156.8 MHz is provided. The conditions for the use of this frequency are contained in Article 35.

In the bands 156.025-157.425 MHz, 160.625-160.975 MHz and 161.475-162.025 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by that administration (see Article 35).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radio communication service.

However, the frequency bands in which priority is given to the maritime mobile service may be used for radio communications on inland waterways, subject to agreements between interested and affected administrations and taking into account current frequency usage and existing agreements.

Delete Regulation No. 287A.

NOC 288, 290



In the Table of Frequency Allocations, replace the provisions for the band 450-470 MHz by the following:

MHz (Mar2)

Allocation to Services		
Region 1	Region 2	Region 3
45 0 — 460		
	FIXED	
	MOBILE 318B 318C	
	318 319A	
460 — 470		
	FIXED	
	MOBILE 318B 318C	
	Meteorological-Satellite (Space-to	o-Earth) 318A
	324B	

NOC 318, 318A

After Regulation No. 318A add the following new Regulations:

ADD 318B In the maritime mobile service, the frequencies 457.525 MHz. 457.550 MHz.

Mar2 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by onboard communication stations. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Appendix 19A.

ADD 318C In the territorial waters of Canada, the United States of America and the Philippines.

Mar2 the preferred frequencies for use by on-board communication stations shall be 457-525

MHz, 457-550 MHz, 457-575 MHz and 457-600 MHz paired, respectively, with

467-750 MHz, 467-775 MHz, 467-800 MHz and 467-825 MHz. The characteristics of the equipment used shall conform to those specified in Appendix 19A.

NOC 319A, 324B

In the Table of Frequency Allocations, replace the provisions for the band 2 900-3100 MHz by the following:

MHz (Mar2)

	Allocation to Serv	vices		
Region 1	Region 2			Region 3
2 900 — 3 100	RADIONAVIGATION	367	367A	367B
	Radiolocation			

NOC 367

After Regulation No. 367 add the following new Regulations:

ADD 367A In the bands 2 900-2 920 MHz and 9 300-9 320 MHz in the maritime Mar2 radionavigation service, the use of shipborne radars other than those existing on 1 January 1976 is not permitted.

ADD 367B In the bands 2 920-3 100 MHz and 9 320-9 500 MHz in the maritime

Mar2 radionavigation service, the use of fixed-frequency radar beacons on land or at sea is not permitted.

Replace Regulation No. 369 by the following new text:

(MOD) 369 In the band 3 100-3 300 MHz, existing radar beacons (racons) and shipborne Mar2 radars in merchant ships may operate within the band 3 100-3 266 MHz.

In the Table of Frequency Allocations, replace the provisions for the band 9300-9500 MHz by the following:

MHz (Mar2)

Allocation to Services		
Region 1	Region 2	Region 3
300 — 9 500	RADIONAVIGATION 367 Radiolocation	A 367B
	399	

MOD

NOC 399

ANNEX 3

Revision of Article 6 of the Radio Regulations

Article 6 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 421 by the following new text:

MOD 421 § 7. Any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the international distress frequencies 500 kHz or 2 182 kHz is prohibited (see Nos. 187, 201, 1112 and 1325). Any emission causing harmful interference to distress, safety and calling communications on the frequency 156.8 MHz is prohibited (see Nos. 287, 1363 and 1376).

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ANNEX 4

Revision of Article 7 of the Radio Regulations

Article 7 of the Radio Regulations shall be amended as follows:

Replace Regulations Nos. 447, 448 and 449 by the following new texts:

MOD 447 Mar2 a) Ship stations, telephony, duplex operation (two-frequency channels)

4 063 - 4 139.5 kHz 6 200 - 6 210.4 kHz 8 195 - 8 281.2 kHz 12 330 - 12 421 kHz 16 460 - 16 565 kHz 22 000 - 22 094.5 kHz

As from 1 January 1978, the bands listed above will be replaced by

4 063 - 4 143 · 6 kHz 6 200 - 6 218 · 6 kHz 8 195 - 8 291 · 1 kHz 12 330 - 12 429 · 2 kHz 16 460 - 16 587 · 1 kHz 22 000 - 22 124 kHz

MOD 448 Mar2 b) Coast stations, telephony, duplex operation (two-frequency channels)

4 361 - 4 438 kHz 6 514 - 6 525 kHz 8 728·5 - 8 815 kHz 13 107·5 - 13 200 kHz 17 255 - 17 360 kHz 22 624·5 - 22 720 kHz

As from 1 January 1978, the bands listed above will be replaced by

4 357·4 - 4 438 kHz 6 506·4 - 6 525 kHz 8 718·9 - 8 815 kHz 13 100·8 - 13 200 kHz 17 232·9 - 17 360 kHz 22 596 - 22 720 kHz

MOD 449 Mar2 c) Ship stations and coast stations, telephony, simplex operation (single-frequency channels) and intership cross-band operation (two-frequencies)

> 4 139·5 - 4 142·5 kHz 6 210·4 - 6 216·5 kHz 8 281·2 - 8 288 kHz 12 421 - 12 431·5 kHz 16 565 - 16 576 kHz 22 094·5 - 22 112 kHz

As from 16 July 1977, the following bands will be in use simultaneously with the bands listed above and, as from 1 January 1978, will replace them

4 143.6 - 4 146.6 kHz 6 218.6 - 6 224.6 kHz 8 291.1 - 8 297.3 kHz 12 429.2 - 12 439.5 kHz 16 587.1 - 16 596.4 kHz 22 124 - 22 139.5 kHz Replace Regulation No. 451 by the following new text:

MOD 451 Mar2 e) Ship stations, wide-band telegraphy, facsimile and special transmission systems

```
4 146.6 - 4 162.5 kHz
 4 166 - 4 170
                  kH2
 6 224.6 - 6 244.5 kHz
 6 248 - 6 256
                  kH2
 8 300 - 8 328
                  kH<sub>2</sub>
 8 331·5 - 8 343·5 kHz
12 439·5 - 12 479·5 kHz
12 483 - 12 491
                  kHz
16 596·4 - 16 636·5 kHz
16 640 - 16 660 kHz
22 139·5 - 22 160·5 kHz
22 164 - 22 192
                kHz
```

Replace Regulation No. 451B by the following new text:

MOD 451B Mar2 g) Ship stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds (frequencies paired with those in No. 452C)

```
4 170 - 4 177.25 kHz
6 256 - 6 267.75 kHz
8 343.5 - 8 357.25 kHz
12 491 - 12 519.75 kHz
16 660 - 16 694.75 kHz
22 192 - 22 225.75 kHz
```

After Regulation No. 451B add the following new Regulation:

ADD 451C Mar2 ga) Ship stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds (non-paired frequencies)

4 177.25 - 4 179.75 kHz 6 267.75 - 6 269.75 kHz 8 297.3 - 8 300 kHz 8 357.25 - 8 357.75 kHz 12 519.75 - 12 526.75 kHz 16 694.75 - 16 705.8 kHz 22 225.75 - 22 227 kHz 25 076 - 25 090.1 kHz

Replace Regulation No. 452 by the following new text:

MOD 452

h) Ship stations, A1 Morse telegraphy, calling

Mar2

4 179·75 - 4 187·2 kHz 6 269·75 - 6 280·8 kHz 8 359·75 - 8 374·4 kHz 12 539·6 - 12 561·6 kHz 16 719·8 - 16 748·8 kHz 22 227 - 22 247 kHz 25 070 - 25 076 kHz

After Regulation No. 452 add the following new Regulations:

ADD 452A

ha) Ship stations, digital selective calling

Mar2

4 187.2 - 4 188 kHz 6 280.8 - 6 282 kHz 8 374.4 - 8 376 kHz 12 561.6 - 12 564 kHz 16 748.8 - 16 752 kHz 22 247 - 22 250 kHz

ADD 452B

hb) Ship stations, A1 Morse telegraphy, working

Mar2

4 188 - 4 219.4 kHz 6 282 - 6 325.4 kHz

8357.75 - 8359.75 kHz 8 3 7 6 - 8435.4 kHz 12 526.75 - 12 539.6 kHz 12 564 - 12 652.3 kHz 16 705 8 - 16 719 8 kHz 16 752 - 16 859 - 4 kHz 22 250 - 22 310.5 kHz 25 090 1 - 25 110 kHz

ADD 452C Mar2 hc) Coast stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds (frequencies paired with those in No. 451B)

4 349·4 - 4 356·75 kHz 6 493·9 - 6 505·75 kHz 8 704·4 - 8 718·25 kHz 13 070·8 - 13 099·75 kHz 17 196·9 - 17 231·75 kHz 22 561 - 22 594·75 kHz

ADD 452D

hd) Coast stations, digital selective calling

Mar2

4 356·75 - 4 357·4 kHz 6 505·75 - 6 506·4 kHz 8 718·25 - 8 718·9 kHz 13 099·75 - 13 100·8 kHz 17 231·75 - 17 232·9 kHz 22 594·75 - 22 596 kHz

Replace Regulation No. 453 by the following new text:

MOD 453 Mar2 i) Coast stations, wide-band and A1 Morse telegraphy, facsimile, special and data transmission systems and directprinting telegraph systems

> 4 219 · 4 · 4 349 · 4 kHz 6 325 · 4 · 6 493 · 9 kHz

8 435·4 - 8 704·4 kHz 12 652·3 - 13 070·8 kHz 16 859·4 - 17 196·9 kHz 22 310·5 - 22 561 kHz

Replace Regulations Nos. 456 and 457 by the following new texts:

- MOD 456 § 13. (1) Appendix 17 and Appendix 17 Rev. show the Mar2 radiotelephone channels of the maritime mobile service in the frequency bands listed in Nos. 447, 448 and 449.
- MOD 457
 (2) The Frequency Allotment Plan for coast radiotelephone stations in the high frequency bands is contained in Appendix 25 MOD which remains in force up to and including 31 December 1977, and in Appendix 25 Mar2 which will enter into force on 1 January 1978 (see Resolution No. Mar2 12).

After Section IV insert the following new Section IV A:

ADD Mar2

Section IV A. Ship Movement Service

ADD 457A The ship movement service should be operated only on Mar2 frequencies allocated to the maritime mobile service in the band 156-174 MHz.

Revision of Article 9 of the Radio Regulations

Article 9 of the Radio Regulations shall be amended as follows:

Replace Regulations Nos. 540, 541 and 542 by the following new texts:

- MOD 540 (5) The provisions of Nos. 537 to 539 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25 Mar2, 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.
- MOD 541 § 19. (1) Examination of Notices concerning Frequency Assignments

 Mar2 to Coast Radiotelephone Stations in the Bands allocated exclusively to
 the Maritime Mobile Service between 4 000 and 23 000 kHz for Coast
 Radiotelephone Stations (see No. 500). 1
- MOD 542 (2) The Board shall examine each notice covered by No. 541:

 Mar2

After Regulation No. 542 add the following new Regulations:

- ADD 542A a) with respect to the provisions of No. 501 and in particular those of No. 1351C;
- ADD 542B b) in order to determine whether the notified assignment is in conformity with an allotment in the Allotment Plan contained in Appendix 25 Mar2 to these Regulations.
- ADD 541.1 See paragraph 10 of Resolution No. Mar2 12.

Replace Regulation No. 543 by the following new text:

MOD 543 (3) Any frequency assignment for which the finding is favourable with respect to Nos. 542A and 542B shall be recorded in the Master Register (see also No. 540). The date to be entered in Column 2a shall be that determined according to the relevant provisions of Section III of this Article.

After Regulation No. 543 add the following new Regulation:

ADD 543A (4) Any frequency assignment for which the finding is unMar2 favourable with respect to No. 542A shall be examined with respect to
Nos. 520 and 521. The date to be entered in Column 2b shall be determined according to the relevant provisions of Section III of this Article.

Delete Regulation No. 544.

Replace Regulations Nos. 545, 546, 547 and 548 by the following new texts:

- MOD 545 (5) In the case of a notice which has received a favourable finding with respect to No. 542A but unfavourable with respect to No. 542B, the Board shall examine this notice with respect to the probability of harmful interference to the service rendered by a radiotelephone coast station for which a frequency assignment:
 - a) is in conformity with an allotment in the Allotment Plan and is already recorded in the Master Register or may be so recorded in the future; or
 - b) was recorded in the Master Register on a frequency specified in Appendix 17 Rev., as a result of a favourable finding with respect to No. 545; or

c) was recorded in the Master Register on a frequency specified in Appendix 17 Rev., after an unfavourable finding with respect to No. 545, but has not, in fact, caused harmful interference to any frequency assignment to a coast radiotelephone station previously recorded in the Master Register.

MOD 546 (6) According to the finding of the Board with respect to No.

545, further action shall be in accordance with the provisions of Nos.

509 to 518 inclusive, or Nos. 532 to 534 inclusive, as appropriate, it being understood that in those provisions No. 545 shall be read for No.

502.

MOD 547 § 20. (1) Examination of Notices concerning Frequencies used for Mar2 Reception by Coast Radiotelephone Stations in the Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kHz for Ship Radiotelephone Stations (see Nos. 487 and 500). \(^1\)

MOD 548 (2) The Board shall examine each notice covered by No.

Mar2 547:

After Regulation No. 548 add the following new Regulations:

ADD 548A a) with respect to the provisions of No. 501 and in particular those of No. 1351D;

ADD 548B

Mar2

b) in order to determine whether the notified assignment corresponds to a frequency associated, according to Appendix 17 Rev., with a frequency allotted to the notifying administration in the Allotment Plan contained in Appendix 25 Mar2 to these Regulations.

ADD 547.1 See paragraph 10 of Resolution No. Mar2 – 12. Mar2

Replace Regulation No. 549 by the following new text:

MOD 549
(3) Any frequency assignment for reception by a coast radiotelephone station for which the finding is favourable with respect to Nos. 548A and 548B shall be recorded in the Master Register. The date to be entered in Column 2a shall be that determined according to the relevant provisions of Section III of the present Article.

After Regulation No. 549 add the following new Regulation:

ADD 549A (4) Any frequency assignment for reception by a coast Mar2 radiotelephone station for which the finding is unfavourable with respect to No. 548A shall be examined with respect to Nos. 520 and 521. The date to be entered in Column 2b shall be that determinated according to the relevant provisions of Section III of this Article.

Delete Regulation No. 550.

Replace Regulation No. 551 by the following new text:

MOD 551

Mar2

(5) Any assignment of a frequency for reception by a coast radiotelephone station which has received a favourable finding with respect to No. 548A but unfavourable with respect to No. 548B shall be recorded in the Master Register. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section III of the present Article.

Replace Regulation No. 573 by the following new text:

MOD 573 § 26. (1) Frequency Bands:

10 - 2850 kHz 3155 - 3400 kHz 3500 - 3900 kHz in Region 1 3500 - 4000 kHz in Region 2 3 500 - 3 950 kHz in Region 3 4 219·4 - 4 349·4 kHz 6 325·4 - 6 493·9 kHz 8 435·4 - 8 704·4 kHz 12 652·3 - 13 070·8 kHz 16 859·4 - 17 196·9 kHz 22 310·5 - 22 561 kHz

Replace Regulations Nos. 577 and 578 by the following new texts:

- MOD 577 § 27. (1) Frequency Bands allocated exclusively to the Maritime

 Mar2 Mobile Service between 4 000 and 23 000 kHz for Coast

 Radiotelephone Stations.

 A coast
- MOD 578 (2) If the finding is favourable with respect to Nos. 542A and Mar2 542B, the date of 7 June 1974 shall be entered in Column 2a.

Delete Regulation No. 579.

Replace Regulations Nos. 582 and 583 by the following new texts:

- MOD 582 § 28. (1) Frequency Bands allocated exclusively to the Maritime

 Mar2 Mobile Service between 4 000 and 23 000 kHz for Ship Radiotelephone

 Stations.²
- MOD 583 (2) If the finding is favourable with respect to Nos. 548A and Mar2 548B, the date of 7 June 1974 shall be entered in Column 2a.

Delete Regulation No. 584.

 $\begin{array}{lll} \textbf{ADD} & \textbf{577.1} & \textbf{1See paragraph 10 of Resolution No. Mar2} - 12. \\ \textbf{Mar2} & \textbf{} \end{array}$

ADD 582.1 ² See paragraph 10 of Resolution No. Mar2 – 12. Mar2

Replace Regulation No. 635 by the following new text:

MOD 635 § 47. The provisions of Sections V, VI (excepting No. 619) and VII

Mar2 of this Article shall not be applied to frequency assignments in conformity with the Allotment Plans contained in Appendices 25 Mar2, 26 and 27 to these Regulations.

Addition of a new Article (Article 9B) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 9A:

ADD Mar2

ARTICLE 9B

Procedure for bringing up to date the Frequency Allotment ¹
Plan for Coast Radiotelephone Stations operating in the
exclusive Maritime Mobile Bands between
4 000 and 23 000 kHz

(Appendix 25 Mar2)

- 639DY § 1. (1) Before notifying to the International Frequency Registra-Mar2 tion Board or bringing into use at any coast radiotelephone station a frequency assignment not covered by an allotment in the Frequency Allotment Plan contained in Appendix 25 Mar2, an administration which
 - a) intends to establish a coast radiotelephone station and has no allotment in the Plan or
 - b) intends to expand its coast radiotelephone service and requires an additional allotment

shall send the information listed in Appendix 1C to the Board not earlier than two years in the case of a) above, or not earlier than six months in the case of b) above, before the projected date of bringing into service of the planned coast radiotelephone service but in any case not later than three months before that date.

¹See Resolution No. 6.

- 639DZ (2) The Board shall publish the information sent under No.

 Mar2 639DY in a special section of the I.F.R.B. weekly circular together with such apparent incompatibilities between the proposed allotment which is the subject of the publication and any other existing or proposed allotments which the Board can indicate. The Board shall also indicate any information of a technical nature and make suggestions as it may be able to offer with a view to avoiding these incompatibilities.
- 639EA (3) If it is requested by any administration, particularly by an Mar2 administration of a country in need of special assistance, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall render the following assistance:
 - a) indication of a suitable channel or channels for the service projected by the administration before that administration submits the information for publication;
 - b) carry out the procedure for which provision is made in No. 639EB;
 - c) any other assistance of a technical nature for completion of the procedure in the present Article.
- 639EB § 2. (1) At the same time as sending the information listed in Mar2 Appendix IC to the Board for publication, an administration shall seek the agreement of the administrations having an allotment in the same channel as the proposed allotment. A copy of the relevant correspondence shall be sent to the Board.
- 639EC (2) Any administration which, upon examining the information Mar2 published by the I.F.R.B., considers that its existing services or services planned within the time limits mentioned in No. 639DY would be affected, shall have the right to be brought into the procedure undertaken pursuant to No. 639EB.
- 639ED § 3. (1) An administration which receives a request under No. Mar2 639EB shall acknowledge receipt thereof immediately by telegram. If

no acknowledgement is received within thirty days after the date of the I.F.R.B. weekly circular containing the information published under No. 639DZ, the administration seeking agreement shall dispatch a telegram requesting acknowledgement, to which the receiving administration shall reply within a further period of fifteen days.

- 639EE (2) Upon receipt of the request under No. 639EB, an adminisMar2 tration shall, having regard to the proposed date of bringing into use of
 the assignment(s) corresponding to the allotment for which agreement
 was requested, promptly examine the matter with regard to harmful
 interference which would be caused to the services rendered by its coast
 station(s):
 - a) using a frequency assignment corresponding to an allotment appearing in the Plan, or
 - to be brought into service in conformity with an allotment appearing in the Plan within the time limit prescribed in No.
 639EV, or
 - c) to be brought into service within the time limit prescribed in No. 639EV, in conformity with a proposed allotment for which the information has been submitted to the I.F.R.B. under No. 639DY for publication under No. 639DZ.
- 639EF (3) Any administration which receives a request under No. Mar2 639EB and which considers that the proposed use of a channel will not cause harmful interference to the services rendered by its coast stations as outlined in No. 639EE shall, as soon as possible and not later than sixty days from the date of the relevant I.F.R.B. weekly circular, notify its agreement to the administration seeking agreement.
- 639EG (4) Any administration which receives a request under No.
 Mar2 639EB and which considers that the proposed use of a channel may cause harmful interference to the services rendered by its coast stations as outlined in No. 639EE, shall inform the administration concerned of

the reasons for its desagreement as soon as possible and not later than sixty days from the date of the relevant I.F.R.B. weekly circular and shall furnish any information and suggestions with a view to reaching a satisfactory solution of the problem. The administration seeking agreement shall try, as far as possible, to adjust its requirements according to the comments received.

639EH (5) In a case where the administration seeking agreement has no Mar2 allotment in the band concerned, the administration(s) with which agreement is sought shall, in consultation with the requesting administration, explore all means of meeting the requirement of the requesting administration.

639EI § 4. (1) An administration seeking agreement may request the Board Mar2 to endeavour to obtain such agreement in those cases where:

- a) an administration to which a request has been sent under No. **639EB** fails to acknowledge receipt of the request within fortyfive days from the date of the I.F.R.B. weekly circular containing the pertinent information:
- an administration has acknowledged receipt under No.
 639ED but fails to give a decision within sixty days from the date of the I.F.R.B. weekly circular containing the pertinent information:
- c) there is disagreement between the administration seeking agreement and an administration with which agreement is sought as to the sharing possibilities;
- d) it is not possible to reach agreement for any other reason.

- 639EJ (2) Either the administration seeking agreement or an administration with which agreement is sought, or the Board, may request additional information which it may require in studying any problem relating to this agreement.
- 639EK (3) Where the Board receives a request under No. 639EI a), it Mar2 shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.
- 639EL (4) Where the Board receives an acknowledgement following its Mar2 action under No. 639EK, or where the Board receives a request under No. 639EI b), it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.
- 639EM (5) Where the Board receives a request under No. 639EI d), it Mar2 shall endeavour to obtain agreement to which reference is made in No. 639EB. Where the Board receives from an administration no acknowledgement to the request it made under the terms of No. 639EB for agreement within the period specified in No. 639ED, it shall act, in so far as this administration is concerned, in accordance with No. 639EK.
- 639EN (6) Where an administration fails to reply within fifteen days of Mar2 the Board's telegram requesting an acknowledgement sent under No. 639EK, or fails to give a decision in the matter within thirty days of dispatch of the Board's telegram of request under No. 639EL, it shall be deemed that the administration with which agreement was sought has undertaken, once the projected allotment is included in the Plan:
 - a) that no complaint will be made in respect of any harmful interference which may be caused to the services rendered by its coast radiotelephone stations by the use of assignments in accordance with the allotment for which agreement was requested and

b) that its existing or projected coast radiotelephone stations will not cause harmful interference to the use of assignments in conformity with the allotment for which agreement was requested.

The Board shall enter a remark in the Remarks Column of the Master Register for each assignment covered by the allotment in question, indicating that this assignment does not benefit from the provisions of No. 607 of the Radio Regulations with respect to assignments of the administration seeking the agreement.

- 639EO (7) The Board shall examine the proposed allotment with Mar2 respect to the probability of harmful interference which it may receive from an allotment in the Plan of the administration which failed to reply or which indicated disagreement without supplying the reasons; if the finding is favourable and where the application of the present procedure with respect to the other administrations concerned permits, it enters the proposed allotment in the Plan.
- 639EP (8) In the event of an unfavourable finding resulting, the Board Mar2 informs the administration concerned of the result of the examination; if the administration insists, and where the application of the present procedure with respect to the other administrations concerned permits, it enters the proposed allotment in the Plan.
- 639EQ (9) Where the Board receives a request under No. 639EI c), it Mar2 shall assess the sharing possibilities and it shall inform the administrations concerned of the results obtained.
- 639ER (10) In the case of continuing disagreement the Board shall Mar2 examine the proposed allotment from the point of view of harmful interference which may be caused to the services rendered by the stations of the administration having declared its disagreement. In the case where the Board's finding is favourable and where the application of the present procedure with respect to the other administrations concerned permits, it enters the proposed allotment in the Plan.

- 639ES (11) If, after the examination under No. 639ER, the Board Mar2 reaches an unfavourable finding, it shall then examine the proposed allotment from the point of view of harmful interference which may be caused to the services on all the various channels in the band. Should the Board reach an unfavourable finding in each case, it shall determine the channel which is the least affected and, if so requested by the administration seeking agreement, it shall enter the proposed allotment in this channel in the Plan.
- 639ET § 5. An administration seeking agreement for a proposed allot-Mar2 ment shall inform the Board of the results of its consultations with the administrations concerned. When the Board finds that the procedure prescribed in the present Article has been applied with respect to each administration concerned the Board shall publish its finding in a special section of the I.F.R.B. weekly circular and, as the case may be, bring the Plan up to date.
- 639EU § 6. Notwithstanding the above provisions and if the cirMar2 cumstances justify, an administration may, in exceptional circumstances, notify to the Board for provisional entry in the Master
 Register an assignment which is not covered by an allotment in the
 Plan. It shall, however, begin forthwith the procedure prescribed in the
 present Article.
- 639EV § 7. When, within twelve months from the date of the inclusion Mar2 of the allotment in the Plan, the Board does not receive a notice of a first frequency assignment corresponding to this allotment, or where the first notified frequency assignment has not been brought into use within the time limits prescribed in the Radio Regulations, before proceeding with the deletion of the allotment from the Plan, it shall consult with the administration concerned on the appropriateness of such a deletion and of publishing this information in connection with bringing the Plan up to date. However, in the case where the Board, in the light of a request from the administration concerned, finds that exceptional circumstances warrant an extension of this period, the extension shall in no case exceed six months, except in the case of an administration which has no coast station in service in which case the period may be extended to eighteen months.

- 639EW § 8. Any administration in whose name an allotment is shown in Mar2 the Plan, and which has a need to replace this allotment by another allotment in the same frequency band with a view to improving its service, shall apply the procedure described in the present Article. When that administration arrives at a positive result in applying this procedure, the Board, at its request, shall replace the existing allotment in the Plan by the proposed allotment.
- 639EX § 9. The Board shall maintain an up to date master copy of the Mar2 Plan resulting from the application of this procedure. It shall prepare in a suitable form, for publication by the Secretary-General, the whole or part of the revised version of the Plan as and when the circumstances justify and in any case once annually.

Revision of Article 19 of the Radio Regulations

Article 19 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 737 by the following new text:

MOD 737 § 2. A station shall be identified by a call sign or other recognized means of identification. Such recognized means of identification may be one or more of the following necessary for complete identification: name of station, location of station, operating agency, official registration mark, flight identification number, selective call number or signal, selective call identification number or signal, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

Replace Regulation No. 783A by the following new text:

MOD 783A § 25A. When stations of the maritime mobile service use selective Mar2 calling devices in accordance with Appendix 20B and Appendix 20C, their call numbers shall be assigned by the responsible administrations in accordance with the provisions below.

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Revision of Article 20 of the Radio Regulations

Article 20 of the Radio Regulations shall be amended as follows:

Replace Regulations Nos. 792 and 793 by the following new texts:

MOD 792 Mar2 b) the frequencies (e.g. 500 kHz or 2 182 kHz) prescribed by these Regulations for common use by certain services, including frequencies specified in Appendices 15, 15A, 15B, 15C, 15D, 17, 17 Rev. and 18;

MOD 793 Mar2 c) the allotments in the Allotment Plans included in Appendices 25 MOD, 25 Mar2 (see No. 457), 26 and 27.

Replace Regulations Nos. 805, 806 and 807 by the following new texts:

MOD 805 (IV) List IV. List of Coast Stations.

Mar2

There are annexed to this list a table and a chart showing the zones and hours of service of ships of the second and third categories (see Appendix 12) and a table of inland telegraph rates, limitrophic rates, etc. This list shall also contain an annex giving any details of maritime mobile-satellite systems which may be forwarded to the Secretary-General by participating administrations.

MOD 806 (V) List V. List of Ship Stations.

Mar2

This list shall contain particulars of:

a) ship stations fitted with radiotelegraph installations;

- b) ship stations fitted with radiotelegraph and radiotelephone installations;
- ship stations fitted with radiotelephone installations only, which communicate with stations of the maritime mobile service other than those of their own nationality or make international voyages;
- d) ship stations fitted with mobile earth stations.

This list shall contain a table and a chart showing the zones and hours of service of ships of the second and third categories (see Appendix 12) and an annex giving details of maritime mobile-satellite systems which may be forwarded to the Secretary-General by participating administrations.

MOD 807 (VI) List VI. List of Radiodetermination and Special Service Mar2 Stations.

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

Replace Regulation No. 811A by the following new text:

MOD 811A (VIII A) List VIIIA. List of Stations in the Space Service and in the Mar2 Radio Astronomy Service.

	This list shall contain particulars of earth and space
	stations and of radio astronomy stations. In this list, each class of sta-
	tion shall occupy a special section. However, mobile earth stations of
	the maritime mobile-satellite service shall not be listed. Instead a general
	reference to the List of Ship Stations shall be included in List VIIIA.
	· ·
(MOD) 815	[concerns the French and Spanish texts only]
Mar2	•
	Replace Regulation No. 825 by the following new

MOD 825 § 7. The List of Ship Stations (List V) shall be republished each year. It shall be kept up to date by means of a quarterly supplement in addition to a half-yearly recapitulative supplement.

text:

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Revision of Article 21 of the Radio Regulations

Article 21 of the Radio Regulations shall be amended as follows:

Replace the title of the Article by the following:

MOD Mar2

Inspection of Mobile Stations and Mobile Earth Stations in the Maritime Mobile-Satellite Service

Replace Regulations Nos. 838 and 839 by the following new texts:

- MOD 838 § 1. (1) The governments or appropriate administrations of countries which a mobile station or a mobile earth station in the maritime mobile-satellite service visits, may require the production of the licence for examination. The operator of the station, or the person responsible for the station, shall facilitate this examination. The licence shall be kept in such a way that it can be produced upon request. As far as possible, the licence, or a copy certified by the authority which has issued it, should be permanently exhibited in the station.
- MOD 839 (2) The inspectors shall have in their possession an identity

 Mar2 card or badge, issued by the competent authority, which they shall
 show on request of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station or the mobile earth
 station in the maritime mobile-satellite service.

Replace Regulations Nos. 842, 843 and 844 by the following new texts:

- MOD 842 § 2. (1) When a government or an administration has found it necessary to adopt the course indicated in No. 840, or when the operators' certificates cannot be produced, the government or administration to which the mobile station or mobile earth station in the maritime mobile-satellite service is subject shall be so informed without delay. In addition, the procedure specified in Article 16 is followed when necessary.
- MOD 843 (2) Before leaving, the inspector shall report the result of his inmar2 spection to the master, or the person responsible for the ship, aircraft or
 other vehicle carrying the mobile station or mobile earth station in the
 maritime mobile-satellite service. If any breach of the conditions imposed by these Regulations is observed, the inspector shall make this
 report in writing.
- MOD 844 § 3. The Members of the Union undertake not to impose upon foreign mobile stations or upon foreign mobile earth stations in the maritime mobile-satellite service which are temporarily within their territorial waters or make a temporary stay in their territory, technical and operating conditions more severe than those contemplated in these Regulations. This undertaking in no way affects arrangements which are made under international agreements relating to maritime or air navigation, and which are therefore not covered by these Regulations.

Revision of the title of Chapter VI and of Article 22 of the Radio Regulations

The title of Chapter VI shall be amended as follows:

MOD Mar2

Personnel of Stations in the Mobile Service and the Maritime Mobile-Satellite Service

Article 22 of the Radio Regulations shall be amended as follows:

After Regulation No. 847 add the following new Regulation:

ADD 847A § 4. The authority and obligations imposed by Nos. 845, 846

Mar2 and 847 shall also apply to personnel of mobile earth stations in the
maritime mobile-satellite service.

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Revision of Article 23 of the Radio Regulations

Article 23 of the Radio Regulations shall be amended as follows:

Replace the title of the Article by the following:

MOD Mar2

Operators' Certificates for Ship and Aircraft Stations and Mobile Earth Stations in the Maritime Mobile-Satellite Service

After Regulation No. 849 add the following new Regulation:

ADD 849A (2A) The service of every mobile earth station in the maritime mobile-satellite service shall be controlled by a person holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the equipment.

After Regulation No. 856 add the following new Regulation:

ADD 856A (1A) However, in the maritime mobile service the certificates

Mar2 issued after 1 January 1978 shall bear the photograph of the holder and
the holder's date of birth.

After Regulation No. 857 add the following new Regulation:

- ADD 857A (3) However, in the maritime mobile service all certificates not in one of the working languages of the Union and issued after 1 January 1978 shall carry at least the following information in one of these working languages:
 - the name and date of birth of the holder,
 - the title of the certificate and its date of issue,
 - if applicable, the number and period of validity of the certificate,
 - the issuing administration.

Replace the title preceding No. 859 by the following:

MOD Mar2

Section II. Classes and Categories of Certificates except for the Operators of Ship Stations

Delete Regulation No. 860A.

Replace Regulations Nos. 861 and 862 by the following new texts:

- MOD 861 § 6. (1) The holder of a first or second class radiotelegraph

 Mar2 operator's certificate may carry out the radiotelegraph or
 radiotelephone service of any aircraft station.
- MOD **862** (2) The holder of a radiotelephone operator's general cer-Mar2 tificate may carry out the radiotelephone service of any aircraft station.

Delete Regulation No. 863A.

Replace Regulations Nos. 864 and 865 by the following new texts:

MOD 864 (4) The holder of a radiotelephone operator's restricted cer-Mar² tificate may carry out the radiotelephone service of any aircraft station operating on frequencies allocated exclusively to the aeronautical mobile service, provided that the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements, and that the stability of the frequencies is maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.

MOD 865

865 (5) The radiotelephone service of aircraft stations for which Mar2 only a restricted radiotelephone operator's certificate is required may be carried out by an operator holding a radiotelegraph operator's special certificate.

After Section II insert the following new Section IIA:

ADD Mar2

Section IIA. Categories of Certificates for Ship Station Operators

866A § 7A. (1) There are four categories of certificates for radiotelegraph Mar2 operators, namely:

- the radiocommunication operator's general certificate,
- the first class radiotelegraph operator's certificate,
- the second class radiotelegraph operator's certificate,
- the radiotelegraph operator's special certificate.

866B (2) There are two categories of radiotelephone operator's ² cer-Mar² tificates, general and restricted.

⁸⁶⁶A.1 As regards the employment of operators holding the different certificates, see Mar2 Article 24.

⁸⁶⁶B.1 ² As regards the employment of operators holding the different certificates, see Mar2 Article 24.

- 866C § 7B. (1) The holder of a radiocommunication operator's general Mar2 certificate, or of a first class or second class radiotelegraph operator's certificate, may carry out the radiotelegraph or radiotelephone service of any ship station.
- **866D** (2) The holder of a radiotelephone operator's general certificate Mar2 may carry out the radiotelephone service of any ship station.
- 866E
 (3) The holder of a radiotelephone operator's restricted cerMar2 tificate may carry out the radiotelephone service of any ship station,
 provided that the operation of the transmitter requires only the use of
 simple external controls, and excludes all manual adjustment of
 frequency determining elements, with the stability of the frequencies
 maintained by the transmitter itself within the limits of tolerance
 specified by Appendix 3, and the peak envelope power of the
 transmitter does not exceed 1.5 kilowatt.
- 866F (4) The radiotelephone operator's restricted certificate may be
 Mar2 limited exclusively to one or more of the maritime mobile frequency
 bands. In such cases the certificate shall be suitably endorsed.
- 866G (5) The radiotelegraph service of ships for which a

 Mar2 radiotelegraph installation is not made compulsory by international
 agreements, as well as the radiotelephone service of ship stations for
 which only a radiotelephone operator's restricted certificate is required,
 may be carried out by the holder of a radiotelegraph operator's special
 certificate.
- 866H (6) However, where the conditions specified in No. 893A are

 Mar2 satisfied, the radiotelegraph service of ships for which a radiotelegraph
 installation is not made compulsory by international agreements, as well
 as the radiotelephone service of any ship station, may be carried out by
 the holder of a radiotelegraph operator's special certificate.
- 8661 § 7C. Exceptionally, the second class radiotelegraph operator's Mar2 certificate as well as the radiotelegraph operator's special certificate

may be limited exclusively to the radiotelegraph service. In such cases the certificate shall be suitably endorsed.

After Regulation No. 870 add the following new Regulation:

ADD 870A (3) However, with respect to the maritime mobile service, administrations should also take whatever steps they consider necessary to ensure the continued proficiency of operators while in service.

After the new Regulation 870A add the following new heading and Regulations:

- ADD Mar2 A. Radiocommunication Operator's General Certificate for the Maritime Mobile Service
- ADD 870B § 9A. The radiocommunication operator's general certificate for Mar2 the maritime mobile service is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:
- ADD 870C

 Mar2

 Mar2

 Mode and Strong of the principles of electricity and the theory of radio and of electronics sufficient to meet the requirements specified in Nos. 870D, 870E and 870F.
- ADD 870D

 Mar2

 b) Theoretical knowledge of modern radiocommunication equipment, including marine radiotelegraph and radiotelephone transmitters and receivers, marine antenna systems, automatic alarm devices, radio equipment for lifeboats and other survival craft, direction-finding equipment, together with all auxiliary items including power supply (such as motors, alternators, generators, inverters, rectifiers and accumulators), as well as a general knowledge of the

principles of other apparatus generally used for radionavigation, with particular reference to maintaining the equipment in service.

- ADD 870E
- c) Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in No. 870D, including the taking of direction-finding bearings and knowledge of the principles of the calibration of radio direction-finding apparatus.
- ADD 870F Mar2
- d) Practical knowledge necessary for the location and remedying (using appropriate testing equipment and tools) of faults in the apparatus mentioned in No. 870D which may occur during a voyage.
- ADD 870G Mar2
- e) Ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of 16 groups a minute, and a plain language text at a speed of 20 words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and receiving shall be, as a rule, five minutes.
- ADD 870H Mar2
- f) Ability to send correctly and to receive correctly by radiotelephone.
- ADD 8701 Mar2
- g) Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.
- ADD 870J Mar2
- h) A sufficient knowledge of world geography, especially the principal shipping routes and the most important telecommunication routes.
- ADD 870K Mar2
- i) Knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfac-

torily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.

Present Sub-Section A (First Class Radiotelegraph Operator's Certificate) becomes Sub-Section B.

(MOD) Mar2 B. First Class Radiotelegraph Operator's Certificate

Present Sub-Section B (Second Class Radiotelegraph Operator's Certificate) becomes Sub-Section C.

(MOD) Mar2 C. Second Class Radiotelegraph Operator's Certificate

Present Sub-Section C (Radiotelegraph Operator's Special Certificate) becomes Sub-Section D.

(MOD) Mar 2 D. Radiotelegraph Operator's Special Certificate

After Regulation No. 893 add the following new Regulation:

ADD 893A (3) In the maritime mobile service each administration conMar2 cerned shall fix the other conditions for obtaining this certificate.
However, except as provided for in No. 866I, the conditions specified in
Nos. 894, 895, 896, 897 and 898 shall be satisfied for such a certificate
issued to ship station operators after 1 January 1976.

Present Sub-Section D (Radiotelephone Operator's Certificate) becomes Sub-Section E.

(MOD)Mar2 E. Radiotelephone Operator's Certificate

Replace Regulation No. 894 by the following new text:

MOD 894 § 13. The radiotelephone operator's general certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below (see also Nos. 861, 862, 866C, 866D, 866G and 866H):

After Regulation No. 905 add the following new Regulation:

ADD 905A § 15A. However, in the maritime mobile service a radiotelephone Mar2 operator's restricted certificate shall show whether it is also limited as provided for in No. 866F.

Replace Regulation No. 907 by the following new text:

MOD 907 § 17. (1) The holder of a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932).

After Regulation No. 907 add the following new Regulation:

ADD 907A (2) However, before becoming chief or sole operator of a ship

Mar2 station of the fourth category (see No. 932) which is required by inter
national agreements to carry a radiotelegraph operator, the holder of a

radiocommunication operator's general certificate or a first or second

class radiotelegraph operator's certificate shall have had adequate experience as operator on board ship at sea.

Replace Regulations Nos. 908 and 909 by the following new texts:

MOD 908

Mar2

(3) Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A), the holder of a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate shall have had, as operator on board ship or in a coast station, at least six months' experience of which at least three months shall have been on board ship.

MOD 909

909 (4) Before becoming chief operator of a ship station of the first category (see No. 930), the holder of a radiocommunication operator's general certificate or a first class radiotelegraph operator's certificate shall have had, as operator on board ship or in a coast station, at least one year's experience of which at least six months shall have been on board ship.

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Revision of Article 24 of the Radio Regulations

Article 24 of the Radio Regulations shall be amended as follows:

Replace the title of the Article and Regulations Nos. 912 to 917 by the following:

MOD Mar2 Class and Minimum Number of Operators for Stations on Board Ships and Aircraft

- MOD 912 § 1. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships and aircraft of its own nationality have personnel adequate to perform efficient service.
- MOD 913 § 2. The personnel of ship and aircraft stations in the public correspondence service shall, having regard to the provisions of Article 23, include at least:
- MOD 914

 a) ship stations of the first category, except in the case provided for in No. 918: a chief operator holding a radiocommunication operator's general certificate or a first class radiotelegraph operator's certificate;
- MOD 915 b) ship stations of the second and third categories, except in the case provided for in No. 918: a chief operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate;
- MOD 916 c) ship stations of the fourth category, except in the cases provided for in Nos. 917 and 918: one operator holding a

radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate;

MOD 917 Mar2 d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements: one operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate, or a radiotelegraph operator's special certificate;

Revision of Article 25 of the Radio Regulations

Article 25 of the Radio Regulations shall be amended as follows:

After Regulation No. 927 add the following new Regulation:

ADD 927A Mar2 c) making a general call to all stations announcing the closing down of the service and advising the time of reopening, if other than their normal hours of service.

Replace Regulation No. 934 by the following new text:

MOD 934 § 7. (1) Ship stations of the second category shall maintain the Mar2 following hours of service:

0000 - 0400 0800 - 1200 1600 - 1800 2000 - 2200

and, additionally, four hours of service at times to be decided by the administration, master or responsible person, to meet the essential communication needs of the ship having regard to propagation conditions and traffic requirements.

After Regulation No. 934 add the following new Regulations:

ADD 934A (1A) Ship stations of the third category shall maintain the Mar2 following hours of service:

0800 - 1200 Ship's time or zone time,

two continuous hours of service between 1800-2200 hours, ship's time or zone time, at times decided by the administration, master or responsible person and, additionally, two hours of service at times decided by the administration, master or responsible person, to meet the essential communication needs of the ship having regard to propagation conditions and traffic requirements.

ADD 934B (1B) Each administration will determine whether ship's time
Mar2 observed by its ships is to be zone time as shown in Appendix 12 (see
Nos. 934 and 934A).

Replace Regulation No. 935A by the following new text:

MOD 935A § 7A. Ship stations of the fourth category are encouraged to Mar2 provide service from 0830 to 0930 hours, ship's time or zone time.

Revision of title of Chapter VII and of Article 27 of the Radio Regulations

The title of Chapter VII shall be amended as follows:

MOD Mar2

Working Conditions in the Mobile Services and in the Maritime Mobile-Satellite Service

Article 27 of the Radio Regulations shall be amended as follows:

Replace the title of the Article by the following:

MOD Mar2

Aeronautical Stations and Stations on Board Aircraft

Replace Regulation No. 952 by the following new text:

MOD 952 (2) For this purpose stations on board aircraft should use the frequencies allocated to the maritime mobile or maritime mobile-satellite services. However, having regard to interference which may be caused by aircraft stations at high altitudes, frequencies in the maritime mobile bands above 30 MHz shall not be used by aircraft stations, with the exception of those frequencies between 156 and 174 MHz specified in Appendix 18 which may be used provided that the following conditions are observed:

After Regulation No. 952 add the following new Regulations:

- ADD 952A a) the altitude of aircraft stations shall not exceed 300 metres (1000 feet), except for reconnaissance aircraft participating in ice-breaking operations where an altitude of 450 metres (1500 feet) is allowed;
- ADD 952B

 Mar2

 b) the mean power of aircraft station transmitters shall not exceed five watts; however, a power of one watt or less shall be used to the maximum extent possible;
- ADD 952C c) aircraft stations shall use the channels designated for this purpose in Appendix 18;
- ADD 952D d) except as provided in No. 952B, aircraft station transmitters shall comply with the technical characteristics given in Appendix 19;
- ADD 952E

 e) the communications of an aircraft station shall be brief and limited to operations in which stations of the maritime mobile service are primarily involved and where direct communication between the aircraft and the ship or coast station is required.

Replace Regulations Nos. 953 and 954 by the following new texts:

- MOD 953 (3) The frequencies 156.3 MHz and 156.8 MHz may be used Mar2 by aircraft stations for safety purposes only.
- MOD 954 (4) Stations on board aircraft when handling public correspondence with stations of the maritime mobile service or of the maritime mobile-satellite service shall comply with all the provisions applicable to the handling of public correspondence in the maritime mobile or maritime mobile-satellite services (see particularly Articles 37, 38, 39 and 40A).

Revision of Article 28 of the Radio Regulations

Article 28 of the Radio Regulations shall be amended as follows:

Delete Regulation No. 964A.

Replace Regulation No. 969 by the following new text:

MOD 969
(2) For these purposes only, they may use the aeronautical Mar2 emergency frequency 121.5 MHz and the aeronautical auxiliary frequency 123.1 MHz, using class A3 emissions for both frequencies. They shall then comply with any special arrangements between the governments concerned by which the aeronautical mobile service is regulated.

After Regulation No. 969 add the following new Regulation:

ADD 969A (3) The aeronautical frequencies 3 023.5 kHz and 5 680 kHz may be used by mobile stations for search and rescue scene-of-action coordination purposes, including communication between these stations and participating land stations, in accordance with any special arrangements by which the aeronautical mobile service is regulated (see Nos. 1326C and 1353B).

Replace Regulation No. 970 by the following new text:

MOD 970 § 12. Ship stations equipped with radiotelegraph apparatus in-Mar2 tended to be used for normal traffic by Morse telegraphy shall be provided with devices permitting changeover from transmission to reception and vice versa without manual switching. In addition these stations should be able to listen on the reception frequency during the course of periods of transmission.

Add the following new sub-section as second sub-section of Section IV:

ADD Mar2 Bands between 4 000 and 23 000 kHz

ADD 987A § 20A. In the zone of Regions 1 and 2 south of latitude 15° N, inMar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N, all
ship stations equipped with radiotelephony to work in the authorized
bands between 4 000 and 23 000 kHz should be able to send and
receive on the carrier frequencies 4 136·3 kHz and 6 204 kHz (as from
1 January 1978 to be replaced by the carrier frequencies 4 125 kHz and
6 215·5 kHz respectively) (see Nos. 1351E and 1351F).

Replace Regulation No. 989 by the following new text:

MOD 989 a) the distress, safety and calling frequency 156.8 MHz;

Replace Regulation No. 992 by the following new text:

MOD 992 § 22. (1) Any aircraft required by national or international Mar2 regulations to communicate for distress, urgency or safety purposes with stations of the maritime mobile service, shall be capable of transmitting preferably class A2 or A2H and receiving preferably class A2 and A2H emissions on the carrier frequency 500 kHz or, on the

carrier frequency 2 182 kHz, transmitting class A3 or A3H and receiving class A3 and A3H emissions, or on the frequency 156.8 MHz transmitting and receiving class F3 emissions.

After Regulation No. 998 add the following new Regulation:

ADD 998A Mar2

 in the bands between 156 and 174 MHz, be able to transmit on 156.8 MHz using class F3 emission. If a receiver is provided for any of these bands it shall be able to receive class F3 emission on 156.8 MHz;

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Revision of Article 28A of the Radio Regulations

Article 28A of the Radio Regulations shall be amended as follows:

Before Regulation No. 999A, add the following new sub-title:

ADD Mar2

Section I. Sequential Single-Frequency Code System

Replace Regulations Nos. 999B and 999C by the following new texts:

MOD 999B § 2. (1) The call shall consist of:

Mar2

- the selective call number or identification number or signal of the station called, followed by:
- the selective call number or identification number or signal of the station calling.

However, in the case of a coast station calling on VHF, the number of the channel to be used for the reply and for traffic may replace the identification number or signal of the coast station.

The call shall be transmitted twice.

MOD 999C (2) When a station called does not reply, the call should not Mar2 normally be repeated until after an interval of at least five minutes and should not then normally be renewed until after a further interval of fifteen minutes.

After Regulation No. 999C add the following new Regulation:

ADD 999CA (3) The use of an "all ships call" shall be confined to distress Mar2 and urgency in the MF and HF bands and the announcement of vital navigational warnings in those bands; additionally it may be used for safety purposes in the VHF band. This call may only be used to supplement, if required, the distress procedure specified in Nos. 1402, 1403, 1416 and 1417 and shall in no circumstances be used in place of such procedures, in particular the alarm signals mentioned in Nos. 1463 and 1465.

Replace Regulations Nos. 999E and 999E.1 by the following new texts:

MOD 999E § 4. Selective calls should be sent on one or more of the Mar2 following calling carrier frequencies:

500 kHz 2.182 kHz. kHz 1 2170.5kHz 4 136.3 kHz 4 4 3 4 • 9 6.518.6 kHz 8 802 - 4 kH₇ 13 182.5 kHz 17 328.5 kHz 22 699 kHz. 156.8 MHz²

MOD 999E.1 This frequency will replace 2 182 kHz for selective calling not later than 1 April Mar2 1977, except as provided in No. 1325A.

After Regulation No. 999E.1 add the following new Regulation:

ADD 999E.2 ² Selective calling on this frequency should normally be only in the direction coast

Mar2 station to ship or intership. Selective calls from ship to coast stations should whenever

possible be sent on other frequencies of Appendix 18, as appropriate.

As from 1 January 1978, the above-indicated carrier frequencies will be replaced by the following carrier frequencies:

500 kHz 2 170.5 kHz^{-1} 4 125 kHz. 4419.4 kHz 6 521.9 kH₂ 8 780.9 kHz. 13 162.8 kHz. 17 294.9 kHz. 22 658 kHz 156.8 MHz²

The following new Section II is added after Regulation No. 999E:

ADD Mar2

Section II. Digital Selective Calling System

ADD 999F § 5. A digital selective calling system may be used if it is in full operational, technical and compatibility aspects which might be involved have been taken into account.

MOD 999E.1 This frequency will replace 2 182 kHz for selective calling not later than 1 April Mar2 1977, except as provided in No. 1325A.

ADD 999E.2 ² Selective calling on this frequency should normally be only in the direction coast Mar2 station to ship or intership. Selective calls from ship to coast stations should whenever possible be sent on other frequencies of Appendix 18, as appropriate.

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Addition of a new Article (Article 28B) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 28A:

ADD Mar2

ARTICLE 28B

Narrow-Band Direct-Printing Telegraphy

Section I. General Provisions

- 999G § 1. The characteristics of the narrow-band direct-printing Mar2 equipment shall be in accordance with Appendix 20B.
- 999H § 2. Frequencies assigned to coast stations shall be indicated in Mar2 the List of Coast Stations (List IV). This list shall also indicate any other useful information concerning the service performed by each coast station.

Section II. Bands between 405 and 535 kHz

- 9991 § 3. (1) All ship stations equipped with narrow-band direct-printing Mar2 telegraph apparatus to work in the authorized bands between 405 and 535 kHz shall be able to send and receive class F1 emissions on at least two working frequencies (see No. 1123). 1
- 999J (2) Narrow-band direct-printing telegraphy is forbidden in the Mar2 band 490-510 kHz.

^{9991.1} In the European Maritime Area usage of these class F1 emissions is subject to Mar2 special arrangements between interested and affected administrations.

Section III. Bands between 1 605 and 4 000 kHz

- 999K § 4. (1) All ship stations equipped with narrow-band direct-printing Mar2 telegraph apparatus to work in the authorized bands between 1 605 and 4 000 kHz shall be able to send and receive class F1 emissions on at least two working frequencies.
- 999L (2) Narrow-band direct-printing telegraphy is forbidden in the Mar2 band 2 170-2 194 kHz.

Section IV. Bands between 4 000 and 27 500 kHz

999M § 5. All ship stations equipped with narrow-band direct-printing Mar2 telegraph apparatus to work in the authorized bands between 4 000 and 27 500 kHz shall be able to send and receive class F1 emissions on at least two frequencies in each band as required by their service. The assignable frequencies are indicated in Appendices 15A and 15B.

Section V. Bands between 156 and 174 MHz

999N § 6. All ship stations equipped with narrow-band direct-printing Mar2 telegraph apparatus may work in the authorized bands between 156 and 174 MHz and shall conform to the provisions of Appendix 18.

Revision of Article 29 of the Radio Regulations

Article 29 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 1007 by the following new text:

MOD 1007 § 5. (1) Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress. This obligation does not apply to stations where unattended operation is possible through automatic means (see No. 850) on frequencies dedicated to narrowband direct-printing.

Replace Regulations Nos. 1013A and 1013AA by the following new texts:

- MOD 1013A (3) The procedure described in Nos. 1012 and 1013 is not Mar2 applicable to the maritime mobile service.
- MOD 1013AA (4) When selective calling in accordance with Article 28A, Sec-Mar2 tion I, is used in the maritime mobile service, the procedures prescribed in Nos. 999B, 999C and 999D shall be observed.

After Regulation No. 1013AA add the following new Regulation:

ADD 1013AB (5) When digital selective calling is used in the maritime mobile Mar2 service, the procedures described in No. 999F shall be observed.

Replace the sub-title preceding Regulation No. 1013B by the following:

MOD Mar2 Method of Calling in the Maritime Mobile Service – Morse Telegraphy

Replace Regulations Nos. 1013B and 1013C by the following new texts:

MOD 1013B § 6A.(1) The call consists of:

Маг2

- the call sign of the station called, not more than twice;
- the word DE;
- the call sign of the calling station, not more than twice;
- the information required by No. 1016A and, as appropriate, by Nos. 1020A and 1021;
- the letter K.

MOD 1013C (2) For normal calling, when the requirements of No. 1162

Mar2 have been met, the call specified in No. 1013B may be transmitted twice
at an interval of not less than one minute; thereafter it shall not be
repeated until after an interval of three minutes.

Delete Regulations Nos. 1013D, 1013E and 1013E.1.

Replace Regulation No. 1015A by the following new text:

MOD 1015A (3) However, when using direct-printing telegraphy or similar

Mar2 systems in any of the frequency bands allocated to the maritime mobile service, the call may, by prior arrangement, be made on a working frequency available for such systems.

Replace Regulation No. 1016 by the following new text:

MOD 1016 § 8. (1) Except in the maritime mobile service, the call, as described Mar2 in Nos. 1012 and 1013, shall be followed by the service abbreviation indicating the working frequency and, if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.

After Regulation No. 1016 add the following new Regulation:

ADD 1016A (1A) In the maritime mobile service, the call, as described in No.

Mar2 1013B, shall contain the service abbreviation indicating the working frequency and, if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.

Replace Regulation No. 1019A by the following new text:

MOD 1019A (3) When, in the maritime mobile service, the call by a coast

Mar2 station does not contain an indication of the frequency to be used for
the traffic, this indicates that the coast station proposes to use for traffic
its normal working frequency shown in the List of Coast Stations.

Replace the sub-title preceding No. 1020 and Regulation No. 1020 by the following:

- MOD Mar2 Indication of Priority, of the Reason for the Call, and of Transmission of Radiotelegrams in Series
- MOD 1020 § 9. (1) Except in the maritime mobile service, when the calling sta-Mar2 tion has more than one radiotelegram to transmit to the station called, the above-mentioned preparatory signals shall be followed by the service abbreviation and the figure giving the number of such radiotelegrams.

After Regulation No. 1020 add the following new Regulation:

ADD 1020A (1A) In the maritime mobile service the calling station shall Mar² transmit the service abbreviation after the above-mentioned preparatory signals to indicate a priority message other than a distress, urgency or safety message (see No. 1496A) and to indicate the reason for the call.

> Replace Regulation No. 1022 by the following new text:

- MOD **1022** § 10. Except in the maritime mobile service, the reply to calls Mar2 consists of:
 - the call sign of the calling station, not more than three times:
 - the word DE:
 - the call sign of the station called.

After Regulation No. 1022 add the following new Regulation:

In the maritime mobile service the reply to calls consists of: ADD **1022A** § 10A. Mar2

- the call sign of the calling station, not more than twice; - the word DE:
- the call sign of the station called, once only.

Replace Regulations Nos. 1031 and 1032 by the following new texts:

- if useful, the service abbreviation and figure indicating the MOD 1031 strength and/or intelligibility of the signals received (see Mar2 Appendix 13 for Aeronautical Mobile Service and Appendix 13A for the Maritime Mobile Service).
- the letter K if the station called is ready to receive the traffic MOD 1032 Mar2 of the calling station.

Replace Regulation No. 1044 by the following new text:

- MOD 1044 (4) If the transmission of a radiotelegram is to take place on a

 Mar2 frequency and/or with a class of emission other than those used for the
 call, the transmission of the radiotelegram shall be preceded by:
 - the call sign of the station called, not more than twice;
 - the word DE;
 - the call sign of the calling station, once only.

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Addition of a new Article (Article 29A) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 29:

ADD Mar2

ARTICLE 29A

Procedures for Narrow-Band Direct-Printing Telegraphy in the Maritime Mobile Service 1

Section I. General

- 1062AA § 1. Stations using narrow-band direct-printing telegraphy shall Mar2 comply with the provisions of Article 28B.
- 1062AB § 2. The procedures specified in the present Article should be Mar2 employed, except in cases of distress, urgency or safety.
- 1062AC § 3.(1) The traffic may be exchanged with or without the use of Mar2 error-correcting equipment.
- 1062AD (2) For communication between two stations the ARQ mode Mar2 should be used when available.
- 1062AE (3) For transmissions from one coast or ship station to two or Mar2 more other stations the forward-error-correcting mode should be used when available.

¹ Reference may also be made to the relevant C.C.I.R. Recommendations.

- 1062AF § 4. The services provided by each station open to public cor-Mar2 respondence shall be indicated in the List of Coast Stations and in the List of Ship Stations, together with information on charging.
- 1062AG § 5. Where transmission over the general network of telecom-Mar2 munication channels is involved, the provisions of the Telegraph Regulations and the relevant C.C.I.T.T. Recommendations should be taken into account.

Section II. Procedures for Manual Operation

A. Ship to Coast Station

- 1062AH § 6.(1) The operator of the ship station establishes communication Mar2 with the coast station by A1 Morse telegraphy, telephony or by other means using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the ship station direct-printing selective call number assigned in accordance with Appendix 20B.
- 1062AI (2) The operator of the coast station then establishes direct-Mar2 printing communication on the frequency agreed using the appropriate identification of the ship.
- 1062AJ § 7. (1) Alternatively the operator of the ship station, using the Mar2 direct-printing equipment, calls the coast station on a predetermined coast station receive frequency using the identification of the coast station assigned in accordance with Appendix 20B.
- 1062AK (2) The operator of the coast station then establishes direct-Mar² printing communication on the corresponding coast station transmit frequency.

B. Coast Station to Ship

- 1062AL § 8.(1) The operator of the coast station calls the ship station by Mar2 A1 Morse telegraphy, telephony or other means using normal calling procedures.
- 1062AM (2) The operator of the ship station then applies the procedures Mar2 of No. 1062AH or No. 1062AJ.

C. Intership

- 1062AN § 9.(1) The operator of the calling ship station establishes com-Mar2 munication with the called ship station by A1 Morse telegraphy, telephony or by other means using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the direct-printing selective call number of the calling ship station assigned in accordance with Appendix 20B.
- 1062AO (2) The operator of the called ship station then establishes direct-printing communication on the frequency agreed using the appropriate identification of the calling ship.

Section III. Procedures for Automatic Operation

A. Ship to Coast Station

- 1062AP § 10. (1) The ship station calls the coast station on a predetermined Mar2 coast station receive frequency using the direct-printing equipment and the identification signal of the coast station assigned in accordance with Appendix 20B.
- 1062AQ (2) The coast station's direct-printing equipment detects the Mar2 call and the coast station responds directly on the corresponding coast station transmit frequency either automatically or under manual control.

B. Coast Station to Ship

- 1062AR § 11.(1) The coast station calls the ship on a predetermined coast Mar2 station transmit frequency using the direct-printing equipment and the ship station direct-printing selective call number assigned in accordance with Appendix 20B.
- 1062AS (2) The ship station's direct-printing equipment tuned to Mar2 receive the predetermined coast station transmit frequency detects the call, whereupon the reply is given in one of the following ways:
- 1062AT a) the ship station replies either immediately on the corresponding coast station receive frequency or at a later stage using the procedure of No. 1062AJ; or
- the ship station's transmitter is automatically started on the corresponding coast station receive frequency and the direct-printing equipment responds by sending appropriate signals to indicate readiness to receive traffic automatically.

Section IV. Message Format

- 1062AV § 12. Where the appropriate facilities are provided by the coast Mar2 station, traffic may be exchanged with the telex network:
- 1062AW a) in a conversational mode where the stations concerned are connected directly either automatically or under manual control; or
- 1062AX b) in a store-and-forward mode where traffic is stored at the coast station until the circuit to the called station can be set up, either automatically or under manual control.
- 1062AY § 13. In the shore-to-ship direction the message format should Mar2 conform to normal telex network practice.

1062AZ § 14. In the ship-to-shore direction the message format should Mar2 conform to normal telex network practice with the addition of a preamble as follows:

1062BA Mar2

a) in the conversational mode the preamble shall consist of the characters DIRTLXyz+ transmitted in sequence and preceded by at least one carriage return and a line feed, where "y" is the telex destination code in accordance with relevant C.C.I.T.T. Recommendations, "z" is the land subscriber's telex number and "+" indicates end of sequence;

1062BB Mar2

b) in the store-and-forward mode the preamble shall consist of the characters TLXyz+ transmitted in sequence preceded by at least one carriage return and a line feed, where "y" is the telex destination code in accordance with relevant C.C.I.T.T. Recommendations, "z" is the land subscriber's telex number and "+" indicates end of sequence.

Section V. Procedures for Operation in the Forward-Error-Correcting Mode

1062BC § 15. Messages in the forward-error-correcting mode may be Mar2 sent, by prior arrangement, from a coast station or a ship station to one or more ship stations in the following cases:

1062BD Mar² a) where a receiving ship station is not able to use its transmitter or is not permitted to do so;

1062BE Mar2

b) where the message is intended for more than one ship;

1062BF Mar2

c) where unattended reception of a message in the forward-error-correcting mode is necessary and automatic acknowledgement is not required.

1062BG § 16. All messages in the forward-error-correcting mode should Mar2 be preceded by at least one carriage return and a line feed signal.

1062BH § 17. Ship stations may acknowledge the reception of messages Mar2 in the forward-error-correcting mode by A1 Morse telegraphy, telephony or by other means.

Revision of Article 30 of the Radio Regulations

Article 30 of the Radio Regulations shall be amended as follows:

After Regulation No. 1064 add the following new Regulation:

ADD 1064A (3) The provisions of this Article are not applicable to the Mar2 maritime mobile-satellite service.

Replace Regulation No. 1067 by the following new text:

(MOD) 1067 § 3. (1) In addition, each coast station shall, so far as practicable, Mar2 transmit its calls in the form of "traffic lists" consisting of the call signs in alphabetical order of all mobile stations for which it has traffic on hand. These calls shall be made at specified times fixed by agreement between the administrations concerned and at intervals of not less than two hours and not more than four hours during the working hours of the coast station.

After Regulation No. 1067 add the following new Regulation:

ADD 1067A (1A) In the bands between 4 000 and 27 500 kHz, however, traf-Mar2 fic lists may be transmitted at intervals of not less than one hour.

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Revision of Article 31 of the Radio Regulations

Article 31 of the Radio Regulations shall be amended as follows:

Before Regulation No. 1088 add the following new Regulation:

ADD 1087A § 0. The provisions of this Article are not applicable to the Mar2 maritime mobile-satellite service.

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Revision of Article 32 of the Radio Regulations

Article 32 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 1114 by the following new text:

MOD 1114 § 7. (1) The general calling frequency which, except as provided un-Mar2 der No. 1015A, shall be used by any ship station or coast station engaged in radiotelegraphy in the authorized bands between 405 and 535 kHz, and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in these bands, is the frequency 500 kHz.

After Regulation No. 1117 add the following new Regulation:

ADD 1117A § 8A. Selective calling under the provisions of Article 28A may Mar2 be carried out on the frequency of 500 kHz in the shore-to-ship, ship-to-shore and ship-to-ship directions.

Replace Regulations Nos. 1145 and 1146 by the following new texts:

- MOD 1145 § 17. (1) Mobile radiotelegraph stations equipped to operate in the Mar2 bands specified in Nos. 1174 and 1196 shall employ only class A1 Morse telegraphy emissions at speeds not exceeding 40 bands. Survival craft stations may use class A2 or A2H emissions in these bands (see Nos. 994 and 997).
- MOD 1146 (2) Mobile stations equipped for wide-band telegraphy, fac-Mar2 simile and special transmission systems may, in the frequency bands reserved for such use, employ any class of emission provided that such

emissions can be contained within the wide-band channels indicated in Appendix 15. However, A1 Morse telegraphy and telephony are excluded, except for circuit alignment purposes.

Replace Regulation No. 1149 by the following new text:

MOD 1149 § 18. Nos. 451 to 453 and the corresponding columns of Appen-Mar2 dix 15 show those parts of the bands between 4 000 and 27 500 kHz exclusively allocated to the maritime mobile service which are to be used by coast stations and ship stations for radiotelegraphy.

Delete Regulations Nos. 1150, 1150A, 1150B, 1151, 1152, 1153, 1154, 1156 and 1158.

Replace Regulations Nos. 1160 and 1161 by the following new texts:

- MOD 1160 § 22. (1) In order to establish communication with a station in the maritime mobile service, each ship and aircraft station shall use an appropriate calling frequency in one of the bands listed in No. 1174.
- MOD 1161 (2) Frequencies in the A1 Morse telegraphy calling bands are assigned to each mobile station in accordance with the provisions of Nos. 1176A to 1179.

After Regulation No. 1162 add the following new Regulation:

ADD 1162A § 23A. In order to reduce interference on the common calling Mar2 channels, they shall be used only when a ship cannot use a calling frequency within the group indicated as a coast station receiving channel of the station with which it desires to communicate or when the coast station has indicated that it is keeping watch only on the common calling channels.

After Regulation No. 1164 add the following new Regulations:

ADD 1164A § 24A.(1) The frequencies assignable to coast stations using the Mar2 bands between 4 000 and 27 500 kHz for digital selective calling are included within the following band limits (see also No. 1238D):

4 356·75 - 4 357·4 kHz 6 505·75 - 6 506·4 kHz 8 718·25 - 8 718·9 kHz 13 099·75 - 13 100·8 kHz 17 231·75 - 17 232·9 kHz 22 594·75 - 22 596 kHz

ADD 1164B (2) The exclusive digital selective calling frequencies within the Mar2 bands indicated in No. 1164A (see No. 1238D) may be assigned to any coast station for use in accordance with No. 999F.

Replace Regulation No. 1166 by the following new text:

MOD 1166 a)
Mar2

a) for a mobile station, one of its assigned calling frequencies in the same band, with due regard to No. 1162A.

Replace Regulation No. 1168 by the following new text:

MOD 1168 § 26. Administrations shall indicate, in respect of each coast station, in which of the ship calling bands and on which coast station receiving channels that coast station keeps watch and, as far as possible, the approximate hours of watchkeeping in Greenwich Mean Time (G.M.T.). This information shall be published in the List of Coast Stations.

After Regulation No. 1168 add the following new Regulations:

- ADD 1168A § 26A. Exceptionally, a coast station may indicate that it is keep-Mar2 ing watch on calling frequencies other than those specified as its own receiving frequencies.
- ADD 1168B § 26B. In order to reduce interference on calling frequencies, a Mar2 coast station shall take adequate steps to ensure, under normal conditions, the prompt receipt of calls (see No. 1013B).

Replace Regulation No. 1173 by the following new text:

MOD 1173 (3) Working frequencies assignable to coast stations using the bands between 4 000 and 27 500 kHz are included within the following band limits:

After Regulation No. 1173 add the following new Regulations:

ADD 1173A Mar2 a) for wide-band and A1 Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems:

4 219·4 - 4 349·4 kHz 6 325·4 - 6 493·9 kHz 8 435·4 - 8 704·4 kHz 12 652·3 - 13 070·8 kHz 16 859·4 - 17 196·9 kHz 22 310·5 - 22 561 kHz

(see also No. 453A)

ADD 1173B b) for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bands

(frequencies paired with those in No. 451B):

4 349·4 - 4 356·75 kHz 6 493·9 - 6 505·75 kHz 8 704·4 - 8 718·25 kHz 13 070·8 - 13 099·75 kHz 17 196·9 - 17 231·75 kHz 22 561 - 22 594·75 kHz

Replace Regulation No. 1174 by the following new text:

MOD 1174 § 29. The frequencies assignable to ship stations for A1 Morse
Mar2 telegraphy calling are included within the following band limits:

4 179.75 - 4 187.2 kHz 6 269 • 75 - 6 280 • 8 kHz 8 359 - 75 - 8 374 - 4 kHz. 12 539.6 - 12 561.6 kH2 16 719.8 - 16 748.8 kHz 22 227 - 22 247 kHz. 25 070 - 25 076 kH2

Delete Regulations Nos. 1175 and 1176.

Before Regulation No. 1177 add the following new Regulations:

- ADD 1176A § 29A. Each calling band between 4 000 and 23 000 kHz indicated Mar2 in No. 1174 is divided into four groups of channels and two common channels. The 25 MHz band is divided into three channels of which one is a common channel (see Appendix 15C).
- ADD 1176B § 29B. (1) Coast stations shall, when providing international ser-Mar2 vice as published in the List of Coast Stations, keep watch on the common calling channels in each band throughout their hours of service in the bands concerned, and on the appropriate group channel or channels during busy periods. The times during which watch will be kept on the

group channel or channels shall be published for each country in the List of Coast Stations.

ADD 1176C (2) If necessary, an indication of the channels on which watch
Mar2 is kept may be included in the coast station transmissions.

Replace Regulation No. 1177 by the following new text:

MOD 1177 § 30. In the bands between 4000 and 23000 kHz, the ad-Mar² ministration to which a ship station is subject shall assign to it at least two calling frequencies in each band in which the station is equipped to transmit. 1 One of the calling frequencies in each band shall be within one of the common coast station receiving channels contained in Appendix 15C; another in each band shall be selected from within the other channels in Appendix 15C, taking account of the receiving channel or channels of the coast station with which the ship station most frequently communicates. In the 25 MHz band, administrations shall assign to ship stations under their control a frequency within the common channel. Another calling frequency in this band shall be selected from within Channel A or B of Appendix 15C, taking account of the receiving channel of the coast station with which the ship station most frequently communicates.

After Regulation No. 1177 add the following new Regulations:

ADD 1177A § 30A. A ship station should, wherever possible, be assigned Mar2 additional calling frequencies (see No. 1162A).

ADD 1177.1 'Up to 1 January 1980 ship stations whose transmitters are capable of using only Mar2 three frequencies in each of the bands between 4 000 and 23 000 kHz may, exceptionally, be assigned a single calling frequency in each of the frequency bands in which they can transmit. This exception may be made only if the administration concerned considers that the assignment of a minimum of two working frequencies in each band is necessary for the ship's service.

- ADD 1177B § 30B. If it is not intended to maintain watch on all the receiving Mar2 channels within a group, the administration concerned, in order to ensure an even distribution of calls, shall determine the channel or channels on which watch will be maintained but only after coordination as far as possible with administrations sharing the same group (see Resolution No. Mar2 5).
- ADD 1177C § 30C. Administrations which assign to their ships frequencies in Mar2 two or more calling channels within their group shall take the necessary steps to distribute such assignments uniformly throughout the channels taken into use.
- ADD 1177D § 30D. In order to ensure an even distribution of calls on the com-Mar2 mon calling channels, administrations should, as far as practicable, assign frequencies in each of the two channels to an equal number of their ships.
- ADD 1177E § 30E. Administrations shall ensure, as far as possible, that ship Mar2 stations under their jurisdiction are capable of keeping their transmission within the limits of the assigned channels (see Appendix 3).

Delete Regulation No. 1178.

Replace Regulation No. 1179 by the following new text:

MOD 1179 § 31. The frequency 8 364 kHz is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands between 4 000 and 27 500 kHz and if they desire to establish communications relating to search and rescue operations with stations of the maritime and aeronautical mobile services.

After Regulation No. 1179 add the following new Regulations:

ADD 1179A § 31A. (1) The frequencies assignable for digital selective calling to Mar2 ship stations using the bands between 4 000 and 27 500 kHz are includ-

ed within the following band limits:

4 187.2 - 4 188 kHz 6 280.8 - 6 282 kHz 8 374.4 - 8 376 kHz 12 561.6 - 12 564 kHz 16 748.8 - 16 752 kHz 22 247 - 22 250 kHz

ADD 1179B (2) The exclusive digital selective calling frequencies within the Mar2 bands indicated in No. 1179A (see No. 1238C) may be assigned to any ship station for use in accordance with No. 999F.

(MOD) 1180 [concerns the French text only]

Replace Regulation No. 1180B by the following new text:

MOD 1180B § 32B. In all bands, the working frequencies for ship stations using marrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bands, including those paired with the working frequencies assignable to coast stations (see No. 452C) are spaced 0.5 kHz apart. The frequencies assignable to ship stations which are paired with those used by the coast stations are shown in Appendix 15A (see also No. 1191D). The frequencies assignable to ship stations which are not paired with those used by the coast stations are shown in Appendix 15B (see also No. 1191F).

Delete Regulation No. 1181.

Replace Regulations Nos. 1182 and 1183 by the following new texts:

- MOD 1182 § 33. In all bands, except the 6 MHz band, the working frequenMar2 cies for ship stations using A1 Morse telegraphy, at speeds not
 exceeding 40 bands, are spaced 0.5 kHz apart; in the 6 MHz band they
 are spaced 0.75 kHz apart (see also Note e) to Appendix 15). The
 extreme frequencies assignable in each of these bands are shown in
 Appendix 15.
- MOD 1183 § 34. In the 4, 6, 8, 12 and 16 MHz bands, certain frequencies Mar2 are harmonically related as shown in Appendix 15D.

Delete Regulations Nos. 1184, 1185, 1186 and 1187.

Replace Regulation No. 1188 by the following new text:

MOD 1188 § 37. The working frequencies assignable to ship stations using Mar2 wide-band telegraphy, facsimile and special transmission systems are included within the following band limits:

4 146.6 - 4 162.5 kHz. 4 166 - 4 170 kHz 6 224.6 - 6 244.5 kHz 6 2 4 8 - 6 2 5 6 kHz 8 300 - 8 328 kHz 8 3 3 1 · 5 - 8 3 4 3 · 5 kHz 12 439.5 - 12 479.5 kHz 12 483 - 12 491 kHz 16 596.4 - 16 636.5 kHz 16 640 - 16 660 kHz. 22 139.5 - 22 160.5 kHz 22 164 - 22 192 kHz. Replace Regulation No. 1191 by the following new text:

(MOD) 1191 (3) However, within the limits of the bands given in No. 1188, Mar2 administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in Appendix 15.

Nevertheless, administrations shall take into account, as far as possible, the provisions of Appendix 15 concerning channelling and 4 kHz spacing.

Replace Regulation No. 1191A by the following new text:

(MOD) 1191A § 38A. The working frequencies assignable to ship stations for Mar2 oceanographic data transmission are included within the following band limits:

4 162·5 - 4 166 kHz 6 244·5 - 6 248 kHz 8 328 - 8 331·5 kHz 12 479·5 - 12 483 kHz 16 636·5 - 16 640 kHz 22 160·5 - 22 164 kHz

Replace the sub-title preceding Regulation No. 1191D, by the following:

MOD Mar2 d) Working Frequencies (paired with those in No. 452C) for Ship Stations using Narrow-Band Direct-Printing Telegraph and Data Transmission Systems, at Speeds not exceeding 100 Bauds

Replace Regulation No. 1191D by the following new text:

MOD 1191D § 38D. (1) Working frequencies assignable to ship stations using Mar2 narrow-band direct-printing telegraph and data transmission systems are included within the following band limits:

4 170 - 4 177·25 kHz 6 256 - 6 267·75 kHz 8 343·5 - 8 357·25 kHz 12 491 - 12 519·75 kHz 16 660 - 16 694·75 kHz 22 192 - 22 225·75 kHz After Regulation No. 1191D add the following new Regulation:

ADD 1191DA (2) The frequency pairs assignable to coast stations and ship Mar2 stations using narrow-band direct-printing telegraph and data transmission systems are indicated in Appendix 15A.

Replace Regulation No. 1191E by the following new text:

MOD 1191E § 38E. When assigning frequencies listed in Appendix 15A for Mar2 narrow-band direct-printing telegraph and data transmission systems, administrations shall apply the procedure described in Resolution No. Mar2 – 7.

After Regulation No. 1191E add the following new sub-title and Regulations:

- ADD Mar2 da) Working Frequencies (Non-Paired) for Ship Stations using Narrow-Band Direct-Printing Telegraph and Data Transmission Systems, at Speeds not exceeding 100 Bauds
- ADD 1191F § 38F. Working frequencies assignable to ship stations using Mar2 narrow-band direct-printing telegraph and data transmission systems are included within the following band limits:

4 177.25 - 4 179.75 kHz. 6 267.75 - 6 269.75 kHz. 8 297.3 - 8 300 kHz8 357.25 - 8 357.75 kHz 12 519 - 75 - 12 526 - 75 kHz 16 694 • 75 - 16 705 • 8 kHz 22 225 • 75 - 22 227 kHz. 25 076 - 25 090.1 kHz. ADD 1191G § 38G. When assigning frequencies listed in Appendix 15B for Mar2 narrow-band direct-printing telegraph and data transmission systems, administrations shall take due account of the information entries in the Master Register resulting from the notification procedure contained in Resolution No. Mar2 – 8.

Delete sub-title preceding No. 1192 as well as Regulations Nos. 1192, 1193, 1194 and 1195.

Replace the sub-title preceding No. 1196 and Regulation No. 1196 by the following new texts:

MOD Mar2 f) Working Frequencies for Ship Stations using A1 Morse Telegraphy

MOD 1196 § 42. Working frequencies assignable to ship stations using A1 Mar2 Morse telegraphy are included within the following band limits:

4 188	-	4 219 • 4	kHz
6 282	-	6 325 - 4	kHz
8 357.75	-	8 359 - 75	kHz
8 376	-	8 435.4	kHz
12 526 - 75	-]	12 539.6	kHz
12 564	-]	12 652-3	kHz
16 705.8	- 1	16 719.8	kHz
16 752	- 1	16 859.4	kHz
22 250	- 2	22 3 10 · 5	kHz
25 090-1	- 2	25 110	kHz

Delete Regulations Nos. 1197, 1198 and 1199.

Replace Regulation No. 1200 by the following new text:

MOD 1200 § 43. Each administration shall assign to each ship station under Mar2 its jurisdiction a sufficient number of working frequencies, in any of the

4, 6, 8, 12, 16, 22 and 25 MHz bands, to meet the traffic needs of the ship. In each band used, preferably not less than two working frequencies should be assigned to each ship. Administrations shall ensure a uniform distribution of assignments throughout the bands.

After Regulation No. 1200 add the following new Regulation:

ADD 1200A § 43A. For the exclusive purpose of communication with stations Mar2 of the maritime mobile service, an aircraft station may be assigned one or more working frequencies in the bands shown in No. 1196. These frequencies shall be assigned in accordance with the same principles of uniform distribution as for ship stations.

Delete Regulation No. 1201, the sub-title following it and Regulation No. 1202.

Replace Regulations Nos. 1203 and 1204 by the following new texts:

- MOD 1203 § 45. In the bands between 4 000 and 27 500 kHz the following Mar2 abbreviations may be used to designate a working frequency:
- MOD 1204 a) if the frequency expressed in kHz has no decimal value, the last three figures shall be transmitted;

After Regulation No. 1204 add the following new Regulation:

ADD 1204A b) if the frequency expressed in kHz has a decimal value, the last three figures before the decimal point and the first decimal figure shall be transmitted.

Delete Regulations Nos. 1205 and 1206.

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ANNEX 23

Revision of Article 33 of the Radio Regulations

Article 33 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 1214 by the following new text:

MOD 1214 § 4. (1) Devices providing for the emission of a signal to indicate

Mar2 that a call is in progress on a channel may be used in this service on a

non-interference basis to the service provided by coast stations.

After Regulation No. 1214 add the following new Regulations:

- ADD 1214A (1A) The use of devices for continuous or repetitive calling or Mar2 identification is not permitted.
- ADD 1214B (1B) A station may not transmit identical information Mar2 simultaneously on two or more frequencies when communicating with only one other station.
- ADD 1214C (1C) A station shall not emit any carrier between calls.

 Mar2

Replace Regulation No. 1216 by the following new text:

MOD 1216 § 5. (1) Stations of the maritime mobile service equipped for Mar2 radiotelephony may transmit and receive radiotelegrams by means of radiotelephony. Coast stations providing such service and open for public correspondence shall be indicated in the List of Coast Stations.

After Regulation No. 1222 add the following new Regulations:

- ADD 1222A (1A) However, in the bands between 156 and 174 MHz when Mar2 the conditions for establishing contact are good, the call described in No. 1222 may be replaced by:
 - the call sign of the station called, once;
 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
 - the call sign or other identification of the calling station, twice.
- ADD 1222B (1B) When calling a VHF coast station operating on more than Mar2 one channel, a ship station calling on a working channel should include the number of that channel in the call.

Replace Regulations Nos. 1225, 1226 and 1227 by the following new texts:

- MOD 1225 § 8. (1) A radiotelephone ship station calling a coast station should Mar2 use for the call, in order of preference:
- MOD 1226 a) a working frequency on which the coast station is keeping watch:
- MOD 1227 b) the carrier frequency 2 182 kHz;

Delete Regulation No. 1228.

After Regulation No. 1235A add the following new Regulation:

ADD 1235B (9) Selective calling under the provisions of Article 28A may be Mar2 carried out on appropriate radiotelephone working frequencies in the shore-to-ship, ship-to-shore and ship-to-ship directions in the band 1 605-4 000 kHz.

Replace Regulations Nos. 1236 and 1237 by the following new texts:

- MOD 1236 § 9. (1) A ship station calling a coast station by radiotelephony

 Mar2 shall use either one of the calling frequencies mentioned in No. 1352 or
 the working frequency associated with that of the coast station:
 - until 1 January 1978, in accordance with Appendix 17, Sections A and B, or
 - as from 1 January 1978, in accordance with Appendix 17 Rev., Section A.
- MOD 1237 (2) A coast station calling a ship station by radiotelephony shall use one of the calling frequencies mentioned in No. 1352A, one of its working frequencies shown in the List of Coast Stations, or the carrier frequency 4 136.3 kHz or 6 204 kHz (as from 1 January 1978 to be replaced by the carrier frequencies 4 125 kHz and 6 215.5 kHz respectively) in accordance with the provisions of Nos. 1352.2 and 1352.3.

Replace Regulation No. 1238A by the following new text:

MOD 1238A (4) The provisions of Nos. 1236 and 1237 do not apply to Mar2 communication between ship stations and coast stations using the simplex frequencies specified in Appendix 17, Section C, or in Appendix 17 Rev., Section B.

After Regulation No. 1238A add the following new Regulations:

ADD 1238B § 9A. The frequencies assignable to ship and coast stations for Mar2 digital selective calling as specified in No. 999F are as follows:

ADD 1238C		a)	Ship stations	
	Mar2		4 187.6	kHz
			6 281 - 4	kHz
			8 3 7 5 • 2	kHz
			12 562.3	kHz
			12 562.8	kHz
			16 749.9	kHz
			16 750.4	kHz
			22 248	kHz
			22 248.5	kHz
ADD 1238D		<i>b)</i>	Coast stations	
	Mar2		4 357	kHz
			6 506	kHz
			8718.5	kHz
			13 100	kHz
			13 100.5	kHz
			17 232	kHz
			17 232.5	kHz
			22 595	kHz
			22 595.5	kHz

Replace Regulation No. 1239 by the following new text:

MOD 1239 § 10. (1) In the bands between 156 and 174 MHz used by the maritime mobile service, intership and coast station to ship calling should, as a general rule, be made on 156.8 MHz. However, coast station to ship calling may be conducted on a working channel or on a two-frequency calling channel which has been implemented in accordance with No. 1361. Except for distress, urgency or safety communications, when 156.8 MHz should be used, ship to coast station calling should, whenever possible, be made on a working channel or on a two-frequency calling channel which has been implemented in accordance with No. 1361. Ships wishing to participate in a port operations

service or ship movement service should call on a port operations or ship movement working frequency, indicated in heavy type in the List of Coast Stations.

After Regulation No. 1239 add the following new Regulation:

ADD 1239A (1A) Selective calling under the provisions of Article 28A may

Mar2 be carried out on 156.8 MHz and on appropriate radiotelephone working frequencies in the shore-to-ship, ship-to-shore and ship-to-ship
directions.

After Regulation No. 1240 add the following new sub-title and Regulations:

ADD Mar2

D. Procedure for Calling a Station Providing Pilot Service

- ADD 1240A § 10A. A radiotelephone ship station calling a station providing Mar2 pilot service should use for the call, in order of preference:
- ADD 1240B a) an appropriate channel in the bands between 156 and 174 MHz;
- ADD 1240C b) a working frequency in the bands between 1 605 and 4 000 kHz;
- ADD 1240D c) the carrier frequency 2 182 kHz, and then only to determine the working frequency to be used.

Replace Regulation No. 1249 by the following new text:

- MOD 1249 § 13. (1) A ship station called by a coast station shall reply on either Mar2 one of the calling frequencies mentioned in No. 1352 or on the working frequency associated with that of the coast station:
 - until 1 January 1978 in accordance with Appendix 17, Sections A and B, or
 - as from 1 January 1978 in accordance with Appendix 17 Rev., Section A.

After Regulation No. 1250 add the following new Regulation:

ADD 1250A (2A) In the zone of Regions 1 and 2 south of latitude 15° N, in
Mar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N,

when a station is called on the carrier frequency 4 136·3 kHz (as from 1

January 1978 to be replaced by the carrier frequency 4 125 kHz) it

should reply on the same frequency unless another frequency is in
dicated by the calling station.

Replace Regulations Nos. 1251, 1251A and 1252 by the following new texts:

- MOD 1251
 (3) In the zone of Region 3 south of latitude 25°N, when a station is called on the carrier frequency 6 204 kHz (as from 1 January 1978 to be replaced by the carrier frequency 6 215.5 kHz) it should reply on the same frequency unless another frequency is indicated by the calling station.
- MOD 1251A (4) The provisions of Nos. 1249 and 1250 do not apply to Mar2 communication between ship stations and coast stations using the

simplex frequencies specified in Appendix 17, Section C or in Appendix 17 Rev., Section B.

NOC

C. Bands between 156 and 174 MHz

MOD 1252 § 14. (1) When a station is called on 156.8 MHz it should reply on Mar2 the same frequency unless another frequency is indicated by the calling station.

Replace Regulation No. 1256 by the following new text:

MOD 1256 § 17. (1) Whenever contact has been established between a coast station in the public correspondence service and a ship station either on 156.8 MHz or on a two-frequency calling channel (see No. 1362), the stations shall transfer to one of their normal pairs of working frequencies for the exchange of traffic. The calling station should indicate the channel to which it is proposed to transfer by reference to the frequency in MHz or, preferably, to its channel designator.

After Regulation No. 1257 add the following new Regulation:

ADD 1257A (2A) When contact on 156.8 MHz has been established between Mar2 a coast station in the ship movement service and a ship station, the coast station shall then indicate the channel to be used for the exchange of traffic by reference to the frequency in MHz or, preferably, to its channel designator.

Replace Regulation No. 1258A by the following new text:

MOD 1258A (4) However, a brief exchange of traffic not to exceed one

Mar2 minute concerning the safety of navigation need not be transmitted on a

working frequency when it is important that all ships within range
receive the transmission.

Replace Regulation No. 1265 by the following new text:

MOD 1265 § 19. When the calling station wishes to exchange more than one Mar2 radiotelephone call, or to transmit one or more radiotelegrams, it should indicate this when contact is established with the station called.

Replace Regulation No. 1290 by the following new text:

MOD 1290 § 25. (1) Calling, and signals preparatory to traffic, shall not exceed Mar2 one minute when made on the carrier frequency 2 182 kHz or on 156.8 MHz, except in cases of distress, urgency or safety to which the provisions of Article 36 apply.

Replace Regulation No. 1295 by the following new text:

- MOD 1295 (2) Any signals sent for testing shall be kept to a minimum, Mar2 particularly:
 - on the carrier frequency 2 182 kHz;
 - on the frequency 156.8 MHz;
 - in the zone of Regions 1 and 2 south of latitude 15° N, including Mexico, and in the zone of Region 3 south of latitude 25° N, on the carrier frequency 4 136.3 kHz;
 - in the zone of Region 3 south of latitude 25° N also on the carrier frequency 6 204 kHz.

As from 1 January 1978, the carrier frequencies 4 136.3 kHz and 6 204 kHz will be replaced by the carrier frequencies 4 125 kHz and 6 215.5 kHz respectively.

After Regulation No. 1295 add the following new Regulation:

ADD 1295A (3) It is not permitted to send test transmissions of the Mar2 radiotelephone alarm signal on the carrier frequency 2 182 kHz and the frequency 156.8 MHz, except where emergency equipment which can operate only on these frequencies is involved, in which case measures shall be taken to prevent radiation. Measures shall also be taken to prevent radiation from radiotelephone alarm tests carried out on frequencies other than 2 182 kHz and 156.8 MHz.



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ANNEX 24

Revision of Article 34 of the Radio Regulations

Article 34 of the Radio Regulations shall be amended as follows:

After Regulation No. 1297 add the following new Regulations:

- ADD 1297A (3) The provisions of this Article relating to the intervals be-Mar2 tween calls are not applicable to a station in the maritime mobile service operating under conditions involving distress, urgency or safety.
- ADD 1297B (4) The provisions of this Article are not applicable to the Mar2 maritime mobile-satellite service.

Replace Regulation No. 1300 by the following new text:

(MOD) 1300 § 3. (1) In addition, each coast station shall, so far as practicable, Mar2 transmit its calls in the form of "traffic lists" consisting of the call signs or other identification in alphabetical order of all mobile stations for which it has traffic on hand. These calls shall be made at specified times fixed by agreement between the administrations concerned and at intervals of not less than two hours and not more than four hours during the working hours of the coast station.

After Regulation No. 1302 add the following new Regulation:

ADD 1302A (3A) However, in the bands between 156 and 174 MHz when Mar2 the conditions for establishing contact are good, the call described in No. 1302 may be replaced by:

- "Hello all ships" or CQ (spoken as CHARLIE QUEBEC), once;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- ". . . Radio", twice;
- "Listen for my traffic list on channel . . .".

In no case may this preamble be repeated.

After Regulation 1308A add the following new Regulation:

ADD 1308B (1B) In areas where reliable VHF communication with a called Mar2 coast station is practicable, the calling mobile station may repeat the call as soon as it is ascertained that traffic has been terminated at the coast station.

ANNEX 25

Revision of Article 35 of the Radio Regulations

Article 35 of the Radio Regulations shall be amended as follows:

Replace Regulations Nos. 1321 and 1321A by the following new texts:

- MOD 1321 (3) Any aircraft in distress shall transmit the distress call on Mar2 the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service, the provisions of Nos. 1323 and 1324 or 1359 and 1359B shall be complied with.
- MOD 1321A § 1A. Except with regard to the provisions of Article 9 concernMar2 ing notification and recording of frequencies, when designating
 frequencies for single sideband radiotelephony the carrier frequency is
 always to be designated. The assigned frequency is to be determined in
 accordance with No. 445A.

After Regulation No. 1321A add the following new Regulation:

ADD 1321B § 1B. Coast stations shall not occupy idle radiotelephone Mar2 channels by emitting identification signals, such as those generated by call slips or tapes. Exceptionally, a coast station when requested by a mobile station for the purpose of establishing a radiotelephone call, may emit a receiver tuning signal of not more than 10 seconds duration.

After Regulation No. 1322A add the following new Regulations:

- ADD 1322AA § 2AA. When linked compressor and expander systems are used Mar2 they shall conform to the characteristics specified in Appendix 20D, paragraph a).
- ADD 1322AB § 2AB. Single sideband radio equipment used in conjunction with Mar2 linked compressor and expander systems shall conform to the characteristics specified in Appendix 17A and should also conform to Appendix 20D, paragraph b).

Replace Regulation No. 1322B by the following new text:

- (MOD) 1322B § 2B. (1) Except in the cases specified in Nos. 984, 1322D and 1323, Mar2 the classes of emissions to be used in the bands between 1 605 and 4 000 kHz shall be:
 - *a*) A3 or
 - b) A3H, A3A and A3J.

However, unless otherwise specified in the present Regulations (see Nos. 984, 996, 1322D, 1323 and 1337):

- after 1 January 1975, class A3 emissions shall no longer be authorized for coast stations and
- after 1 January 1982, class A3H emissions for coast stations and class A3 and A3H emissions for ship stations shall no longer be authorized.

Delete Regulation No. 1322B.1.

After Regulation No. 1322B add the following new Regulation:

- ADD 1322BA (1A) The peak envelope power of coast radiotelephone stations

 Mar2 operating in the authorized bands allocated between 1 605 and 4 000

 kHz shall not exceed: 1
 - 5 kW for coast stations located north of latitude 32° N,
 - 10 kW for coast stations located south of latitude 32° N.

Replace Regulation No. 1322D by the following new text:

MOD 1322D (3) Transmissions in the bands 2 170 - 2 173.5 kHz and Mar2 2 190.5 - 2 194 kHz with the carrier frequency 2 170.5 kHz and the carrier frequency 2 191 kHz respectively are limited to class A3A and A3J emissions and are limited to a peak envelope power of 400 watts. However, on the frequency 2 170.5 kHz and with the same power limit, coast stations may also use class A2H emissions when using the selective calling system³ defined in Appendix 20C and, exceptionally, in Regions 1 and 3 and in Greenland, may also use class A3H emissions for safety messages.

ADD 1322BA.1 See Resolution No. Mar2 – 9.

SUP 1322D.1

NOC 1322D.2 See also No. 1329A.

MOD 1323.1 Where administrations provide at their coast stations a watch on 2 182 kHz for receiving class A3A and A3J emissions as well as class A3 and A3H emissions, ship stations beyond the A3 or A3H communication range of such coast stations may call them for safety purposes using class A3A or A3J emissions. This procedure shall only be used when calling by the use of class A3 and A3H emissions has not been successful.

After Regulation No. 1323 add the following new Regulation:

ADD 1323A (1A) In the zone of Regions 1 and 2 south of latitude 15° N, inMar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N, if a
distress message on the carrier frequency 2 182 kHz has not been
acknowledged, the radiotelephone alarm signal, whenever possible
followed by the distress call and message, may be transmitted again on
a carrier frequency of 4 136.3 kHz or 6 204 kHz (as from 1 January
1978 to be replaced by the carrier frequencies 4 125 kHz and 6 215.5
kHz respectively), as appropriate (see Nos. 1351E, 1351F and 1354A).

Replace Regulation No. 1324 by the following new text:

MOD 1324 (2) However, ship and aircraft stations which cannot transmit on the carrier frequency 2 182 kHz or, in accordance with No. 1323A, on the carrier frequencies 4 136.3 kHz or 6 204 kHz (as from 1 January 1978 to be replaced by the carrier frequencies 4 125 kHz and 6 215.5 kHz respectively) should use any other available frequency on which attention might be attracted.

After Regulation No. 1325 add the following new Regulation:

ADD 1325A (3A) Selective calling under the provisions of Article 28A may Mar2 be used on the carrier frequency 2 182 kHz in the shore-to-ship, ship-to-shore and ship-to-ship directions and on this frequency shall be confined to distress and urgency and to vital navigational warnings. In no circumstances shall such selective calling be used in place of the procedures given in Nos. 1402, 1403, 1416, 1417 and 1465.

After Regulation No. 1326 add the following new Regulation:

ADD 1326AA (4A) Any coast station authorized to send navigational warnings

Mar2 should be able to transmit the navigational warning signal described in

No. 1476AA, 1476AB and 1476AC.

Replace Regulation No. 1326C by the following new text:

MOD 1326C § 3A. The frequency 3 023.5 kHz may be used for intercommunication between mobile stations when engaged in coordinated search and rescue operations, including communication between these stations and participating land stations, with the carrier frequencies, classes of emission and conditions of operation defined in Appendix 27.

Replace Regulation No. 1329A by the following new text:

MOD 1329A c) by coast stations when using the selective calling system defined in Appendix 20C with class of emission A2H, until 1 April 1977 (see No. 999E.1).

Delete Regulation No. 1329A.1.

Replace Regulation No. 1334 by the following new text:

MOD 1334 (3) In addition, ship stations should keep the maximum watch Mar2 practicable on the carrier frequency 2 182 kHz for receiving by any appropriate means the radiotelephone alarm signal described in No. 1465, and the navigational warning signal described in Nos. 1476AA, 1476AB and 1476AC, as well as distress, urgency and safety signals.

After Regulation No. 1335 add the following new Regulation:

ADD 1335A § 7A. In order to increase the safety of life at sea and over the sea,

Mar2 all stations of the maritime mobile service normally keeping watch on
frequencies in the authorized bands between 1 605 and 2 850 kHz shall.

during their hours of service, and as far as possible, take steps to keep watch on the international distress carrier frequency 2 182 kHz for three minutes twice each hour beginning at x h 00 and x h 30 Greenwich Mean Time (G.M.T.).

Replace Regulation No. 1336A by the following new text:

(MOD) 1336A (1A) Coast stations authorized to use radiotelephony on one or more frequencies other than 2 182 kHz in the authorized bands between 1 605 and 2 850 kHz shall be capable of transmitting on those frequencies class A3 emissions or class A3H, A3A and A3J emissions. However, after 1 January 1975, class A3 emissions shall no longer be authorized, and after 1 January 1982 class A3H emissions also shall no longer be authorized, except on the frequency 2 182 kHz (see also No. 1322D).

Delete Regulation No. 1336A.1.

Delete Regulation No. 1342.

Delete title after No. 1348A and Regulations Nos. 1349. 1349.1 and 1350.

Replace Regulations Nos. 1351A, 1351A.1 and 1351A.2 by the following new texts:

- MOD 1351A § 13A.(1) The classes of emission to be used for radiotelephony in the Mar2 maritime mobile service bands between 4 000 and 23 000 kHz are:
 - a) class A3 1 for existing ship stations until 1 January 1978, or
 - b) class A3H, 2 A3A and A3J.

MOD 1351A.1 For the use of class A3 and A3B emissions, see Resolution No. Mar2 – 13. Mar2

MOD 1351A.2 ²The conditions of use of class A3H emissions are specified in No. 1351I. in Mar2 Appendix 17 and in Resolution No. Mar2 - 13.

Delete Regulation No. 1351A.3.

After Regulation No. 1351B add the following new Regulations:

ADD 1351C (3) Coast radiotelephone stations employing class A3H, A3A Mar2 or A3J emissions in the maritime mobile service bands between 4 000 and 23 000 kHz shall use the minimum power necessary to cover their service area and shall at no time use a peak envelope power in excess of 10 kW per channel.

ADD 1351D (4) Ship radiotelephone stations employing class A3H², A3A Mar2 or A3J emissions in the maritime mobile service bands between 4 000 and 23 000 kHz shall at no time use a peak envelope power in excess of 1.5 kW per channel.

After the new Regulation No. 1351D add the following new sub-title and Regulations:

ADD Mar2

B. Distress

ADD 1351E § 13B. (1) In the zone of Regions 1 and 2 south of latitude 15° N, in-Mar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N, the carrier frequency 4 136.3 kHz (as from 1 January 1978 to be replaced by the carrier frequency 4 125 kHz) is designated to supplement the carrier frequency of 2 182 kHz for distress and safety purposes and for call and reply.

ADD 1351C.1 For the use of class A3H emissions after 1 January 1978, see No. 1351I. Mar2

ADD 1351D.1 ² For the use of class A3H emissions after 1 January 1978, see No. 13511. Mar2

- ADD 1351F (2) In the zone of Region 3 south of latitude 25° N, the carrier Mar2 frequency 6 204 kHz (as from 1 January 1978 to be replaced by the carrier frequency 6 215.5 kHz) is designated to supplement the carrier frequency of 2 182 kHz for distress and safety purposes and for call and reply.
- ADD 1351G (3) In the zone of Regions 1 and 2 south of latitude 15° N, inMar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N,
 before transmitting on the carrier frequency 4 136·3 kHz or 6 204 kHz
 (as from 1 January 1978 to be replaced by the carrier frequencies 4 125
 kHz and 6 215·5 kHz respectively), a station shall listen on the frequency for a reasonable period to make sure that no distress traffic is
 being sent (see No. 1217).
- ADD 1351H (4) The provisions of No. 1351G do not apply to stations in Mar2 distress.
- ADD 1351I (5) Stations using the carrier frequencies 4 136·3 kHz and Mar2 6 204 kHz (as from 1 January 1978 to be replaced by the carrier frequencies 4 125 kHz and 6 215·5 kHz) in the conditions specified in Nos. 1351E and 1351F may continue to use class A3H emission until 1 January 1984.

Replace the title preceding No. 1352 as well as Regulations Nos. 1352, 1352.1, 1352A, 1352A.1 and 1352A.2 by the following:

MOD Mar2

C. Call and Reply

MOD 1352 § 14. (1) Ship stations may use the following carrier frequencies for Mar2 calling in radiotelephony:

4 136·3 kHz¹·2 6 204 kHz³ 8 268·4 kHz 12 403·5 kHz 16 533·5 kHz 22 073·5 kHz

As from 1 January 1978, the above-indicated carrier frequencies will be replaced by the following carrier frequencies:

4 125	kHz ^{1,2}
6 215.5	kHz³
8 257	kHz
12 392	kHz
16 522	kHz
22 062	kHz

MOD 1352.1 In the United States and Canada, the carrier frequency 4 136.3 kHz (as from Mar2 1 January 1978 to be replaced by the carrier frequency 4 125 kHz) is also authorized for common use by coast and ship stations for single sideband radiotelephony on a simplex basis, provided the peak envelope power of such stations does not exceed 1 kW (see also No. 1352A.2).

ADD 1352.2 ² In the zone of Regions 1 and 2 south of latitude 15° N, including Mexico, and in the Mar2 zone of Region 3 south of latitude 25° N, the carrier frequency 4 136·3 kHz is also authorized for common use by coast and ship stations for single sideband radiotelephony on a simplex basis for call, reply and safety purposes, provided the peak envelope power of such coast stations does not exceed 1 kW. In these zones the use of the carrier frequency 4 136·3 kHz for working purposes is not permitted (see also Nos. 1351E, 1351G and 1352.1).

As from 1 January 1978, the carrier frequency 4 136.3 kHz will be replaced by the carrier frequency 4 125 kHz.

ADD 1352.3 In the zone of Region 3 south of latitude 25° N, the carrier frequency 6 204 kHz is

Mar2 also authorized for common use by coast and ship stations for single sideband radiotelephony on a simplex basis for call, reply and safety purposes, provided the peak envelope power of such coast stations does not exceed 1 kW. In these zones the use of the carrier frequency 6 204 kHz for working purposes is not permitted (see also No. 1351F).

As from 1 January 1978, the carrier frequency 6 204 kHz will be replaced by the carrier frequency 6 215.5 kHz.

MOD 1352A (2) Coast stations may use the following carrier frequencies for Mar2 calling in radiotelephony: 1

4 434.9 kHz ² 6 518.6 kHz ² 8 802.4 kHz 13 182.5 kHz 17 328.5 kHz 22 699 kHz

As from 1 January 1978, the above-indicated carrier frequencies will be replaced by the following carrier frequencies:

4 419.4 kHz ² 6 521.9 kHz ² 8 780.9 kHz 13 162.8 kHz 17 294.9 kHz 22 658 kHz

After Regulation No. 1352A add the following new Regulation:

ADD 1352AA § 14A. Ship and coast stations using digital selective calling in Mar2 accordance with No. 999F may use the frequencies specified in Nos. 1238C and 1238D respectively.

MOD 1352A.1 These frequencies may also be used by coast stations with class A2H emission, Mar2 when using the selective calling system defined in Appendix 20C.

MOD 1352A.2 In Regions 2 and 3, the carrier frequencies 4 434.9 kHz and 6 518.6 kHz are also

Mar2 authorized for common use by coast and ship stations for single sideband
radiotelephony on a simplex basis, provided the peak envelope power of such stations
does not exceed 1 kW. The use of 6 518.6 kHz for this purpose should be limited to
daytime use (see also No. 1352.1).

As from 1 January 1978, the carrier frequencies 4 434.9 kHz and 6 518.6 kHz will be replaced by the carrier frequencies 4 419.4 kHz and 6 521.9 kHz, respectively.

Delete Regulations Nos. 1352B, 1353 and 1353A.

Replace the title preceding No. 1353B as well as Regulation No. 1353B by the following:

(MOD) Mar2

D. Search and Rescue

MOD 1353B § 15A. The frequency 5 680 kHz may be used for intercommunica-Mar2 tion between mobile stations when engaged in coordinated search and rescue operations, including communication between these stations and participating land stations with the carrier frequencies, classes of emission and conditions of operation defined in Appendix 27.

Replace the title preceding No. 1354 by the following:

(MOD) Mar2

E. Watch

After Regulation No. 1354 add the following new Regulations:

- ADD 1354A § 16A. (1) In the zone of Regions 1 and 2 south of latitude 15° N, inMar2 cluding Mexico, and in the zone of Region 3 south of latitude 25° N, all
 coast stations which are open to public correspondence and which form
 an essential part of the coverage of the area for distress purposes may,
 during their hours of service, maintain a watch on the carrier frequencies 4 136·3 kHz and/or 6 204 kHz (as from 1 January 1978 to be
 replaced by the carrier frequencies 4 125 kHz and 6 215·5 kHz respectively), as appropriate (see Nos. 1351E and 1351F). Such watch should
 be indicated in the List of Coast Stations.
- ADD 1354B (2) These stations should maintain this watch by means of an Mar2 operator using some aural method, such as headphones, split headphones or loudspeaker.

Replace the title preceding No. 1355 as well as Regulations Nos. 1355, 1356 and 1357 by the following:

(MOD) Mar2

F. Traffic

MOD 1355 § 17. (1) For the conduct of duplex telephony, the transmitting Mar2 frequencies of the coast stations and of the corresponding ship stations shall be associated in pairs, as indicated in Appendix 17 and Appendix 17 Rev., except temporarily in cases where working conditions prohibit the use of paired frequencies in order to meet operational needs.

MOD 1356 (2) The frequencies to be used for the conduct of simplex Mar2 radiotelephony are shown in Appendix 17, Section C, or in Appendix 17 Rev., Section B. In these cases, the peak envelope power of the coast station transmitter shall not exceed 1 kW.

MOD 1357 (3) The frequencies indicated in Appendix 17 or in Appendix Mar2 17 Rev. for ship station transmissions may be used by ships of any category according to traffic requirements.

Replace the title preceding No. 1359 as well as Regulation No. 1359 by the following:

MOD Mar2

A. Distress, Safety, Call and Reply

MOD 1359 § 18. (1) The frequency 156.8 MHz is the international distress, safe-Mar2 ty and calling frequency for radiotelephony for stations of the maritime mobile service when using frequencies in the authorized bands between 156 and 174 MHz. It is used for the distress signal and call and distress traffic, for the urgency signal, urgency traffic and the safety signal. Safety messages shall be transmitted where practicable on a working frequency after a preliminary announcement on 156.8 MHz. The class of emission to be used for radiotelephony on the frequency 156.8 MHz shall be F3 (see Appendix 19). After Regulation No. 1359 add the following new Regulation:

ADD 1359AA (1A) However, ship stations which cannot transmit on 156.8 Mar2 MHz should use any other available frequency on which attention might be attracted.

Replace Regulation No. 1359A by the following new text:

MOD 1359A (1B) The frequency 156.8 MHz may also be used:

Mar2

- a) by coast and ship stations for call and reply in accordance with the provisions of Article 33;
- by coast stations to announce the transmission on another frequency of traffic lists and important maritime information (see Nos. 1301 to 1304).

After Regulation No. 1359A add the following new Regulation:

ADD 1359B (1C) The frequency 156.8 MHz may be used by ship stations Mar2 and coast stations for selective calling.

Delete Regulation No. 1360.

Replace Regulation No. 1363.1 by the following new text:

MOD 1363.1 'After 1 January 1983 this band is reduced to 156.7625-156.8375 MHz (see Mar2 Resolution No. Mar2 - 14).

After Regulation No. 1363 add the following new Regulations:

ADD 1363A (6) Before transmitting on the frequency 156.8 MHz, a station Mar2 in the mobile service should listen on this frequency for a reasonable period to make sure that no distress traffic is being sent (see No. 1217).

- ADD 1363B (7) The provisions of No. 1363A do not apply to stations in Mar2 distress.
- ADD 1363C (8) To facilitate the reception of distress calls all transmissions

 Mar2 on 156.8 MHz shall be kept to a minimum and shall not exceed one
 minute.

Replace Regulation No. 1364 by the following new text:

MOD 1364 § 19. (1) A coast station providing an international maritime mobile Mar2 radiotelephone service in the band 156-174 MHz and which forms an essential part of the coverage of the area for distress purposes should, during its working hours in that band, maintain an efficient aural watch on 156.8 MHz (see Recommendation No. Mar2 – 10).

Replace Regulations Nos. 1367 and 1367A by the following new texts:

- MOD 1367 (4) Ship stations should, where practicable, maintain watch on Mar2 156.8 MHz when within the service area of a coast station providing international maritime mobile radiotelephone service in the band 156-174 MHz. Ship stations fitted only with VHF radiotelephone equipment operating in the authorized bands between 156 and 174 MHz, should maintain watch on 156.8 MHz, when at sea.
- MOD 1367A (5) Ship stations, when in communication with a port station Mar2 may, on an exceptional basis and subject to the agreement of the administration concerned, continue to maintain watch, on the appropriate port operations frequency only, provided that watch on 156.8 MHz is being maintained by the port station.

After Regulation No. 1367A add the following new Regulation:

ADD 1367B (6) Ship stations, when in communication with a coast station Mar2 in the ship movement service and subject to the agreement of the administrations concerned, may continue to maintain watch on the appropriate ship movement service frequency only, provided the watch on 156.8 MHz is being maintained by that coast station.

After Regulation No. 1368 add the following new Regulation:

ADD 1368A § 20A. A coast station in the ship movement service in an area Mar2 where 156.8 MHz is being used for distress, urgency and safety shall, during its working hours, keep an additional watch on the ship movement frequencies indicated in heavy type in the List of Coast Stations.

Replace Regulation No. 1371 by the following new text:

MOD 1371 § 22. Communications in the port operations service shall be

Mar2 restricted to those relating to operational handling, the movement and
the safety of ships and, in emergency, to the safety of persons.

Messages of a public correspondence nature shall be excluded from this
service.

After Regulation No. 1371 add the following new Regulation:

ADD 1371A § 22A. Communications in the ship movement service shall be Mar2 restricted to those relating to the movement of ships. Messages of a public correspondence nature shall be excluded from this service.

Delete Regulation No. 1373C.

Note by the General Secretariat:

In Nos. 1370, 1373, 1375 and 1377 reference to Resolution No. Mar 14 which has been abrogated should be changed to Resolution No. Mar2 - 14.

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Addition of a new Article (Article 35A) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 35:

ADD Mar2

ARTICLE 35A

Conditions to be Observed by Mobile Earth Stations in the Maritime Mobile-Satellite Service

- 1379AA § 1. Mobile earth stations shall be so established as to conform Mar2 to the provisions of Chapter II as regards frequencies.
- 1379AB § 2. The frequencies of emissions of mobile earth stations shall Mar2 be checked as often as practicable by the inspection service to which these stations are subject.
- 1379AC § 3. The energy radiated by receiving apparatus shall be re-Mar2 duced to the lowest practicable value and shall not cause harmful interference to other stations.
- 1379AD § 4. Administrations shall take all practicable steps necessary to Mar2 ensure that the operation of any electrical or electronic apparatus installed in mobile earth stations does not cause harmful interference to the essential radio services of stations which are operating in accordance with the provisions of these Regulations.

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Revision of Article 36 of the Radio Regulations

Article 36 of the Radio Regulations shall be amended as follows:

After Regulation No. 1380 add the following new Regulation:

ADD 1380A § 1A. The procedures specified in this Article are obligatory in Mar2 the maritime mobile-satellite service and for communications between stations on board aircraft and stations of the maritime mobile-satellite service, where this service or stations of this service are specifically mentioned. Nos. 1391, 1394, 1397, 1398, 1399, 1400, 1481, 1483 and 1490 are also applicable.

Replace Regulation No. 1381 by the following new text:

MOD 1381 § 2. (1) No provision of these Regulations prevents the use by a Mar2 mobile station or ship earth station in distress of any means at its disposal to attract attention, make known its position, and obtain help.

After Regulation No. 1381 add the following new Regulation:

ADD 1381A (1A) No provision of these Regulations prevents the use by Mar2 stations on board aircraft or ships engaged in search and rescue operations, in exceptional circumstances, of any means at their disposal to assist a mobile station in distress.

Replace Regulation No. 1383 by the following new text:

MOD **1383** § 3. The distress call and message shall be sent only on the Mar² authority of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station or ship earth station.

> After Regulation No. 1388 add the following new Regulation:

(3) The characteristics of the "all ships call" in the selective ADD 1388AA Mar2 calling system, which is reserved for alarm purposes only, are given in Appendix 20C.

> Replace Regulation No. 1397 by the following new text:

MOD 1397 § 10. (1) As a general rule, a ship shall signal its position in latitude and longitude (Greenwich), using figures for the degrees and minutes, together with one of the words NORTH or SOUTH and one of the words EAST or WEST. In radiotelegraphy, the signal - - - - shall be used to separate the degrees from the minutes; however this shall not necessarily apply to the maritime mobile-satellite service. When practicable, the true bearing and distance in nautical miles from a known geographical position may be given.

> Replace Regulations Nos. 1429 and 1430 by the following new texts:

MOD 1429 Mar2 a) Radiotelegraphy:

- the distress signal SOS:
- the call sign of the station sending the distress message, sent three times:
- the word DE:
- the call sign of the station acknowledging receipt, sent three times:
- the group RRR;
- the distress signal SOS.

MOD 1430

b) Radiotelephony:

Mar2

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

Replace Regulations Nos. 1448 and 1449 by the following new texts:

MOD 1448 § 33. A land station or an earth station in the maritime mobile-Mar2 satellite service at a specified fixed point receiving a distress message shall, without delay, take the necessary action to advise the appropriate authorities responsible for providing for the operation of rescue facilities.

MOD 1449 § 34. (1) When distress traffic has ceased on a frequency which has Mar2 been used for distress traffic, the station which has controlled this traffic shall transmit on that frequency a message addressed "to all stations" (CQ) indicating that normal working may be resumed.

After Regulation No. 1449 add the following new Regulation:

ADD 1449A (1A) When complete silence is no longer necessary on a fre-Mar2 quency which is being used for distress traffic, the station controlling the traffic shall transmit on that frequency a message addressed "to all stations" (CO) indicating that restricted working may be resumed. Replace Regulations Nos. 1450 and 1451 by the following new texts:

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

- the distress signal SOS;
- the call "to all stations" (CQ) sent three times;
- the word DE;
- the call sign of the station sending the message;
- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress;
- the service abbreviation QUM.
- b) In radiotelegraphy, the message referred to in No. 1449A consists of:
 - the distress signal SOS;
 - the call "to all stations" (CQ) sent three times;
 - the word DE;
 - the call sign of the station sending the message;
 - the time of handing in of the message;
 - the name and call sign of the mobile station which is in distress;
 - the service abbreviation QUZ.

MOD 1451 (3) a) In radiotelephony, the message referred to in No. 1449 consists of:

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

- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress;
- the words SEELONCE FEENEE pronounced as the French words "silence fini".
- b) In radiotelephony, the message referred to in No. 1449A consists of:
 - the distress signal MAYDAY;
 - the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
 - the call sign or other identification of the station sending the message;
 - the time of handing in of the message;
 - the name and call sign of the mobile station which is in distress;
 - the words PRU-DONCE pronounced as the French word "prudence".

Replace Regulation No. 1456 by the following new text:

MOD 1456 § 36. (1) The transmission of a distress message under the conditions prescribed in Nos. 1453 to 1455 shall be made on one or more of the international distress frequencies (500 kHz, 2 182 kHz, 156.8 MHz) or on any other frequency which may be used in case of distress (see Nos. 1107, 1108, 1208, 1321, 1323, 1324, 1359 and 1359AA).

After Regulation No. 1466 add the following new Regulation:

ADD 1466AA (2A) The radiotelephone alarm signal transmitted by coast Mar2 stations shall be that described in Nos. 1465 and 1466, which may be followed by a single tone of 1 300 Hz for 10 seconds.

After Regulation No. 1466A add the following new Regulations:

- ADD 1466B (4) To reduce unnecessary alarm signal emissions, tests of the Mar2 radiotelephone alarm signal on the carrier frequency 2 182 kHz are prohibited (see No. 1295A).
- ADD 1466C (5) As an exception such tests are permitted for radiotelephone

 Mar2 emergency equipment which can operate only on the international distress frequency 2 182 kHz, in which case a suitable artificial aerial shall
 be employed.

Replace Regulation No. 1469 by the following new text:

MOD 1469

Mar2

b) in radiotelephony, to attract the attention of the person on watch or to actuate automatic devices giving the alarm, or activating a silenced loudspeaker for the message which is to follow.

After Regulation No. 1476, insert the following new Section VIIIAA:

ADD Mar2 Section VIIIAA. Navigational Warning Signal

1476AA § 44AA. (1) The navigational warning signal consists of one Mar2 substantially sinusoidal tone of the frequency 2 200 Hz, interrupted so that the durations of tone and space are 250 milliseconds each.

- 1476AB (2) The signal should be transmitted by coast stations con-Mar2 tinuously for a period of 15 seconds before vital navigational warnings on radiotelephony in the medium frequency maritime bands.
- 1476AC (3) The purpose of the signal is to attract the attention of the Mar2 person on watch using a loudspeaker or a filtered loudspeaker, or to activate an automatic device to activate a silenced loudspeaker for the message which is to follow.

Replace Regulation No. 1476L by the following new text:

MOD 1476L (9) Equipment designed to transmit emergency position in-Mar2 dicating radiobeacon signals on the frequencies 121.5 MHz and 243 MHz shall be in agreement with the recommendations and standards recommended by the Organizations mentioned in Resolution No. Mar 7.

Replace Regulations Nos. 1478, 1479 and 1480 by the following new texts:

- MOD 1478 (2) In radiotelephony, the urgency signal consists of three Mar2 repetitions of the group of words PAN PAN, each word of the group pronounced as the French word "panne". The urgency signal shall be transmitted before the call.
- MOD 1479 § 46. (1) The urgency signal shall be sent only on the authority of the Mar2 master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station or mobile earth station in the maritime mobile-satellite service.
- MOD 1480 (2) The urgency signal may be transmitted by a land station or an earth station in the maritime mobile-satellite service at specified fixed points only with the approval of the responsible authority.

Replace Regulations Nos. 1482, 1482A and 1483 by the following new texts:

- MOD 1482 (2) The urgency signal and the message following it shall be Mar2 sent on one or more of the international distress frequencies (500 kHz, 2 182 kHz, 156.8 MHz), or on any other frequency which may be used in case of distress.
- MOD 1482A (2A) However, in the maritime mobile service, the message shall Mar2 be transmitted on a working frequency:
 - a) in the case of a long message or a medical call or
 - b) in areas of heavy traffic in the case of the repetition of a message transmitted in accordance with the provision as laid down in No. 1482.

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

MOD 1483 (3) The urgency signal shall have priority over all other communications, except distress. All stations which hear it shall take care not to interfere with the transmission of the message which follows the urgency signal.

Replace Regulations Nos. 1490, 1491 and 1492 by the following new texts:

- MOD 1490 § 52. (1) The safety signal indicates that the station is about to Mar2 transmit a message containing an important navigational or important meteorological warning.
- MOD 1491 (2) The safety signal and call shall be sent on one or more of the international distress frequencies (500 kHz, 2 182 kHz, 156.8 MHz) or on any other frequency which may be used in case of distress.
- MOD 1492 (3) The safety message which follows the call should be sent on Mar2 a working frequency. A suitable announcement to this effect shall be made at the end of the call.

Revision of the title of Chapter IX and of Article 37 of the Radio Regulations

The title of Chapter IX shall be amended as follows:

MOD Mar2

Radiotelegrams, Radiotelephone Calls and Radiotelex Calls

The title of Article 37 of the Radio Regulations shall be amended as follows:

MOD Mar2

Order of Priority of Communications in the Mobile Service except in the Maritime Mobile Service and in the Maritime Mobile-Satellite Service

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Addition of a new Article (Article 37A) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 37:

ADD Mar2

ARTICLE 37A

Order of Priority of Communications in the Maritime Mobile Service and in the Maritime Mobile-Satellite Service

1496A The term "communication" as used in this Article means

Mar2 radiotelegrams, radiotelephone calls and radiotelex calls. The order of
priority for communications in the maritime mobile service and the
maritime mobile-satellite service shall be as follows:

- 1. Distress calls, distress messages, and distress traffic;
- 2. Communications preceded by the urgency signal;
- 3. Communications preceded by the safety signal;
- 4. Communications relating to radio direction-finding;
- Communications relating to the navigation and safe movement of aircraft engaged in search and rescue operations;
- 6. Communications relating to the navigation, movements and needs of ships, and weather observation messages destined for an official meteorological service;

- 7. ETATPRIORITENATIONS Government radiotelegrams relative to the application of the United Nations Charter:
- 8. ETATPRIORITE Government radiotelegrams with priority and Government calls for which priority has been expressly requested:
- 9. Service communications relating to the working of the telecommunication service or to communications previously exchanged;
- 10. Government communications other than those shown in 7 and 8 above, ordinary private communications, RCT radiotelegrams and press radiotelegrams.

Revision of Article 40 of the Radio Regulations

The title of Article 40 of the Radio Regulations shall be amended as follows:

MOD Mar2 Accounting for Radiotelegrams and Radiotelephone
Calls except in the Maritime Mobile Service

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Addition of a new Article (Article 40A) to the Radio Regulations

The following new Article shall be added to the Radio Regulations after Article 40:

ADD Mar2

ARTICLE 40A

Accounting for Radiotelegrams, Radiotelephone Calls and Radiotelex Calls in the Maritime Mobile Service

Section I. General

- 1559AA § 1. For the purposes of this Article, the following terms shall Mar2 have the meanings defined below:
- 1559AAA Accounting authority: Any organization notified by an ad-Mar2 ministration to the Secretary-General for inclusion in the List of Ship Stations as being responsible for settling radio maritime accounts for some or all of the ship stations licensed by that administration. An accounting authority may be the administration itself, a private operating agency, a ship station licensee or an operating enterprise authorized by a ship station licensee to receive and settle accounts on his behalf.
- 1559AAB Land-line charges: Charges relating to transmission over Mar2 the general network of telecommunication channels, national and international.
- 1559AB § 2. In principle, land station and mobile station charges shall Mar2 not be entered in the international telegraph and telephone accounts.

- 1559AC § 3. The following charges shall be included in the accounts:
- 1559AD (1) In the case of radiotelegrams, radiotelephone calls and Mar2 radiotelex calls originating in mobile stations,
 - the land station charges,
 - the land-line charges,
 - the accessory charges for radiotelegrams which have to be considered in the accounting, and
 - the supplementary charges for radiotelephone calls with special facilities.
- 1559AE (2) In the case of radiotelegrams, radiotelephone calls and Mar2 radiotelex calls destined for mobile stations and passing through a land station of another country,
 - the land station charges,
 - the mobile station charges.
- 1559AF (3) As far as the transmission over the general international Mar2 network of telecommunication channels is concerned, and from the point of view of accounting, the provisions laid down in the Telegraph Regulations and Telephone Regulations, taking into account C.C.I.T.T. Recommendations and Instructions, shall apply to radiotelegrams, radiotelephone calls and radiotelex calls.
- 1559AG (4) The land-line charges shall be included in the international Mar2 telegraph and telephone accounts and shall be accounted for according to the provisions of the Telegraph Regulations and Telephone Regulations, taking into account C.C.I.T.T. Recommendations and Instructions.
- 1559AH § 4. Administrations reserve to themselves the right to make,
 Mar2 between themselves and with the recognized private operating agencies
 concerned, different arrangements with a view to the adoption of other
 accounting systems, more specifically the adoption, as far as practicable, of the system by which the land station and mobile station
 charges follow the radiotelegrams, radiotelephone calls and radiotelex

calls from country to country through the medium of the telegraph and telephone accounts. Such arrangements are subject to previous agreement between the administrations concerned.

- 1559A1 § 5. In the absence of a different arrangement in accordance Mar2 with the provisions of No. 1559AH, the accounts relating to these charges are prepared monthly by the administrations to which the land stations are subject and are forwarded by them to the accounting authorities concerned.
- 1559AJ § 6. The country on whose territory is established a land station Mar2 serving as intermediary for the exchange of radiotelegrams, radiotelephone calls and radiotelex calls between a mobile station and another country, is considered, as far as the application of land-line charges is concerned, as the country of origin or destination and not as a transit country.
- 1559AK § 7. (1) Where the enterprise operating the land station is not the Mar2 administration of the country, this enterprise may replace the administration of that country as far as accounts are concerned. In this event, all the provisions of Article 40A shall apply to such enterprise in the same manner as to an administration.
- 1559AL (2) When the provisions of No. 1082 are not followed, and the Mar2 operating enterprise controlling the mobile station is not known, accounts should be sent to the administration to which the mobile station is subject, for forwarding to the appropriate accounting authority for settlement.
- 1559AM (3) If an accounting authority does not meet its obligations, the Mar2 administration which has issued the licence for the ship station should assist, as far as possible, the creditor administration in its efforts to have the accounts settled.

¹⁵⁵⁹AH.1 'Canada and the United States of America request that this system be adopted to Mar2 the greatest possible extent in relations between themselves and other countries.

1559AN (4) In the general interest of administrations, the number of Mar2 accounting authorities shall be kept to the minimum required for the efficient settlement of accounts.

Section II. Establishment of Accounts for Radiotelegrams

- 1559AO § 8. (1) In the case of radiotelegrams originating in mobile stations, Mar2 the administration to which the land station is subject shall debit the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with:
 - the land station charges,
 - the land-line charges,
 - the total charges collected for prepaid replies,
 - any accessory charges for special telegram services.
- 1559AP (2) So far as transmission over the general network of telecom-Mar² munication channels is concerned, see Nos. 1559AF and 1559AG.
- 1559AQ § 9. (1) In the case of radiotelegrams destined for a country other Mar2 than that to which the land station belongs, the land-line charges to be settled in accordance with the above provisions shall be the charges shown in the table of rates relating to international telegraph correspondence, or those fixed by special arrangements between the administrations and/or recognized private operating agencies of adjacent countries and published by those administrations or recognized private operating agencies.
- 1559AR (2) The land-line charges applicable to radiotelegrams to a Mar2 country other than that to which the land station belongs may be the collection charges fixed or applied by the administration or recognized private operating agency to which the land station belongs.
- 1559AS (3) A seven-word minimum charge is levied for every Mar2 radiotelegram; for press radiotelegrams this minimum is fourteen words.

1559AT § 10. (1) In the case of radiotelegrams addressed to mobile stations, Mar2 the administration to which the office of origin is subject shall be debited direct by the administration to which the land station is subject with the land station and mobile station charges, but only where the radiotelegram has been transmitted to the mobile station. In the case provided for in No. 2132 of the Additional Radio Regulations, however, the administration to which the office of origin is subject shall be debited with the land station charge by the administration to which the land station is subject.

1559AU (2) When the radiotelegram has been transmitted, the ad-Mar2 ministration to which the land station is subject credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority):

1559AV Mar2 1559AW

Маг2

a) with the mobile station charge;

b) if occasion arises, with

- the total charge collected for prepaid replies,

- any accessory charges for special telegram services.

1559AX § 11. When the charge for a radiotelegram is paid for wholly or Mar2 partly by means of a reply voucher, the radiotelegram shall be treated for accounting purposes as if the charge had been paid in cash.

1559AY § 12. Radiotelegrams exchanged between mobile stations:

Mar2 1559AZ Mar2

a) without the intervention of land stations:

except when other arrangements have been made, the administration to which the station of destination is subject (or, if appropriate, the accounting authority) debits the administration to which the station of origin is subject (or, if appropriate, the accounting authority) with all charges collected, less the charges due to this latter station;

1559BA

Mar2

b) through the medium of a single land station:

the administration to which the land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with all the charges collected, less the charges due to that mobile station. Thereafter the provisions of Nos. 1559AU to 1559AW are applied;

1559BB

Mar2

c) through the medium of two land stations:

the administration to which the first land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with all the charges collected, less the charges due to that mobile station, taking into account the provisions of Nos. 1559AP and 1559AR. Thereafter the provisions of Nos. 1559AT to 1559AW are applied by the second land station, the first land station being regarded as the office of origin as far as the accounts are concerned.

Section III. Establishment of Accounts for Radiotelephone Calls

1559BC § 13. (1) In the case of radiotelephone calls originating in mobile Mar2 stations, the administration to which the land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with:

- the land station charges,
- the land-line charges,
- where appropriate, the supplementary charges for radiotelephone calls with special facilities.

1559BD (2) So far as transmission over the general network of telecom-Mar2 munication channels is concerned, see Nos. 1559AF and 1559AG.

- 1559BE § 14. The land-line charges applicable to radiotelephone calls to a Mar2 country other than that to which the land station belongs are the collection charges fixed or applied by the administration or recognized private operating agency to which the land station belongs.
- 1559BF § 15. In the case of radiotelephone calls destined for mobile Mar2 stations and originating in the country to which the land station belongs, the administration to which the land station is subject credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority) with the mobile station charges.
- 1559BG § 16. (1) In the case of radiotelephone calls destined for mobile Mar2 stations and originating in a country other than that to which the land station belongs, the administration to which the land station is subject:
 - debits the administration or recognized private operating agency of the country of origin with the land station and mobile station charges,
 - credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority) with the mobile station charges.
- 1559BH (2) So far as transmission over the general network of telecom-Mar² munication channels is concerned, see Nos. 1559AF and 1559AG.
- 1559BI § 17. The provisions of Nos. 1559AY to 1559BB relative to the Mar2 accounting for radiotelegrams exchanged between mobile stations shall be followed in the case of radiotelephone calls exchanged between mobile stations.
- 1559BJ § 18. For accounting purposes, collect radiotelephone calls shall Mar² be regarded as originating in the country or mobile station of destination.

Section IV. Establishment of Accounts for Radiotelex Calls

- 1559BK § 19. (1) In the case of radiotelex calls originating in mobile stations, Mar2 the administration to which the land station is subject debits the administration to which the mobile station of origin is subject (or, if appropriate, the accounting authority) with:
 - the land station charges,
 - the land-line charges.
- 1559BL (2) So far as transmission over the general network of telecom-Mar² munication channels is concerned, see Nos. 1559AF and 1559AG.
- 1559BM § 20. The land-line charges applicable to radiotelex calls to a Mar2 country other than that to which the land station belongs are the collection charges fixed or applied by the administration or recognized private operating agency to which the land station belongs.
- 1559BN § 21. In the case of radiotelex calls destined for mobile stations

 Mar2 and originating in the country to which the land station belongs, the administration to which the land station is subject credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority) with the mobile station charges.
- 1559BO § 22. (1) In the case of radiotelex calls destined for mobile stations Mar2 and originating in a country other than that to which the land station belongs, the administration to which the land station is subject:
 - debits the administration or recognized private operating agency of the country of origin with the land station and mobile station charges,
 - credits the administration to which the mobile station of destination is subject (or, if appropriate, the accounting authority) with the mobile station charges.
- 1559BP (2) So far as transmission over the general network of telecom-Mar2 munication channels is concerned, see Nos. 1559AF and 1559AG.

- 1559BQ § 23. The provisions of Nos. 1559AY to 1559BB relative to the Mar2 accounting for radiotelegrams exchanged between mobile stations shall be followed in the case of radiotelex calls exchanged between mobile stations.
- 1559BR § 24. For accounting purposes collect radiotelex calls (if collect Mar2 calls are admitted) shall be regarded as originating in the country or mobile station of destination.

Section V. Exchange and Verification of Accounts. Payment of Balances

- 1559BS § 25. Exchange and verification of accounts and payment of Mar2 balances will be carried out in accordance with the Telegraph Regulations and the Telephone Regulations taking into account C.C.I.T.T. Recommendations, subject to the special provisions in Nos. 1559BT to 1559BX.
- 1559BT § 26. (1) The accounts, in duplicate, are forwarded before the end of Mar2 the third month following that to which the accounts relate.
- 1559BU (2) Radiotelegrams, radiotelephone calls and radiotelex calls

 Mar2 shall be entered individually, with all necessary particulars, in the
 monthly accounts which serve as a basis for the accounting mentioned
 in this Article. The entries in accounts shall be spaced in such a way
 that the duplicate of the accounts can be divided and used for the accounting with the mobile station licensee by the administration to which
 the mobile stations are subject (or, if appropriate, the accounting
 authority). In addition, the entries shall be grouped under mobile station
 name and call sign, with a total charge shown for each mobile station.

 A specimen statement is given in Appendix 21A.
- 1559BV § 27. (1) In principle, an account shall be considered as accepted Mar2 without the need for specific notification of acceptance to the accounting authority which sent it.

- 1559BW (2) However, any accounting authority shall have the right to Mar2 question the contents of an account for a period of six months after receipt of the account.
- 1559BX § 28. The periods mentioned in Nos. 1559BT and 1559BW may Mar2 be exceeded when exceptional difficulties occur in the transmission of the documents by post between the land stations and the administrations to which they are subject. However, the debtor accounting authority may refuse the settlement and adjustment of accounts presented more than eighteen months after the date of handing-in of the radiotelegrams or the date of establishment of the radiotelephone calls or radiotelex calls to which the accounts relate.

Section VI. Period of Retention of Accounting Records

- 1559BY § 29. (1) The originals of radiotelegrams and documents relating to Mar2 radiotelegrams, radiotelephone calls and radiotelex calls retained by the administrations and/or recognized private operating agencies shall be held, with all necessary precautions from the point of view of secrecy, until the settlement of the relative accounts and, in any case, for at least six months counting from the month in which the accounts were sent.
- 1559BZ (2) However, should an administration or recognized private

 Mar2 operating agency deem it desirable to destroy such documents before
 the above-mentioned period, and hence not be in a position to carry out
 an inquiry in respect of the services for which it is responsible, such administration or recognized private operating agency shall bear all the
 consequences both as regards refund of charges and any difference in
 the accounts in question which might otherwise have been observed.

Revision of Article 43 of the Radio Regulations

Article 43 of the Radio Regulations shall be amended as follows:

Replace the title of the Article by the following:

MOD Mar2 Radiodetermination Service and Radiodetermination-Satellite Service

After Regulation No. 1584 add the following new Regulation:

ADD 1584A § 7A. The provisions of Nos. 1576 to 1584 also apply to the Mar2 maritime radiodetermination-satellite service, in so far as practicable.

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Addition of a new Appendix (Appendix 1C) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 1B:

ADD

APPENDIX 1C

Information to be supplied in Accordance with No. 639DY

(see Article 9B)

Initial Additional Replacement allotment allotment (No. 639EW)

1.	Cou	ntry or area of allotment				
2.	2.1	Proposed frequency	Carrier kHz Assigned kHz			
	2.2	Alternative proposed frequency	Carrier kHz Assigned kHz			
	2.3	Frequency to be replaced (No. 639EW)	Carrier kHz Assigned kHz			
3.	3.1	Main service area				
	3.2	Maximum length of circuit in kild	ometres			
4.		ure of service CP, CO, CV or OT)				

5.	Class of emission	
6.	Peak envelope power in kW	
7.	Transmitting antenna characteristics (for details see Appendix 1):	
	7.1 In the case of a non-directional antenna, insert the symbol "ND"	
	7.2 In the case of a directional antenna, indicate:	
	a) the azimuth of maximum radiationb) the angular width of main lobec) relative gain of the antenna in dB	
8.	Planned scheduled hours of operation of the proposed frequencyto	hrs (GMT)
9.	Indicate, if possible: a) the estimated peak hours of trafficto b) the estimated daily volume of traffic in minutes	hrs (GMT)
10.	Planned date of first use of channel (mont	h) (year)

Revision of Appendix 3 to the Radio Regulations

Appendix 3 to the Radio Regulations shall be amended as follows:

	Frequency bands (lower limit exclusive, upper limit inclusive) and categories of stations	Tolerances applicable until 1 January 1966* to transmitters in use and to those to be installed before 1 January 1964	Tolerances applicable to new transmitters installed after 1 January 1964 and to all transmitters after 1 January 1966*		
		* 1 January 1970 in the case of all tolerances marked with an asterisk.			
	Band: 10 to 535 kHz				
MOD	2. Land Stations:				
	a) Coast Stations:				
į	power 200 Wor less	500	500 1)		
	power above200 W	200	200 1)		
MOD	3. Mobile Stations:				
	a) Ship Stations	1 000	1 000 k)		
i			10 HU		

1		T	
	Band: 1605 to 4000 kHz		
MOD	2. Land Stations		
	power 200 Wor less	100	100 h) l)
	– power above 200 W	50	50 h) l)
MOD	3. Mobile Stations		
ł	a) Ship Stations	200	200 i) k)
	Band: 4 to 29.7 MHz		
MOD	3. Mobile Stations:		
	a) Ship Stations:		
	 Class A1 emissions Emissions other 	200	50 p)q)
	than Class A1	50	50 i)k)
	Band: 100 to 470 MHz		
MOD	3. Mobile Stations:		
	Ship Stations and Survival Craft Stations:		
Ì			
	 outside the band 156-174 MHz 	100 <i>d</i>)	50 d) o)
			,
L			

Notes referring to Table of Frequency Tolerances

Delete notes a) and c).

Replace note i) by the following new text:

- MOD i) For ship station single sideband radiotelephone transmitters the tolerance is:
 - 1) in the band 1 605 4 000 kHz:
 - 100 Hz for transmitters in use or to be installed before 1 January 1982;
 - 50 Hz for transmitters installed after 1 January 1982;
 - 2) in the band 4000 23000 kHz:
 - 100 Hz for transmitters in use or to be installed before 1 January 1978;
 - 50 Hz for transmitters installed after 1 January 1978.

(See also Appendix 17A).

Delete note j).

Replace notes k) and l) by the following new texts:

- MOD k) For ship station transmitters used for direct-printing telegraphy or for data transmissions, the tolerance is 40 Hz. This tolerance is applicable to equipment installed after 1 January 1976 and to all equipment after 1 January 1985. For equipment installed before 2 January 1976 the tolerance is 100 Hz (with a maximum deviation of 40 Hz for short periods of the order of 15 minutes).
- MOD 1) For coast station transmitters used for direct-printing telegraphy and for data transmission the tolerance is 15 Hz. This tolerance is applicable to equipment installed after 1 January 1976 and to all equipment after 1 January 1985. For equipment installed before 2 January 1976 the tolerance is 40 Hz.

Delete note m).

Replace note n) by the following new text:

MOD n) For coast and ship station transmitters in the band 156 - 174 MHz put into service after 1 January 1973 a tolerance of 10 parts in 10⁶ shall apply. This tolerance is applicable to all transmitters, including survival craft stations, after 1 January 1983.

After note n) add the following new notes:

- ADD o) For transmitters used by on-board communication stations a tolerance of 5 parts in 10⁶ shall apply.
- ADD p) Applicable from 1 June 1977. However, in the A1 Morse working frequency bands a frequency tolerance of 200 parts in 10° may be applicable to existing transmitters after 1 June 1977, provided that the emissions are contained within the band in question.
- ADD q) In the A1 Morse calling frequency bands frequency tolerances of 40 parts in 10⁶ in the bands between 4 and 23 MHz and of 30 parts in 10⁶ in the 25 MHz band are recommended as far as possible.

Revision of Appendix 9 to the Radio Regulations

Appendix 9 to the Radio Regulations shall be amended as follows:

List IV. List of Coast Stations

Add the following new sub-title:

ADD

Part I. Tables of general or specific interest

The title of Part A as well as the column headings are replaced by the following:

(MOD)

Part II. Alphabetical index of coast stations

Name of the station	See Part III page	Name of the station	See Part III page	Name of the station	See Part III page
------------------------	-------------------------	------------------------	-------------------------	------------------------	-------------------------

Replace Part B by the following:

(MOD)

Part III. Particulars of coast stations

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

MOD

		Emission			Service			nates of antenna tude in econds)		
Name of the station 1	Call sign 7	Frequencies	kHz or MHz	Class	Power kW 3	Nature 6A 6B	Hours of service (GMT)	Charges 4 5	Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks "
_ 	2	3a ²	3b ^{2 A}	4	5	6	7	8	9	10

NOC Indicate for each country the coast station or coast stations to which radiotelegrams intended for high-frequency transmission to ship stations should be sent.

MOD ² Transmitting frequencies. The normal working frequency is printed in heavy type.

ADD 2 A Watch and/or receiving frequencies or channels.

NOC
In the case of directive antennae, indicate under the power, the azimuth of the direction or directions of maximum gain, in degrees, beginning from True North clockwise.

MOD ⁴ The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given in Part IV of this List.

NOC 'If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should, if necessary, be stated.

NOC * Indicate if radar service is provided.

ADD 6 A Indicate if selective calling is provided and, if so, the system employed.

ADD 6 B Indicate if narrow-band direct-printing telegraphy is provided.

MOD ⁷ The call sign of the station shall be followed, where appropriate by the identification number or signal, in brackets, that the station uses when sending selective calling signals.

The list should contain information concerning the times of transmission of traffic lists, and the hours of watchkeeping of the coast station on the various frequencies, etc. Coast stations open to public correspondence and providing service for transmission and reception of radiotelegrams by radiotelephony shall be indicated in the List of Coast Stations.

SUP

The following new Part IV is added after Part III:

ADD Part IV. Inland telegraph rates, limitrophic rates, etc.

List V. List of Ship Stations

Particulars of ship stations

Replace the indications relative to Column 12 by the following:

MOD Column 12 Mar²

When two or more ship stations of the same nationality bear the same name, or if the accounts for charges should be sent direct to the owner of the ship, the name of the shipping line or the firm to which the ship belongs shall be given in this column.

In addition, if there is no room in the appropriate column, further information relating to columns 1 to 11 may be given in column 12 by means of a note reference. This column may comprise several lines.

Indicate if selective calling is provided and, if so, the system employed.

Indicate if narrow-band direct-printing telegraphy is provided.

List VI. List of Radiodetermination and Special Service Stations

The following new Sections 12 and 13 are added after Section 11:

ADD

12. Fixed earth stations in the maritime radiodetermination-satellite service

Names of the countries notifying the stations in alphabetical order of country symbols. Names of stations in alphabetical order.

		de	ransmissi of radio- eterminat oformatio	ion	rac determ	otion of dio- nination nation			Remarks
Name by which station is known	Geographical coordinates (in degrees and minutes) of the transmitter site	Frequency (MHz or GHz)	Class of emission, necessary bandwidth and description of transmission	Power (kW)	Frequency (MHz or GHz)	Class of emission, necessary bandwidth and description of transmission	Identity of associated space station(s)	Operating administration or company	Special methods of modulation, charges, etc.
l	2	3a	3b	3c	4a	4b	5	. 6	7

ADD

13. Space stations in the maritime radiodetermination-satellite service

Names of the countries notifying the stations in alphabetical order of country symbols. Names of stations by alphabetical and/or numerical order of designation of stations.

	radio	nsmission determin formatio to ships	ation	of ra determ inforr	eption adio- ination nation ships				Remarks
Identity of the station	Frequency (MHz or GHz)	Class of emission, necessary bandwidth and description of transmission	Power (W)	Frequency (MHz or GHz)	Class of emission, necessary bandwidth and description of transmission	Service area or areas on the Earth	Name of locality and country in which the associated fixed earth station(s) is (are) located	Operating administration or company	Orbital information, special channelling arrangements, special modulation methods, charges, etc.
l	2a	2b	2c	3a	3b	4	5	6	7

Revision of Appendix 10 to the Radio Regulations

Appendix 10 to the Radio Regulations shall be amended as follows:

Add, in alphabetical order, the following new symbols:

ADD	EG	Space station in the maritime mobile-satellite service
ADD	TG	Mobile earth station in the maritime mobile-satellite service
ADD	TI	Earth station in the maritime mobile-satellite service at a specified fixed point

Revision of Appendix 11 to the Radio Regulations

Appendix 11 to the Radio Regulations shall be amended as follows:

In item 3 of section I insert the following subparagraphs:

- ADD ba) observance of watch on the international distress frequency during silence periods,
- ADD f) the opening and closing of each period of service;

Revision of Appendix 12 to the Radio Regulations

Appendix 12 to the Radio Regulations shall be amended as follows:

Replace Sections I and II by the following:

MOD

Section I. Table

Hours of	Service
Ship's Time o (See Nos. 93 -	
16 hours (H16)	8 hours (H8)
from to 0000 - 0400 h 0800 - 1200 h 1600 - 1800 h 2000 - 2200 h plus 4 hours (see No. 934)	from to 0800 - 1200 h 1800 - 2200 h ^a plus 2 hours .(see No. 934A)

^a Two continuous hours of service between 1800 and 2200 hours, ship's time or zone time, at times decided by the administration, master or responsible person.

MOD

Section II. Diagram and Map

Note a: This diagram indicates the *fixed* and *elected* hours of service maintained by ships of the second and third categories in terms of zone time. (The hours of service shown exclude those which are determined by the administration, master, or responsible person.)

The fixed hours of watch are shown thus:

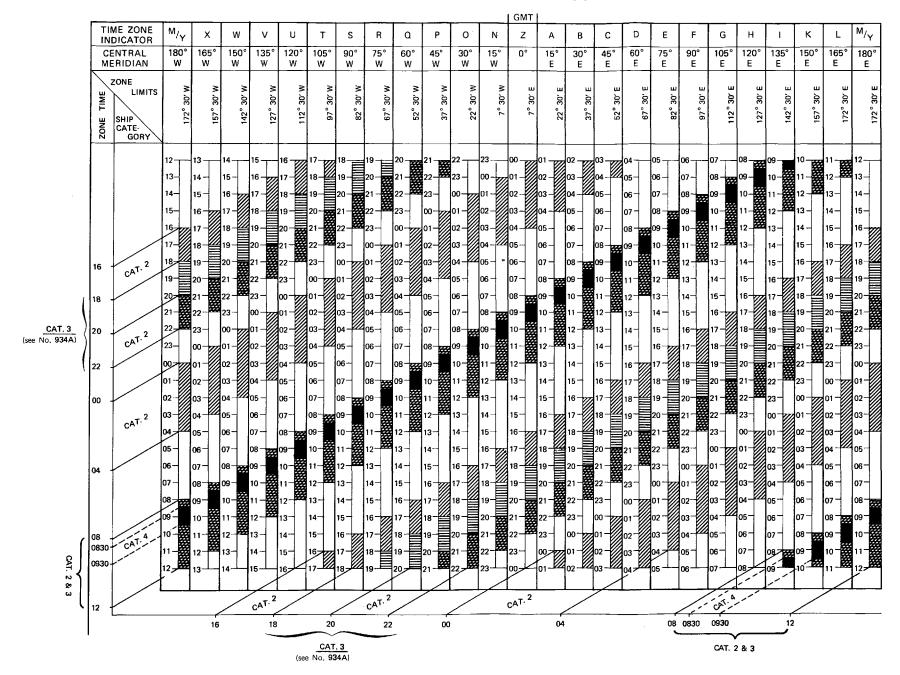
- I) for ships of the second category:
- II) for ships of the second and third categories:



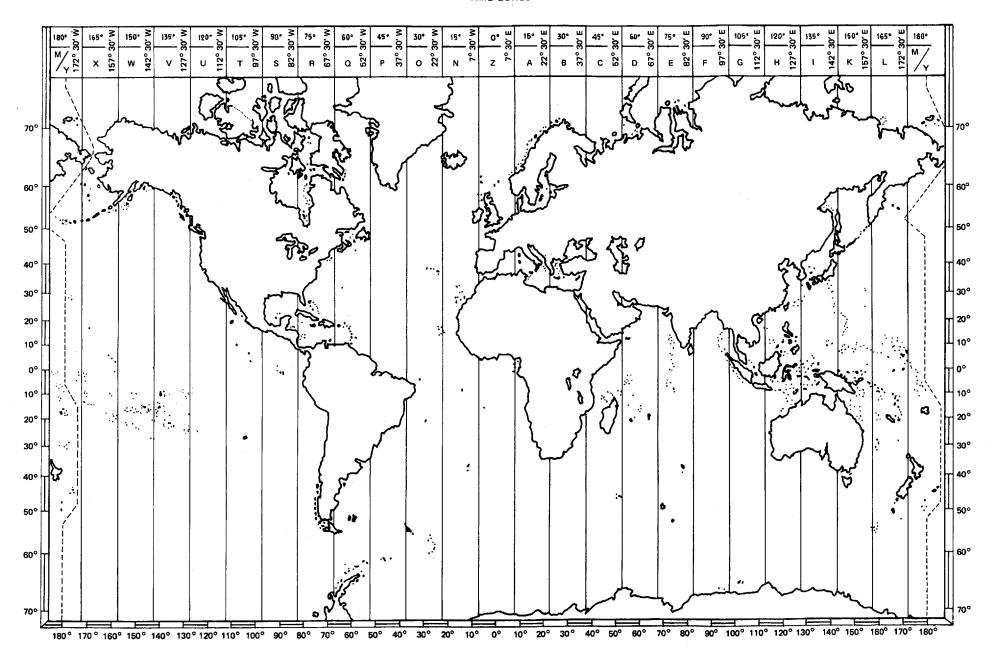
III) for ships of the third category, period over which two continuous hours of service may be elected:



Note b: Also shown (in black) is the specific service period 0830 - 0930 that ships of the fourth category are encouraged to provide (see No. 935A).



TIME ZONES



Revision of Appendix 13A to the Radio Regulations

Appendix 13A to the Radio Regulations shall be amended as follows:

Section I. Q Code

A. List of Abbreviations in Alphabetical Order

After QOK, add the following new abbreviations:

	Abbre- viation	Question	Answer or Advice
ADD	QOL	Is your vessel fitted for reception of selective calls? If so, what is your selective call number or signal?	My vessel is fitted for the reception of selective calls. My selective call number or signal is
ADD	QОМ	On what frequencies can your vessel be reached by a selective call?	My vessel can be reached by a selective call on the following frequency/ies (periods of time to be added if necessary).
ADD	QOT	Do you hear my call; what is the approximate delay in minutes before we may exchange traffic?	I hear your call; the approximate delay is minutes.

Replace QSX by the following:

	Abbre- viation	Question	Answer or Advice
MOD	QSX	Will you listen to (name and/or call sign(s)) on kHz (or MHz), or in the bands/channels?	I am listening to (name and/or call sign(s)) on kHz (or MHz), or in the bands/channels

After QUW, add the following new abbreviation:

	Abbre- viation	Question	Answer or Advice
ADD	QUX	Do you have any navigational warnings or gale warnings in force?	I have the following navigational warn- ing(s) or gale warning(s) in force:

After QUY, add the following new abbreviation:

	Abbre- viation	Question	Answer or Advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

B. List of Signals according to the Nature of Questions, Answer or Advice

In the sub-section "Choice of Frequency and/or Class of Emission" replace QSX by the following:

	Abbre- viation	Question	Answer or Advice
MOD	QSX	Will you listen to (name and/or call sign(s)) on kHz (or MHz), or in the bands/channels?	I am listening to (name and/or call sign(s)) on kHz (or MHz), or in the bands/channels

In the sub-section "Establishing Communication", after QOD, add the following:

	Abbre- viation	Question	Answer or Advice
ADD	QOT	Do you hear my call; what is the approximate delay in minutes before we may exchange traffic?	

Between sub-sections "Establishing Communication" and "Time", add the following sub-section "Selective Calls":

	Abbre- viation	Question	Answer or Advice
ADD		Selective Calls	
ADD	QOL	Is your vessel fitted for reception of selective calls? If so, what is your selective call number or signal?	My vessel is fitted for the reception of selective calls. My selective call number or signal is
ADD	QOM	On what frequencies can your vessel be reached by a selective call?	My vessel can be reached by a selective call on the following frequency/ies (periods of time to be added if necessary).

In the sub-section "Meteorology", after QUH, add the following:

	Abbre- viation	Question	Answer or Advice
ADD	QUX	Do you have any navigational warnings or gale warnings in force?	I have the following navigational warning(s) or gale warning(s) in force:

In the sub-section "Suspension of work", after QUM, add the following:

	Abbre- viation	Question	Answer or Advice
ADD	QUZ	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In the sub-section "Safety", after QOE, add the following:

	Abbre- viation	Question	Answer or Advice
ADD	QUX	Do you have any navigational warnings or gale warnings in force?	I have the following navigational warning(s) or gale warning(s) in force:

In the sub-section "Distress", after QUM, add the following:

	Abbre- viation	Question	Answer or Advice
ADD	Q∪Z	May I resume restricted working?	Distress phase still in force, restricted working may be resumed.

In the sub-section "Search and Rescue", after QUY, add the following:

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

Revision of Appendix 15 to the Radio Regulations

Appendix 15 to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 15

Mar2

Table of Frequencies to be used in the Bands between 4 and 27.5 MHz allocated exclusively to the Maritime Mobile Service

(see Articles 32 and 35)

In the table, where appropriate, the assignable frequencies in a given band for each usage are:

- indicated by the lowest and highest frequency, in heavy type, assigned in that band;
- regularly spaced, the number of assignable frequencies and the spacing in kHz being indicated in italics.

Table of Frequencies to be used in the Bands between 4 and 23 MHz allocated exclusively to the Maritime Mobile Service

(kHz)

Bands (MHz)	Limits	Frequencies assignable to ship stations for telephony, duplex operation	Limits	Frequencies assignable to ship and coast stations for telephony, simplex operation	Limits	Frequencies (non-paired) assignable to ship stations for narrow-band direct- printing telegraph and data transmission systems, at speeds not exceeding 100 bauds	Limits	Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems	Limits	Frequencies assignable to ship stations for oceanographic data transmission	Limits	Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems	Limits	Frequencies (paired) assignable to ship stations for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds	Limits	Frequencies (non-paired) assignable to ship stations for narrow-band direct- printing telegraph and data transmission systems, at speeds not exceeding 100 bauds	Limits
		a)*		a)		b)				c)				d)		b)	
4	4 063	4 064·4 4 141·9 26 frequencies spaced 3·1	4 143.6	4 145 I frequency	4 146-6		4 146-6	4 148.6 4 160.6 4 frequencies spaced 4	4 162.5	4 162.9 4 165.6 10 frequencies spaced 0.3	4 166	4 168	4 170	4 170·5 4 177 14 frequencies spaced 0·5	4 177-25	4 177.5 4 179.5 5 frequencies spaced 0.5	4 179.75
6	6 200	6 201·4 6 216·9 6 frequencies spaced 3·1	6 218-6	6 220 and 6 223 2 frequencies spaced 3	6 224-6		6 224-6	6 226.6 6 242.6 5 frequencies spaced 4	6 244-5	6 244.9 6 247.6 10 frequencies spaced 0.3	6 248	6 250 and 6 254 2 frequencies spaced 4	6 256	6 256·5 6 267·5 23 frequencies spaced 0·5	6 267 - 75	6 268 6 269·5 4 frequencies spaced 0·5	6 269 - 75
8	8 195	8 196·4 8 289·4 31 frequencies spaced 3·1	8 291-1	8 292.5 and 8 295.6 2 frequencies spaced 3.1	8 297.3	8 297.68 299.6 5 frequencies spaced 0.5	8 300	8 302 8 326 7 frequencies spaced 4	8 328	8 328·4· 8 331·1 10 frequencies spaced 0·3	8 331.5	8 333·5 8 341·5 3 frequencies spaced 4	8 343-5	8 344 8 357 27 frequencies spaced 0-5	8 357-25	8 357·5 1 frequency	8 357.75
12	12 330	12 331·412 427·5 32 frequencies spaced 3·1	12 429 2	12 430·612 436·8 3 frequencies spaced 3·1	12 439.5		12 439.5	12 441·512 477·5 10 frequencies spaced 4	12 479.5	12 479·9·12 482·6 10 frequencies spaced 0·3	12 483	12 485 and 12 489 2 frequencies spaced 4	12 491	12 491·512 519·5 57 frequencies spaced 0·5	12 519.75	12 52012 526·5 14 frequencies spaced 0·5	12 526.7
16		16 461·416 585·4 41 frequencies spaced 3·1	16 587-1	16 588·5 16 594·7 3 frequencies spaced 3·1	16 596 • 4		16 596.4	16 598·416 634·4 10 frequencies spaced 4	16 636.5	16 636.916 639.6 10 frequencies spaced 0.3	16 640	16 64216 658 5 frequencies spaced 4	16 660	16 660·516 694·5 69 frequencies spaced 0·5	16 694.75	16 69516 705.5 22 frequencies spaced 0.5	16 705 · 8
22	22 000	22 001·422 122·3 40 frequencies spaced 3·1	22 124	22 125·422 137·8 5 frequencies spaced 3·1	22 139-5		22 139.5	22 14222 158 5 frequencies spaced 4	22 160-5	22 160·9·22 163·6 10 frequencies spaced 0·3	22 164	22 16622 190 7 frequencies spaced 4	22 192	22 192-522 225-5 67 frequencies spaced 0-5	22 225 - 75	22 226 and 22 226.5 2 frequencies spaced 0.5	22 227

^{*}For notes a) to h), see page 231.

continued)

Table of Frequencies to be used in the Bands between 4 and 23 MHz allocated exclusively to the Maritime Mobile Service

(kHz) (concluded)

Bands (MHz)	Limits	Working frequencies assignable to ship stations for A1 Morse telegraphy	Limits	Calling frequencies assignable to ship stations for A1 Morse telegraphy	Limits	Frequencies assignable to ship stations for digital selective calling	Limits	Working frequencies assignable to ship stations for A1 Morse telegraphy	Limits	Frequencies assignable to coast stations for wide-band and A1 Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems	Limits	Frequencies (paired) assignable to coast stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds	Limits	Frequencies assignable to coast stations for digital selective calling	Limits	Frequencies assignable to coast stations for telephony, duplex operation	Limits
		e) *		g) h)				e) f)				d)				a)	
4	4 179.75		4 179 - 75		4 187-2	4 187·6	4 188	4 188 5 4 219 62 frequencies spaced 0 · 5	4 219.4		4 349 4	4 350 4 356·5 14 frequencies spaced 0·5	4 356.75	4 357 1 frequency	4 357-4	4 358·8 4 436·3 26 frequencies spaced 3·1	4 438
6	6 269.75		6 269-75		6 280.8	6 281·4 1 frequency	6 282	6 282.75 6 324.75 57 frequencies spaced 0.75	6 325-4		6 493.9	6 494·56 505·5 23 frequencies spaced 0·5	6 505 - 75	6 506 1 frequency	6 506 - 4	6 507·8 6 523·3 6 frequencies spaced 3·1	6 525
8	8 357-75	8 358·5 8 359·5 3 frequencies spaced 0·5	8 359 - 75		8 374-4	8 375·2	8 376	8 377 8 435 117 frequencies spaced 0.5	8 435 - 4		8 704-4	8 705 8 718 27 frequencies spaced 0.5	8 718 - 25	8 718·5 1 frequency	8 718.9	8 720·3 8 813·3 31 frequencies spaced 3·1	8 815
12	12 526.75	12 52812 538·5 22 frequencies spaced 0·5	12 539-6		12 561.6	12 562·3 and 12 562·8 2 frequencies spaced 0·5	12 564	12 565·512 651 172 frequencies spaced 0·5	12 652-3		13 070-8	13 071.513 099.5 57 frequencies spaced 0.5	13 099 - 75	13 100 and 13 100·5 2 frequencies spaced 0·5	13 100-8	13 102·2···13 198·3 32 frequencies spaced 3·1	13 200
16	16 705-8	16 70716 719 25 frequencies spaced 0.5	16 719.8		16 748 - 8	16 749.9 and 16 750.4 2 frequencies spaced 0.5	16 752	16 75416 858 209 frequencies spaced 0.5	16 859-4		17 196.9	17 197.517 231.5 69 frequencies spaced 0.5	17 231-75	17 232 and 17 232.5 2 frequencies spaced 0.5	17 232.9	17 234·317 358·3 41 frequencies spaced 3·1	17 360
22	22 227		22 227		22 247	22 248 and 22 248.5 2 frequencies spaced 0.5	22 250	22 250·522 309 118 frequencies spaced 0·5	22 310.5		22 561	22 561·522 594·5 67 frequencies spaced 0·5	22 594.75	22 595 and 22 595.5 2 frequencies spaced 0.5	22 596	22 597·422 718·3 40 frequencies spaced 3·1	22 720

^{*} Notes a) to h), see page 231.

Table of Frequencies assignable to Ship Stations in the 25 MHz Band

(kHz)

Limit	Calling frequencies assignable to ship stations for A1 Morse telegraphy	Limit	Frequencies (non-paired) assignable to ship stations for narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds	Limit	Working frequencies assignable to ship stations for A1 Morse telegraphy	Limit
	g)		b)		e)	
25 070	·	25 076	25 076·3 25 089·8 28 frequencies spaced 0·5	25 090 · 1	25 091·5 25 108·5 35 frequencies spaced 0·5	25 110

a) See Appendix 17 Rev.

b) See Appendix 15B.

c) The frequency bands may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys, in accordance with the conditions set forth in Resolution No. Mar 20.

d) See Appendix 15A.

e) In the frequency bands to be used by ship stations for A1 Morse telegraphy working, at speeds not exceeding 40 bands, administrations may assign additional frequencies interleaved between the extreme assignable frequencies. Any frequencies so assigned shall be multiples of 100 Hz. Administrations shall ensure a uniform distribution of such assignments within the bands and avoid, as far as possible, assigning the two frequencies at ±100 Hz from each of the harmonically related frequencies indicated in the first line of each series in Appendix 15D.

J) See Appendix 15D.

g) See Appendix 15C.

h) For the conditions of use of 8 364 kHz, see No. 1179.

Addition of a new Appendix (Appendix 15A) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 15:

ADD

APPENDIX 15A

Mar2

Channelling of the Maritime Mobile Bands between 4 000 and 23 000 kHz used for Narrow-Band Direct-Printing Telegraphy and Data Systems (Frequencies Paired)

(see Article 32 and Resolution No. Mar2 - 7)

Each coast station which uses paired frequencies is assigned one or more frequency pairs from the following series; each pair consists of a transmitting and a receiving frequency.

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

Series	4 MHz	z Band	6 MH	z Band	8 MH	z Band
No.	Transmit	Receive	Transmit	Receive	Transmit	Receive
ı	4 350	4 170-5	6 494.5	6 256-5	8 705	8 344
2	4 350-5	4 171	6 495	6 257	8 705-5	8 344-5
3	4 351	4 171.5	6 495.5	6 257.5	8 706	8 345
4	4 351-5	4 172	6 496	6 258	8 706-5	8 345.5
5	4 352	4 172-5	6 496∙5	6 258-5	8 707	8 346
6	4 352-5	4 173	6 497	6 259	8 707-5	8 346.5
7	4 353	4 173.5	6 497.5	6 259 5	8 708	8 347
8	4 353-5	4 174	6 498	6 260	8 708-5	8 347 5
9	4 354	4 174-5	6 498∙5	6.260-5	8 709	8 348
10	4 354-5	4 175	6 499	6 261	8 709-5	8 348-5
11	4 355	4 175-5	6 499-5	6 261-5	8 710	8 349
12	4 355-5	4 176	6 500	6 262	8 710.5	8 349.5
13	4 356	4 176∙5	6 500∙5	6 262-5	8 711	8 350
14	4 356.5	4 177	6 501	6 263	8 711-5	8 350-5
15			6 501-5	6 263-5	8 712	8 351
16			6 502	6 264	8 712-5	8 351-5
17			6 502 5	6 264-5	8 713	8 352
18			6 503	6 265	8 713.5	8 352-5
19			6 503.5	6 265-5	8 714	8 353
20			6 504	6 266	8 714-5	8 353.5
21			6 504.5	6 266-5	8 715	8 354
22			6 505	6 267	8 715.5	8 354-5
. 23			6 505-5	6 267.5	8 716	8 355
24					8 716.5	8 355-5
25					8 717	8 356
26					8 717-5	8 356-5
27					8 718	8 357
					<u> </u>	

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

Series	12 MH	z Band	16 MH	z Band	22 MHz Band		
No.	Transmit	Receive	Transmit	Receive	Transmit	Receive	
1	13 071-5	12 491.5	17 197-5	16 660∙5	22 561-5	22 192-5	
2	13 072	12 492	17 198	16 661	22 562	22 193	
3	13 072.5	12 492.5	17 198-5	16 661.5	22 562-5	22 193-5	
4	13 073	12 493	17 199	16 662	22 563	22 194	
5	13 073.5	12 493.5	17 199-5	16 662.5	22 563-5	22 194-5	
6	13 074	12 494	17 200	16 663	22 564	22 195	
7	13 0 74·5	12 494.5	17 200 - 5	16 663.5	22 564.5	22 195.5	
8	13 075	12 495	17 201	16 664	22 565	22 196	
9	13 075.5	12 495-5	17 201 5	16 664.5	22 565-5	22 196∙5	
10	13 076	12 496	17 202	16 665	22 566	22 197	
11	13 076-5	12 496-5	17 202 - 5	16 665.5	22 566-5	22 197-5	
12	13 077	12 497	17 203	16 666	22 567	22 198	
13	13 0 77·5	12 497.5	17 203-5	16 666.5	22 567-5	22 198.5	
14	13 078	12 498	17 204	16 667	22 568	22 199	
15	13 078-5	12 498-5	17 204 - 5	16 667-5	22 568-5	22 199.5	
16	13 079	12 499	17 205	16 668	22 569	22 200	
17	13 079.5	12 499-5	17 205 - 5	16 668-5	22 569.5	22 200.5	
18	13 080	12 500	17 206	16 669	22 570	22 201	
19	13 080-5	12 500 - 5	17 206-5	16 669-5	22 570.5	22 201.5	
20	13 081	12 501	17 207	16 670	22 571	22 202	
21	13 081-5	12 501 - 5	17 207-5	16 670-5	22 571.5	22 202.5	
22	13 082	12 502	17 208	16 671	22 572	22 203	
23	13 082.5	12 502-5	17 208-5	16 671-5	22 572.5	22 203 - 5	
24	13 083	12 503	17 209	16 672	22 573	22 204	
25	13 083-5	12 503.5	17 209-5	16 672-5	22 573.5	22 204-5	
26	13 084	12 504	17 210	16 673	22 574	22 205	
27	13 084-5	12 504-5	17 210-5	16 673-5	22 574.5	22 205.5	

(continued)

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

(continued)

Series	12 MH	z Band	16 MHz	z Band	22 MH	z Band
No.	Transmit	Receive	Transmit	Receive	Transmit	Receive
28	13 085	12 505	17 211	16 674	22 575	22 206
29	13 085-5	12 505-5	17 211-5	16 674-5	22 575.5	22 206.5
30	13 086	12 506	17 212	16 675	22 576	22 207
31	13 086-5	12 506-5	17 212-5	16 675.5	22 576-5	22 207-5
32	13 087	12 507	17 213	16 676	22 577	22 208
33	13 087-5	12 507-5	17 213 - 5	16 676.5	22 577-5	22 208-5
34	13 088	12 508	17 214	16 677	22 578	22 209
35	13 088-5	12 508 - 5	17 214-5	16 677-5	22 578-5	22 209-5
36	13 089	12 509	17 215	16 678	22 579	22 210
37	13 089-5	12 509-5	17 215-5	16 678-5	22 579-5	22 210.5
38	13 090	12 510	17 216	16 679	22 580	22 211
39	13 090-5	12 510-5	17 216-5	16 679-5	22 580-5	22 211.5
40	13 091	12 511	17 217	16 680	22 581	22 212
41	13 091-5	12 511-5	17 217-5	16 680-5	22 581-5	22 212-5
42	13 092	12 5 12	17 218	16 681	22 582	22.213
43	13 092-5	12 512.5	17 218-5	16 681-5	22 582.5	22 213.5
44	13 093	12 513	17 219	16 682	22 583	22 214
45	13 093-5	12 513.5	17 219-5	16 682-5	22 583.5	22 214.5
46	13 094	12 514	17 220	16 683	22 584	22 215
47	13 094-5	12 514-5	17 220-5	16 683-5	22 584.5	22 215.5
48	13 095	12 515	17 221	16 684	22 585	22 216
49	13 095-5	12 515-5	17 221.5	16 684-5	22 585.5	22 216.5
50	13 0 96	12 516	17 222	16 685	22 586	22 217
51	13 096-5	12 516 - 5	17 222-5	16 685.5	22 586.5	22 217.5
52	13 097	12 517	17 223	16 686	22 587	22 218
53	13 097.5	12 517-5	17 223.5	16 686-5	22 587-5	22 218.5
54	13 098	12 518	17 224	16 687	22 588	22 219
55	13 098-5	12 518-5	17 224 - 5	16 687-5	22 588-5	22 219.5
<u> </u>		l				<u> </u>

(continued)

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

(concluded)

Series	12 MF	Iz Band	16 M H	z Band	22 MH	Iz Band
No.	Transmit	R eceive	Transmit	Receive	Transmit	Receive
56	13 099	12 519	17 225	16 688	22 589	22 220
57	13 099 13 099·5	12 519-5	17 225 5	16 688.5	22 589 5	22 220.5
58	13 077.5	12 317 3	17 226	16 689	22 590	22 221
59			17 226.5	16 689.5	22 590.5	22 221.5
60			17 227	16 690	22 591	22 222
61			17 227.5	16 690-5	22 591.5	22 222.5
62			17 228	16 691	22 592	22 223
63			17 228 - 5	16 691-5	22 592.5	22 223.5
64			17 229	16 692	22 593	22 224
65			17 229-5	16 692-5	22 593-5	22 224.5
66			17 230	16 693	22 594	22 225
67			17 230-5	16 693.5	-22 594-5	22 225.5
68			17 231	16 694		
69		1	17 231.5	16 694.5		
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Addition of a new Appendix (Appendix 15B) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 15A:

ADD

APPENDIX 15B

Mar2

Channelling of the Maritime Mobile Bands between 4 000 and 27 500 kHz used for Narrow-Band Direct-Printing Telegraphy and Data Transmission (Non-Paired)

(see Article 32 and Resolution No. Mar2 - 8)

One or more frequencies are assigned to each ship station as transmitting frequencies.

Table of Ship Station Transmitting Frequencies

(kHz)

			Freque	ency Bands			
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25 MHz
1	4 177-5	6 268	8 297-6	12 520	16 695	22 226	25 076-3
2	4 178	6 268-5	8 298 1	12 520.5	16 695.5	22 226.5	25 076.8
3	< 4 178⋅5	6 269	8 298-6	12 521	16 696	i	25 077.3
4	4 179	6 269-5	8 299-1	12 521.5	16 696.5		25 077-8
5	4 179-5		8 299-6	12 522	16 697	;	25 078-3
6			8 357-5	12 522-5	16 697.5	,	25 078-8
7				12 523	16 698		25 079-3
8				12 523.5	16 698-5	ļ	25 079.8
9				12 524	16 699	'	25 080-3
10				12 524-5	16 699-5		25 080-8
11				12 525	16 700		25 081.3
12				12 525.5	16 700-5		25 081 8
13				12 526	16 701		25 082-3
14	[12 526.5	16 701-5		25 082 8
15				12 320-3	16 702		25 083.3
16					16 702-5		25 083.8
17					16 703		25 084.3
18			•		16 703-5	,	25 084-8
19			*		16 704		25 085.3
20				,	16 704-5	,	25 085.8
21					16 705		25 086-3
22					16 705.5		25 086.8
23							25 087-3
24							25 087-8
25							25 088-3
26							25 088-8
26	-						25 089.3
27						i	25 089.8
28						į	23 003.8
L			<u> </u>				<u> </u>

Addition of a new Appendix (Appendix 15C) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 15B:

ADD

APPENDIX 15C

Mar2

Table of Calling Frequencies assignable to Ship Stations for A1 Morse Telegraphy at Speeds not exceeding 40 Bauds

(see Article 32 and Resolution No. Mar2-5)

(kHz)

Group	Channel series	4 MHz Band (Ch. width 0·4) <i>a)</i>	6 MHz Band (Ch. width 0·6)	8 MHz Band (Ch. width 0-8) <i>a)</i>	12 MHz Band (Ch. width 1·2)	16 MHz Band (Ch. width 1·6) <i>a)</i>	Channel series (22 MHz)	22 MHz Band (Ch. width 2·0) b)	25 MHz Band (Ch. width 2·0)
1	1 2 3 4	4 180 - 4 180·4 4 180·4 - 4 180·8 4 180·8 - 4 181·2 4 181·2 - 4 181·6	6 270 - 6 270·6 6 270·6 - 6 271·2 6 271·2 - 6 271·8 6 271·8 - 6 272·4	8 361.6 - 8 362.4	12 541 - 2 - 12 542 - 4	16 720 - 16 721·6 16 721·6 - 16 723·2 16 723·2 - 16 724·8 16 724·8 - 16 726·4	1	22 227 - 22 229 22 229 - 22 231	Channel A 25 070 - 25 072 Groups I and II
Common Ch. Common Ch.	5 6	4 181-6 - 4 182 4 182 - 4 182-4	6 272·4 - 6 273 6 273 - 6 273·6	8 363·2 - 8 364 8 364 - 8 364·8		16 726·4 - 16 728 16 728 - 16 729·6	3 4	22 231 - 22 233 22 233 - 22 235	Common Channel C 25 072 - 25 074
11	7 8 9 10	4 182·4 - 4 182·8 4 182·8 - 4 183·2 4 183·2 - 4 183·6 4 183·6 - 4 184	6 273·6 - 6 274·2 6 274·2 - 6 274·8 6 274·8 - 6 275·4 6 275·4 - 6 276	8 364·8 - 8 365·6 8 365·6 - 8 366·4 8 366·4 - 8 367·2 8 367·2 - 8 368	12 548-4 - 12 549-6	16 729·6 - 16 731·2 16 731·2 - 16 732·8 16 732·8 - 16 734·4 16 734·4 - 16 736	5 6	22 235 - 22 237 22 237 - 22 239	Channel A 25 070 - 25 072 Groups I and II
III	11 12 13 14	4 184 - 4 184.4 4 184.4 - 4 184.8 4 184.8 - 4 185.2 4 185.2 - 4 185.6	6 276 - 6 276 · 6 6 276 · 6 - 6 277 · 2 6 277 · 2 - 6 277 · 8 6 277 · 8 - 6 278 · 4	8 368 - 8 368 8 8 368 8 - 8 369 6 8 369 6 - 8 370 4 8 370 4 - 8 371 2	12 553·2 - 12 554·4 12 554·4 - 12 555·6	16 736 - 16 737 · 6 16 737 · 6 - 16 739 · 2 16 739 · 2 - 16 740 · 8 16 740 · 8 - 16 742 · 4	7 8	22 239 - 22 241 22 241 - 22 243	Channel B
IV	15 16 17 18	4 185·6 - 4 186 4 186 - 4 186·4 4 186·4 - 4 186·8 4 186·8 - 4 187·2	6 278·4 - 6 279 6 279 - 6 279·6 6 279·6 - 6 280·2 6 280·2 - 6 280·8	8 371·2 - 8 372 8 372 - 8 372·8 8 372·8 - 8 373·6 8 373·6 - 8 374·4	12 558 - 12 559-2	16 742·4 - 16 744 16 744 - 16 745·6 16 745·6 - 16 747·2 16 747·2 - 16 748·8	9 10	22 243 - 22 245 22 245 - 22 247	25 074 - 25 076 Groups III and IV

a) Administrations should assign the centre frequency within each channel of the appropriate group and/or common channel to ship stations equipped only with crystal-controlled oscillators and using harmonic relationships for A1 Morse telegraphy calling. However, administrations may subdivide each appropriate group channel and common channels into specific calling frequencies commencing 100 Hz from the lower end of the channel and ending 100 Hz from the upper end (see examples below) and assign these discrete frequencies to ships with synthesized transmitters. Administrations shall avoid, as far as possible, assigning the two frequencies at ± 100 Hz from each of the harmonically related centre frequencies in this Appendix.

Examples of subdivision of channels (centre frequencies in italics)

4/1/a	4 180-1	6/1/a	6 270-1	8/1/a	8 360-1	12/1/a	12 540-1	16/1/a	16 720-1
4/1/b	4 180 - 2	6/1/b	6 270-2	8/1/b	8 360.2	12/1/b	12 540-2	16/1/b	16 720-2
4/1/c	4 180-3	6/1/c	6 270 - 3	8/1/c	8 360-3	12/1/c	12 540-3	16/1/c	16 720-3
		6/1/d	6 270-4	8/1/d	8 360 · 4	12/1/d	12 540-4	16/1/d	16 720-4
		6/1/e	6 270-5	8/1/e	8 360-5	12/1/e	12 540-5	16/1/e	16 720-5
				8/1/f	8 360-6	12/1/f	12 540.6	16/1/f	16 720-6
				8/1/g	8 360 7	12/1/g	12 540.7	16/1/g	16 720-7
				-		12/1/h	12 540-8	16/1/h	16 720.8
						12/1/i	12 540.9	16/1/i	16 720-9
						12/1/j	12 541.0	16/1/j	16 721.0
						12/1/k	12 541-1	16/1/k	16 721-1
								16/1/1	16 721-2
								16/1/m	16 721-3
								16/1/n	16 721-4
								16/1/o	16 721-5

b) In 22 MHz and 25 MHz bands the channels are not harmonically related to those in the 4 to 16 MHz bands. However, the principle of subdivision of channels into specific calling frequencies commencing 100 Hz from the lower end of the channel and ending 100 Hz from the upper end applies.

ANNEX 44

Addition of a new Appendix (Appendix 15D) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 15C:

ADD

APPENDIX 15D Mar2

Table of Working Frequencies, in kHz, assignable to Ship Stations for A1 Morse Telegraphy at Speeds not exceeding 40 Bauds

(see also Note e) to Appendix 15)

Note: The first line in each series up to and including series No. 53 indicates the harmonically related assignable frequencies in the 4, 6, 8, 12 and 16 MHz bands. The other frequencies are not necessarily harmonically related.

(kHz)

		(11)			
Series		Ba	nds		
No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
1.	4 188-5	6 282-75	8 377	12 565-5	16 754
a)	•			12 566	16 754-5
b)			8 377-5		16 755
c) .				12 566-5	16 755-5
2.	4 189	6 283-5	8 378	12 567	16 756
a)	ı		•	12 567-5	16 756∙5
b)			8 378-5		16 757
c)				12 568	16 757-5
3.	4 189-5	6 284-25	8 379	12 568-5	16 758
a)				12 569	16 758-5
b)			8 379 5		16 759
c)				12 569 5	16 759.5
4.	4 190	6 285	8 380	12 570	16 760
a)				12 570-5	16 760∙5
b)			8 380-5	1	16 761
c)				12 571	16 761.5
5.	4 190∙5	6 285 75	8 381	12 571-5	16 762
a)				-12 572	16 762-5
b)		[8 381-5		16 763
c)				12 572.5	16 763.5
6.	4 191	6 286.5	8 382	12 573	16 764
a)				12 573.5	16 764.5
b)			8 382-5		16 765
c)		L		12 574	16 765.5
7.	4 191.5	6 287-25	8 383	12 574-5	16 766
a)				12 575	16 766-5
b)			8 383.5		16 767
c)				12 575.5	16 767.5
8.	4 192	6 288	8 384	12 576	16 768
a)				12 576.5	16 768-5
b)]	8 384-5]	16 769
c)				12 577	16 769-5
9.	4 192.5	6 288 75	8 385	12 577-5	16 770
a)]		12 578	16 770-5
b)			8 385.5	•	16 771
c)				12 578-5	16 771-5
10.	4 193	6 289.5	8 386	12 579	16 772
a)] [12 579-5	16 772-5
b)			8 386.5		16 773
c)	•			12 580	16 773·Ś

(kHz)

		(com	inuea)		·
Series		Ва	nds		
No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
11.	4 193-5	6 290 · 25	8 387	12 580-5	16 774
a)				12 581	16 774-5
b)		ļ	8 387-5	1	16 775
c)	ĺ		Ì	12 581-5	16 775-5
12.	4 194	6 291	8 388	12 582	16 776
a)			l	12 582-5	16 776-5
b)		İ	8 388-5		16 777
c)				12 583	16 777-5
13.	4 194-5	6 291.75	8 389	12 583-5	16 778
a)	i	1		12 584	16 778-5
b)			8 389-5	ł	16 779
c)_				12 584-5	16 779-5
14.	4 195	6 292.5	8 390	12 585	16 780
a)	1			12 585-5	16 780-5
b)			8 390-5		16 781
c)				12 586	16 781.5
15.	4 195-5	6 293-25	8 391	12 586-5	16 782
a)				12 587	16 782.5
b)			8 391-5		16 783
c)				12 587-5	16 783.5
16.	4 196	6 294	8 392	12 588	16 784
a)				12 588-5	16 784.5
b)			8 392-5		16 785
c)				12 589	16 785.5
17.	4 196∙5	6 294-75	8 393	12 589-5	16 786
(a)				12 590	16 786-5
b)			8 393-5		16 787
c)				12 590-5	16 787-5
18.	4 197	6 295-5	8 394	12 591	16 788
a)	ļ			12 591.5	16 788-5
b)			8 394-5	1	16 789
c)				12 592	16 789-5
19.	4 197.5	6 296-25	8 395	12 592-5	16 790
a)		1		12 593	16 790 5
b)			8 395.5		16 791
c)				12 593.5	16 791-5
20.	4 198	6 297	8 396	12 594	16 792
a)				12 594-5	16 792-5
b)			8 396.5		16 793
c)		i		12 595	16 793.5
c)		<u> </u>		12 393	10 /93.3

(kHz)

4 MHz 4 198·5	6 MHz 6 297-75	8 MHz 8 397	12 MHz 12 595-5	16 MHz
4 198-5		8 397	12,595-5	<u> </u>
	6 297-75			16501
4 199		0 207 5		16 794
4 199		0 207 5	12 596	16 794.5
4 199		8 397-5		16 795
4 199			12 596-5	16 795-5
	6 298.5	8 398	12 597	16 796
			12 597-5	16 796.5
		8 398 5		16 79 7
			12 598	16 797-5
4 199.5	6 299-25	8 399	12 598-5	16 798
			12 599	16 798∙5
		8 399-5		16 799
			12 599 5	16 799-5
4 200	6 300	8 400	12 600	16 800
			12 600 - 5	16 800 - 5
		8 400.5		16 801
			12 601	16 801-5
4 200-5	6 300 - 75	8 401	12 601-5	16 802
		•	12 602	16 802-5
		8 401 - 5		16 803
	-		12 602-5	16 803 - 5
4 201	6 301 - 5	8 402	12 603	16 804
			12 603.5	16 804-5
		8 402.5		16 805
			12 604	16 805∙5
4 201-5	6 302 - 25	8 403	12 604-5	16 806
			12 605	16 806∙5
		8 403-5		16 807
			12 605-5	16 807-5
4 202	6 3 0 3	8 404	12 606	16 808
			12 606.5	16 808.5
		8 404.5		16 809
		-	12.607	16 8 0 9·5
4 202-5	6 303 - 75	8 405	12 607-5	16 810
			12 608	16 810-5
		8 405 5		16 811
			12 608-5	16 811.5
4 203	6 304 - 5	8 406	12 609	16 812
			12 609 - 5	16 812.5
		8 406 · 5		16 813
		j	12 610	16.813-5
	4 200·5 4 201·5 4 202 4 202·5	4 200 6 300 4 200·5 6 300·75 4 201 6 301·5 4 201·5 6 302·25 4 202 6 303 4 202·5 6 303·75	4 200 6 300 8 400 8 400.5 8 400.5 4 200.5 6 300.75 8 401 8 401.5 8 401.5 4 201 6 301.5 8 402 8 402.5 8 403.5 4 202 6 303 8 404 8 404.5 8 405.5 4 203 6 304.5 8 406	4 200 6 300 8 400 12 600 4 200 6 300 8 400 12 600 5 12 600 60 5 8 400 5 12 601 12 601 5 12 601 12 602 602 5 12 602 602 5 4 201 6 301 5 8 402 12 603 12 603 5 4 201 5 12 604 4 12 604 5 4 201 6 302 25 8 403 12 604 5 12 605 5 4 202 6 303 8 404 12 606 5 12 606 5 8 404 5 12 607 5 12 608 5 4 202 5 6 303 75 8 405 12 607 5 12 608 5 4 203 6 304 5 8 406 12 609 12 609 5

(kHz)
(continued)

	T	(001	inuea)		
Series		Ва	ınds		
No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
31.	4 203 - 5	6 305-25	8 407	12 610-5	16 814
a)				12 611	16 814-5
b)			8 407.5		16 815
c)				12 611.5	16 815.5
32.	4 204	6 306	8 408	12 612	16 816
a)	1			12 612-5	16 816.5
b)			8 408-5	Ì	16 817
c)				12 613	16 817.5
33.	4 204-5	6 306.75	8 409	12 613.5	16 818
a)	ĺ			12 614	16 818-5
b)			8 409-5	l	16 819
c)				12 614.5	16 819-5
34.	4 205	6 307⋅5	8 4 1 0	12 615	16 820
a)				12 615 - 5	16 820⋅5
b)			8 410-5		16 821
c)				12 616	16 821 5
35.	4 205-5	6 308-25	8 411	12 616-5	16 822
a)				12 617	16 822.5
b)	ļ ,		8 411 - 5		16 823
c)				12 617-5	16 823.5
36.	4 206	6 309	8 412	12 618	16 824
a)				12 618-5	16 824.5
p)			8 412.5		16 825
c)				12 619	16 825-5
37.	4 206∙5	6 309 - 75	8 413	12 619-5	16 826
a)			22	12 620	16 826⋅5
b)			8 413.5		16 827
c)				12 620 5	16 827-5
38.	4 207	6 310⋅5	8 414	12 621	16 828
a)			0414.6	12 621 5	16 828-5
b)			8 414-5	12.622	16 829
c)				12 622	16 829-5
39.	4 207-5	6 311-25	8 415	12 622 - 5	16 830
a) .				12 623	16 830.5
b)		,	8 415.5		16 831
c)				12 623.5	16 831-5
40.	4 208	6 3 1 2	8 416	12 624	16 832
a)				12 624.5	16 832-5
b)			8 416.5	12.53	16 833
c)				12 625	16 833.5

(kHz)

		(cont	inued)		
Series		Ba	nds		
No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
41.	4 208-5	6 312 - 75	8 417	12 625.5	16 834
a)				12 626	16 834.5
b)		i	8 417-5		16 835
c)				12 626-5	16 835.5
42.	4 209	6 313 - 5	8 418	12 627	16 836
a)				12 627-5	16 836-5
b)		}	8 418-5		16 837
c)				12 628	16 837-5
43.	4 209-5	6 314-25	8 419	12 628-5	16 838
a)				12 629	16 838-5
b)			8 419 5		16 839
c)				12 629.5	16 839-5
44.	4 210	6 3 1 5	8 420	12 630	16 840
a)				12 630-5	16 840-5
b)			8 420 - 5		16 841
c)				12 631	16 841.5
45.	4 210-5	6 315 - 75	8 421	12 631.5	16 842
a)				12 632	16 842-5
b)			8 421.5		16 843
c)				12 632.5	16 843-5
46.	4 211	6 316-5	8 422	12 633	16 844
a)				12 633-5	16 844.5
ь)			8 422-5		16 845
c)				12 634	16 845.5
47.	4 211.5	6 317-25	8 423	12 634-5	16 846
a)				12 635	16 846∙5
b)			8 423.5		16 847
c)				12 635.5	16 847-5
48.	4 2 1 2	6 3 1 8	8 424	12 636	16 848
a)				12 636-5	16 848-5
b)		1	8 424.5	}	16 849
c)	·			12 637	16 849.5
49.	4 212-5	6 318 - 75	8 425	12 637-5	16 850
a)				12 638	16 850-5
b)			8 425.5		16 851
c)				12 638-5	16 851-5
50.	4 213	6 3 19 - 5	8 426	12 639	16 852
a)				12 639-5	16 852-5
b)	i	ĺ	8 426.5		16 853
c)				12 640	16 853.5

(kHz)
(concluded)

· · · · · · · · · · · · · · · · · · ·		(conci	ииеи)		
Series		Ва	nds	· · · · · · · · · · · · · · · · · · ·	
No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz
51.	4 213.5	6 320-25	8 427	12 640-5	16 854
a)				12 641	16 854·5
b)]	8 427-5		16 855
c)				12 641.5	16 855-5
52.	4 214	6 321	8 428	12 642	16 856
a)				12 642.5	16 856.5
b)			8 428.5		16 857
c)				12 643	16 857.5
53.	4 214.5	6 321-75	8 429	12 643-5	16 858 *
a)		ļ ·		12 644	:
b)			8 429.5		
c)				12 644.5	
54.	4 215	6 322-5	8 430	12 645	
a)				12 645-5	
b)			8 430.5		
c)				12 646	
55.	4 215.5	6 323-25	8 431	12 646-5	
a)	. 0.20			12 647	
ь́)			8 431-5		
c)				12 647.5	
56.	4 216	6 324	8 432	12 648	
a)			0 ,02	12 648-5	
b)		1	8 432-5		
c)				12 649	
57.	4 216.5	6 324 - 75 *	8 433	12 649-5	· · · · · · · · ·
a)		0327.75	0 100	12 650	
b)]	8 433.5	12000	
c)		i (12 650-5	l
		 			
58.	4 217		8 434	12 651 *	
a)					
b)			8 434-5		
59.	4 217-5		8 435 *		
J9,	7 211'3	<u> </u>	U 7JJ		
60.	4 218				
61.	4 218-5		· ——	_	
62.	4 219 *				
		<u> </u>		L	

^{*} This is the highest assignable frequency within the band.

U.I.T. GENEVE

ANNEX 45

Revision of Appendix 17 to the Radio Regulations

Appendix 17 to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 17

Mar2

Channelling of the Maritime Mobile Radiotelephone Bands between 4 000 and 23 000 kHz

(see Article 35)

This Appendix will apply until 1 January 1978; however, as from 16 July 1977, the frequencies in Section B of Appendix 17 Rev. will be in use simultaneously with those in Section C of this Appendix. (See Resolutions Nos. Mar2 - 2 and Mar2 - 12.)

1. Radiotelephone channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile service are indicated in three sections as follows:

Section A — Table of double sideband transmitting frequencies for duplex (two-frequency) operation (in kHz).

(Double sideband emissions cease no later than 1 January 1978.)

- Section B Table of single sideband transmitting frequencies for duplex (two-frequency) operation (in kHz).
- Section C Table of single sideband transmitting frequencies for simplex (single-frequency) operation and for intership cross-band (two-frequency) operation (in kHz).
- 2. The technical characteristics for single sideband transmitters are specified in Appendix 17A.
- 3. One or more series of frequencies from Sections A or B (with the exception of those frequencies of Section B mentioned in paragraph 5 below) are assigned to each coast station, which uses these frequencies associated in pairs (see No. 1355); each pair consists of a transmitting and a receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, as far as possible, harmful interference between the services of different coast stations.
- 4. The frequencies in Section C are provided for world-wide common use by ships of all categories, according to traffic requirements, for ship transmissions to coast stations and for intership communication. They are also authorized for world-wide common use for transmissions by coast stations (simplex operation) provided the peak envelope power does not exceed $1~\rm kW$ (see Recommendation No. Mar2 6).
- 5. a) The following series of frequencies in Section B are allocated for calling purposes:
 - Series No. 24 in the 4 and 8 MHz bands;
 - Series No. 2 in the 6 MHz band;
 - Series No. 22 in the 12, 16 and 22 MHz bands.

The remaining frequencies in Sections A, B and C are working frequencies.

- b) Use of the double sideband calling frequencies 8 269, 12 403.5, 16 533.5 and 22 074 kHz should cease as soon as possible, in order to permit the use of the new single sideband channels. In any event, the use of these frequencies for double sideband calling shall cease not later than 1 January 1978.
- 6. Stations utilizing double sideband emissions shall operate only on the frequencies in Section A subject to No. 1351A and on the frequencies mentioned in paragraph 5 b) above.
- 7. a) Stations using single sideband emissions shall operate only on the carrier frequencies shown in Sections B and C in conformity with the technical characteristics specified in Appendix 17A. The upper sideband mode shall always be employed.
 - b) Stations employing the single sideband mode shall use only class A3A and A3J emissions. However, administrations should endeavour, as far as possible, to restrict to class A3J emissions, the use of the Series No. 1 frequencies from Section B. Until 1 January 1978 class A3H emissions (in accordance with No. 1351A) are permitted only on those carrier frequencies shown in Section B which are coincident with, or within 100 Hz of, the frequencies shown in Section A. However, on the calling frequencies for coast stations class A3H emissions may be used until 1 January 1978.
- 8. During the transition period (see Resolution No. Mar2 13) assignments to stations using independent sideband emissions shall be considered to be in accordance with the Table in Section A if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double sideband emissions.

9. If an administration authorizes the use of frequencies other than those indicated in Sections A, B and C, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies in accordance with the following Tables.

SECTION A

Table of Double Sideband Transmitting Frequencies for Duplex (Two-Frequency) Operation (in kHz)

	4 MHz	Band	8 MH	z Band	12 MH	z Band	16 MH	z Band	22 MHz Band			
Series No.	frequency frequency		Coast station frequency	Ship station frequency	Coast station frequency	Ship station frequency	Coast station frequency	Ship station frequency	Coast station frequency	Ship station frequency		
1	4 364.7	4 066-1	8 732-1	8 198-1	13 112-5	12 333-5	17 258-5	16 463 5	22 629	22 003-5		
2	4 371	4 072-4	8 738-4	8 204-4	13 119-5	12 340-5	17 265.5	16 470.5	22 636	22 010-5		
3	4 377-4	4 078-8	8 744.8	8 210-8	13 126.5	12 347-5	17 272-5	16 477.5	22 643	22 017-5		
4	4 383-8	4 085 2	8 751-2	8 217-2	13 133.5	12 354-5	17 279.5	16 484.5	22 650	22 024-5		
5	4 390-2	4 091.6	8 757-6	8 223.6	13 140-5	12 361-5	17 286-5	16 491-5	22 657	22 031-5		
6	4 396.6	4 098	8 764	8 230	13 147-5	12 368-5	17 293.5	16 498.5	22 664	22 038-5		
7	4 403	4 104.4	8 770-4	8 236-4	13 154-5	12 375.5	17 300 - 5	16 505.5	22 671	22 045-5		
8	4 409-4	4 110.8	8 776-8	8 242 - 8	13 161-5	12 382.5	17 307-5	16 512.5	22 678	22 052.5		
9	4 415.8	4 117-2	8 783.2	8 249-2	13 168-5	12 389-5	17 314.5	16 519-5	22 685	22 059-5		
10	4 422.2	4 123-6	8 789-6	8 255.6	13 175-5	12 396.5	17 321-5	16 526-5	22 692	22 066-5		
11	4 428-6	4 129.9	8 796	8 261-9								

SECTION B

Table of Single Sideband Transmitting Frequencies for Duplex (Two-Frequency) Operation (in kHz)

		4 MH	z Band			6 MH	z Band			8 MH:	z Band			12 MH	z Band			16 MH	z Band			22 MH	z Band		
Series No.	Coast	stations	Ship s	tations	Coast	stations	Ship s	tations	Coast	stations	Ship s	tations	Coast	stations	Ship s	tations	Coast s	stations	Ship s	ations	Coast	stations	Ship s	tations	Series No.
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	
1 2 3 4 5	4 361-6 4 364-7 4 367-8 4 371 4 374-2	4 363 4 366·1 4 369·2 4 372·4 4 375·6	4 063 4 066·1 4 069·2 4 072·4 4 075·6	4 064·4 4 067·5 4 070·6 4 073·8 4 077	6 515·4 6 518·6* 6 521·8	6 516·8 6 520 * 6 523·2	6 200-8 6 204 *1 6 207-2	6 202·2 6 205·4* 6 208·6	8 729 8 732·1 8 735·2 8 738·4 8 741·6	8 730·4 8 733·5 8 736·6 8 739·8 8 743	8 195 8 198·1 8 201·2 8 204·4 8 207·6	8 196·4 8 199·5 8 202·6 8 205·8 8 209	13 109 13 112-5 13 116 13 119-5 13 123	13 110·4 13 113·9 13 117·4 13 120·9 13 124·4	12 330 12 333·5 12 337 12 340·5 12 344	12 331·4 12 334·9 12 338·4 12 341·9 12 345·4	17 255 17 258·5 17 262 17 265·5 17 269	17 256·4 17 259·9 17 263·4 17 266·9 17 270·4	16 460 16 463·5 16 467 16 470·5 16 474	16 461-4 16 464-9 16 468-4 16 471-9 16 475-4	22 625·5 22 629 22 632·5 22 636 22 639·5	22 626-9 22 630-4 22 633-9 22 637-4 22 640-9	22 000 22 003·5 22 007 22 010·5 22 014	22 001·4 22 004·9 22 008·4 22 011·9 22 015·4	1 2 3 4 5
6 7 8 9 10	4 377.4 4 380.6 4 383.8 4 387 4 390.2	4 378·8 4 382 4 385·2 4 388·4 4 391·6	4 078-8 4 082 4 085-2 4 088-4 4 091-6	4 080·2 4 083·4 4 086·6 4 089·8 4 093					8 744·8 8 748 8 751·2 8 754·4 8 757·6	8 746·2 8 749·4 8 752·6 8 755·8 8 759	8 210-8 8 214 8 217-2 8 220-4 8 223-6	8 212·2 8 215·4 8 218·6 8 221·8 8 225	13 126-5 13 130 13 133-5 13 137 13 140-5	13 127·9 13 131·4 13 134·9 13 138·4 13 141·9	12 347·5 12 351 12 354·5 12 358 12 361·5	12 348·9 12 352·4 12 355·9 12 359·4 12 362·9	17 272.5 17 276 17 279.5 17 283 17 286.5	17 273-9 17 277-4 17 280-9 17 284-4 17 287-9	16 477.5 16 481 16 484.5 16 488 16 491.5	16 478.9 16 482.4 16 485.9 16 489.4 16 492.9	22 643 22 646·5 22 650 22 653·5 22 657	22 644·4 22 647·9 22 651·4 22 654·9 22 658·4	22 017·5 22 021 22 024·5 22 028 22 031·5	22 018-9 22 022-4 22 025-9 22 029-4 22 032-9	6 7 8 9 10
11 12 13 14 15	4 393.4 4 396.6 4 399.8 4 403 4 406.2	4 394·8 4 398 4 401·2 4 404·4 4 407·6	4 094.8 4 098 4 101.2 4 104.4 4 107.6	4 096·2 4 099·4 4 102·6 4 105·8 4 109					8 760·8 8 764 8 767·2 8 770·4 8 773·6	8 762·2 8 765·4 8 768·6 8 771·8 8 775	8 226·8 8 230 8 233·2 8 236·4 8 239·6	8 228·2 8 231·4 8 234·6 8 237·8 8 241	13 144 13 147-5 13 151 13 154-5 13 158	13 145·4 13 148·9 13 152·4 13 155·9 13 159·4	12 365 12 368·5 12 372 12 375·5 12 379	12 366·4 12 369·9 12 373·4 12 376·9 12 380·4	17 290 17 293.5 17 297 17 300.5 17 304	17 291·4 17 294·9 17 298·4 17 301·9 17 305·4	16 495 16 498-5 16 502 16 505-5 16 509	16 496·4 16 499·9 16 503·4 16 506·9 16 510·4	22 660·5 22 664 22 667·5 22 671 22 674·5	22 661.9 22 665.4 22 668.9 22 672.4 22 675.9	22 035 22 038·5 22 042 22 045·5 22 049	22 036·4 22 039·9 22 043·4 22 046·9 22 050·4	11 12 13 14 15
16 17 18 19 20	4 409·4 4 412·6 4 415·8 4 419 4 422·2	4 410-8 4 414 4 417-2 4 420-4 4 423-6	4 110·8 4 114 4 117·2 4 120·4 4 123·6	4 112·2 4 115·4 4 118·6 4 121·8 4 125					8 776-8 8 780 8 783-2 8 786-4 8 789-6	8 778·2 8 781·4 8 784·6 8 787·8 8 791	8 242.8 8 246 8 249.2 8 252.4 8 255.6	8 244·2 8 247·4 8 250·6 8 253·8 8 257	13 161-5 13 165 13 168-5 13 172 13 175-5	13 162-9 13 166-4 13 169-9 13 173-4 13 176-9	12 382·5 12 386 12 389·5 12 393 12 396·5	12 383·9 12 387·4 12 390·9 12 394·4 12 397·9	17 307.5 17 311 17 314.5 17 318 17 321.5	17 308·9 17 312·4 17 315·9 17 319·4 17 322·9	16 512.5 16 516 16 519.5 16 523 16 526.5	16 513·9 16 517·4 16 520·9 16 524·4 16 527·9	22 678 22 681·5 22 685 22 688·5 22 692	22 679·4 22 682·9 22 686·4 22 689·9 22 693·4	22 052·5 22 056 22 059·5 22 063 22 066·5	22 053-9 22 057-4 22 060-9 22 064-4 22 067-9	16 17 18 19 20
21 22 23 24 25	4 425·4 4 428·6 4 431·8 4 434·9*	4 426·8 4 430 4 433·2 4 436·3*	4 126·8 4 130 4 133·2 4 136·3*1	4 128-2 4 131-4 4 134-6 4 137-7*					8 792·8 8 796 8 799·2 8 802·4* 8 805·6	8 794·2 8 797·4 8 800·6 8 803·8* 8 807	8 258·8 8 262 8 265·2 8 268·4* 8 271·6	8 260·2 8 263·4 8 266·6 8 269·8* 8 273	13 179 13 182·5* 13 186 13 189·5 13 193	13 180·4 13 183·9* 13 187·4 13 190·9 13 194·4	12 400 12 403·5* 12 407 12 410·5 12 414	12 401·4 12 404·9* 12 408·4 12 411·9 12 415·4	17 325 17 328·5* 17 332 17 335·5 17 339	17 326·4 17 329·9* 17 333·4 17 336·9 17 340·4	16 530 16 533·5* 16 537 16 540·5 16 544	16 531·4 16 534·9* 16 538·4 16 541·9 16 545·4	22 695.5 22 699 * 22 702.5 22 706 22 709.5	22 696·9 22 700·4* 22 703·9 22 707·4 22 710·9	22 070 22 073·5* 22 077 22 080·5 22 084	22 071-4 22 074-9* 22 078-4 22 081-9 22 085-4	
26 27 28 29 30									8 808·8 8 812	8 810·2 8 813·4	8 274·8 8 278	8 276-2 8 279-4	13 196-5	13 197-9	12 417-5	12 418-9	17 342.5 17 346 17 349.5 17 353 17 356.5	17 343-9 17 347-4 17 350-9 17 354-4 17 357-9	16 547·5 16 551 16 554·5 16 558 16 561·5	16 548.9 16 552.4 16 555.9 16 559.4 16 562.9	22 713 22 716·5	22 714·4 22 717·9	22 087·5 22 091	22 088·9 22 092·4	26 27 28 29 30

^{*} The frequencies followed by an asterisk are calling frequencies (see Nos. 1352 and 1352A).

1 For the conditions of use of carrier frequencies 4 136.3 and 6 204 kHz, see Nos. 1351E to 1351I.

SECTION C

Table of Single Sideband Transmitting Frequencies for Simplex (Single-Frequency) Operation and for Intership Cross-Band (Two-Frequency) Operation (in kHz)

(see paragraph 4 of this Appendix)

4 MH	z Band	6 M H:	z Band	8 MH	z Band	12 MH	Iz Band	16 MI	Hz Band	22 MF	Iz Band
Carrier frequency	Assigned frequency	0		Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
4 139-5	4 140-9	6 210·4 6 213·5	6 211-8 6 214-9	8 281·2 8 284·4	8 282·6 8 285·8	12 421 12 424-5 12 428	12 422-4 12 425-9 12 429-4	16 565 16 568-5 16 572	16 566-4 16 569-9 16 573-4	22 094·5 22 098 22 101·5 22 105 22 108·5	22 095·9 22 099·4 22 102·9 22 106·4 22 109·9

ANNEX 46

Addition of a new Appendix (Appendix 17 Rev.) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 17:

ADD

APPENDIX 17 Rev.

Mar2

Channelling of the Maritime Mobile Radiotelephone Bands between 4 000 and 23 000 kHz

(see Article 35)

Section A of this Appendix applies as from 1 January 1978. Section B of this Appendix applies as from 16 July 1977; however until 1 January 1978, these frequencies will be in use simultaneously with those of Appendix 17, Section C. (See Resolutions Nos. Mar2 - 2 and Mar2 - 12.)

* *

1. Radiotelephone channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile service are indicated in two sections as follows:

Section A - Table of single sideband transmitting frequencies for duplex (two-frequency) operation (in kHz);

- Section B Table of single sideband transmitting frequencies for simplex (single-frequency) operation and for intership cross-band (two-frequency) operation (in kHz).
- 2. The technical characteristics for single sideband transmitters are specified in Appendix 17A.
- 3. One or more series of frequencies from Section A (with the exception of those frequencies mentioned in paragraph 5 below) may be assigned to each coast station, which uses these frequencies associated in pairs (see No. 1355); each pair consists of a transmitting and a receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, as far as possible, harmful interference between the services of different coast stations.
- 4. The frequencies in Section B are provided for world-wide common use by ships of all categories, according to traffic requirements, for ship transmissions to coast stations and for intership communication. They are also authorized for world-wide common use for transmissions by coast stations (simplex operation) provided the peak envelope power does not exceed 1 kW. (See Recommendation No. Mar2 6.)
- 5. The following frequencies in Section A are allocated for calling purposes:
 - Channel No. 421 in the 4 MHz band;
 - Channel No. 606 in the 6 MHz band;
 - Channel No. 821 in the 8 MHz band;
 - Channel No. 1221 in the 12 MHz band:
 - Channel No. 1621 in the 16 MHz band;
 - Channel No. 2221 in the 22 MHz band.

The remaining frequencies in Sections A and B are working frequencies.

- 6. a) Stations using single sideband emissions shall operate only on the carrier frequencies shown in Sections A and B in conformity with the technical characteristics specified in Appendix 17A. The upper sideband mode shall always be employed.
 - b) Stations employing the single sideband mode shall use only class A3A and A3J emissions. However, administrations should endeavour, as far as possible, to restrict to class A3J emissions the use of the Channels Nos. 401, 601, 801, 1201, 1601 and 2201.
- 7. If an administration authorizes the use of frequencies other than those indicated in Sections A and B, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies in accordance with the following Tables.

SECTION A Sideband Transmitting Frequ

Table of Single Sideband Transmitting Frequencies for Duplex (Two-Frequency) Operation (in kHz)

		4 MI	Iz Band				6 MH2	Band				8 MH:	z Band				12 MH	z Band				16 MH	z Band				22 MH	z Band	
, N O N	Co	ast stations	Ship sta	ations	No.	Coast s	stations	Ship s	tations	No.	Coasts	stations	Ship st	ations	No.	Coast	stations	Ship st	tations	el No.	Coast st	tations	Ship s	tations	el No.	Coast s	ations	Ship s	tations
Channe	Carrie	1	Carrier frequency	Assigned frequency	Channe	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Channe	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Chann	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Chann	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Chann	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 420 421 423 424 425 426	4 372- 4 376 4 379- 4 382- 4 385- 4 388- 4 391- 4 394- 4 397- 4 400-	5	4 063 4 066-1 4 069-2 4 072-3 4 075-4 4 081-6 4 084-7 4 087-8 4 090-9 4 094 4 097-1 4 100-2 4 103-3 4 106-4 4 115-7 4 118-8 4 121-9 4 128-1 4 131-2 4 134-3 4 140-5	4 064·4 4 067·5 4 070·6 4 073·7 4 076·8 4 079·9 4 083 4 086·1 4 089·2 4 092·3 4 098·5 4 101·6 4 104·7 4 110·9 4 114 4 117·1 4 120·2 4 123·3 4 126·4* 4 135·7 4 138·8 4 141·9	601 602 603 604 605 606	6 506-4 6 509-5 6 512-6 6 515-7 6 518-8 6 521-9*	6 507·8 6 510·9 6 514 6 517·1 6 520·2 6 523·3*	6 200 6 203·1 6 206·2 6 209·3 6 212·4 6 215·5*²	6 201.4 6 204.5 6 207.6 6 210.7 6 213.8 6 216.9*	801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 820 821 822 823 824 825 826 827 828 830 831	8 718.9 8 722 8 725.1 8 728.2 8 731.3 8 734.4 8 737.5 8 740.6 8 743.7 8 746.8 8 749.9 8 753 8 756.1 8 759.2 8 762.3 8 765.4 8 768.5 8 771.6 8 774.7 8 777.8 8 780.9 8 783.3 8 786.4 8 789.5 8 805.7 8 808.8 8 811.9	8 720·3 8 723·4 8 726·5 8 729·6 8 732·7 8 735·8 8 738·9 8 742 8 745·1 8 748·2 8 751·3 8 754·4 8 757·5 8 760·6 8 763·7 8 766·8 8 769·9 8 773 8 776·1 8 779·2 8 782·3* 8 785·4 8 789·9 8 773 8 776·1 8 789·9 8 773 8 780·9 8 773 8 780·9 8 781·3 8 781·6 8 781·6	8 195 8 198·1 8 201·2 8 204·3 8 207·4 8 210·5 8 213·6 8 219·8 8 222·9 8 226 8 229·1 8 232·2 8 235·3 8 238·4 8 241·5 4 244·6 8 247·7 8 250·8 8 257·8 8 266·3 8 266·3 8 269·4 8 272·5 8 278·7 8 281·8 8 288	8 196·4 8 199·5 8 202·6 8 205·7 8 208·8 8 211·9 8 215 8 218·1 8 221·2 8 224·3 8 227·4 8 230·5 8 233·6 8 236·7 8 239·8 8 242·9 8 246 8 249·1 8 255·3 8 256·5 8 261·5 8 261·5 8 277 8 280·1 8 283·2 8 286·3 8 289·4	1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1229 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1231 1231	13 103-9 13 107 13 110-1 13 113-2 13 116-3 13 119-4 13 122-5 13 125-6 13 128-7 13 131-8 13 134-9 13 138 13 141-1 13 144-2 13 147-3 13 150-4 13 159-7 12 162-8* 13 165-9 13 165-9 13 178-3 13 178-3 13 181-4 13 184-5 13 184-5 13 184-5 13 184-5 13 187-6	13 102-2 13 105-3 13 108-4 13 111-5 13 114-6 13 117-7 13 120-8 13 123-9 13 127 13 130-1 13 133-2 13 136-3 13 139-4 13 142-5 13 145-6 13 148-7 13 151-8 13 154-9 13 158 13 161-1 13 164-2* 13 173-5 13 170-4 13 173-5 13 170-6 13 179-7 13 182-8 13 185-9 13 185-9 13 185-9 13 195-2 13 195-2 13 198-3	12 330 12 333·1 12 336·2 12 339·3 12 342·4 12 345·5 12 348·6 12 351·7 12 354·8 12 357·9 12 361 12 364·1 12 367·2 12 370·3 12 373·4 12 376·5 12 379·6 12 382·7 12 388·9 12 392 ** 12 398·2 12 401·3 12 404·4 12 407·5 12 410·6 12 413·7 12 416·8 12 419·9 12 423 12 426·1	12 334-5 12 337-6 12 340-7 12 343-8 12 346-9 12 350 12 353-1 12 356-2 12 359-3 12 362-4 12 365-5 12 368-6 12 371-7	1601 1602 1603 1604 1605 1606 1607 1608 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641	17 294.9* 17 298 17 301.1 17 304.2 17 307.3 17 310.4 17 313.5 17 316.6 17 319.7 17 322.8 17 325.9 17 329 17 332.1 17 335.2	17 234-3 17 237-4 17 240-5 17 243-6 17 246-7 17 249-8 17 252-9 17 256 17 259-1 17 262-2 17 265-3 17 268-4 17 271-5 17 274-6 17 277-7 17 280-8 17 287 17 293-2 17 296-3* 17 293-2 17 296-3* 17 305-6 17 308-7 17 311-8 17 311-8 17 314-9 17 318 17 321-1 17 324-2 17 326-3 17 330-4 17 330-4 17 330-7 17 330-7 17 336-6 17 339-7 17 342-8 17 345-9 17 355-2 17 355-2 17 355-2 17 355-2 17 355-2	16 460 16 463-1 16 466-2 16 469-3 16 472-4 16 475-5 16 478-6 16 481-7 16 484-8 16 487-9 16 494-1 16 497-2 16 500-3 16 503-4 16 506-5 16 509-6 16 512-7 16 515-8 16 518-9 16 522 16 523-1 16 528-2 16 531-3 16 534-4 16 537-5 16 540-6 16 540-6 16 540-7 16 556-1 16 559-2 16 556-1 16 559-2 16 562-3 16 565-4 16 568-5 16 571-6 16 571-7 16 577-8 16 580-9 16 580-9 16 580-9	16 461-4 16 464-5 16 467-6 16 470-7 16 473-8 16 476-9 16 480 16 483-1 16 489-3 16 492-4 16 495-5 16 498-6 16 501-7 16 504-8 16 507-9 16 511 16 514-1 16 517-2 16 520-3 16 523-4* 16 526-5 16 529-6 16 532-7 16 538-9 16 548-2 16 548-2 16 557-5 16 560-6 16 557-5 16 560-6 16 569-9 16 573-1 16 579-2 16 579-2 16 579-2 16 579-2 16 579-2 16 579-2 16 579-2 16 579-2 16 579-2 16 578-1	2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2232 2233 2234 2235 2236 2237 2238 2239 2230 2231 2232 2233 2234 2235	22 602·2 22 605·3 22 608·4 22 611·5 22 614·6 22 617·7 22 620·8 22 623·9 22 627 22 630·1 22 633·2 22 636·3 22 642·5 22 645·6 22 648·7 22 651·8 22 661·1 22 664·2 22 667·3 22 670·4 22 673·5 22 670·6 22 689·2 22 689·2 22 699·1 22 695·2 22 698·3 22 704·5 22 704·5 22 710·7 22 710·7 22 710·7	22 597.4 22 600.5 22 603.6 22 606.7 22 609.8 22 612.9 22 612.9 22 615.3 22 622.2 22 625.3 22 628.4 22 631.5 22 634.6 22 637.7 22 640.8 22 643.9 22 650.1 22 650.1 22 650.2 22 665.6 22 668.7 22 671.8 22 671.8	22 000 22 003·1 22 006·2 22 009·3 22 012·4 22 015·5 22 018·6 22 021·7 22 024·8 22 027·9 22 031 22 034·1 22 037·2 22 040·3 22 046·5 22 049·6 22 052·7 22 055·8 22 056·1 22 068·2 22 071·3 22 074·4 22 077·5 22 080·6 22 083·7 22 086·8 22 089·9 22 093 22 099·2 22 102·3 22 105·4 22 108·5 22 111·6 22 111·7 22 117·8 22 120·9	22 001-4 22 004-5 22 007-6 22 010-7 22 013-8 22 016-9 22 020 22 023-1 22 026-2 22 029-3 22 032-4 22 035-5 22 038-6 22 041-7 22 044-8 22 047-9 22 051 22 054-1 22 057-2 22 060-3 22 066-5 22 069-6 22 072-7 22 075-8 22 078-9 22 088-2 22 088-1 22 088-2 22 097-5 22 100-6 22 103-7 22 106-8 22 109-9 22 113 22 116-1 22 119-2 22 122-3

^{*} The frequencies followed by an asterisk are calling frequencies (see Nos. 1352 and 1352A).

For the conditions of use of the carrier frequency 4 125 kHz, see Nos. 1351E, 1351G, 1351H and 1351L.

² For the conditions of use of the carrier frequency 6 215.5 kHz, see Nos. 1351F to 1351I.

SECTION B

Table of Single Sideband Transmitting Frequencies for Simplex (Single-Frequency) Operation and for Intership Cross-Band (Two-Frequency) Operation (in kHz)

(see paragraph 4 of this Appendix)

4 MH	z Band	6 MH	z Band	8 MH	z Band	12 MF	Iz Band	16 MH	Iz Band	22 MHz Band			
Carrier fre- quency	Assigned fre- quency	Carrier fre- quency	Assigned fre- quency	Carrier fre- quency	Assigned fre- quency	Carrier fre- quency	Assigned fre- quency	Carrier fre- quency	Assigned fre- quency	Carrier fre- quency	Assigned fre- quency		
4 143.6	4 145	6 218·6 6 221·6	6 220 6 223	8 291·1 8 294·2	8 292·5 8 295·6	12 432.3	l i	16 590-2	16 591-6	22 127·1 22 130·2 22 133·3	22 125·4 22 128·5 22 131·6 22 134·7 22 137·8		

ANNEX 47

Revision of Appendix 17A to the Radio Regulations

Appendix 17A to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 17A

Mar2

Technical Characteristics of Single Sideband Transmitters used in the Maritime Mobile Service for Radiotelephony in the Bands between 1 605 and 4 000 kHz and between 4 000 and 23 000 kHz

- 1. Power of the carrier:
 - a) for class A3A emissions the power of the carrier shall be:

Bands between 1605 and 4000 kHz

- for coast station transmitters until 1 January 1982 and for ship station transmitters in use or to be installed before 1 January 1982: 16 ± 2 dB below the peak envelope power;
- for coast station transmitters after 1 January 1982 and for ship station transmitters installed after 1 January 1982: 18 ± 2 dB below the peak envelope power;

Bands between 4 000 and 23 000 kHz

 for coast station transmitters until 1 January 1978 and for ship station transmitters in use or to be installed before 1 January 1978: 16 ± 2 dB below the peak envelope power;

- for coast station transmitters after 1 January 1978 and for ship station transmitters installed after 1 January 1978: 18 ± 2 dB below the peak envelope power;
- b) for class A3J emissions the power of the carrier shall be at least 40 dB below the peak envelope power.
- 2. Coast and ship stations shall use only the upper sideband.
- 3. The transmitter audio-frequency band shall be 350 to 2 700 Hz with a permitted amplitude variation of 6 dB.
- 4. The carrier frequencies shall be maintained within the following tolerances:
 - a) coast stations: ± 20 Hz;
 - b) ship stations:

Bands between 1605 and 4000 kHz

- tolerance applicable to transmitters in use or to be installed before I January 1982: \pm 100 Hz; the short-term limits (of the order of 15 minutes) shall be \pm 40 HZ;
- tolerance applicable to transmitters installed after 1 January 1982: ± 50 Hz;

Bands between 4 000 and 23 000 kHz

- tolerance applicable to transmitters in use or to be installed before 1 January 1978: ± 100 Hz; the short-term limits (of the order of 15 minutes) shall be ± 40 Hz;
- tolerance applicable to transmitters installed after 1 January 1978: \pm 50 Hz.
- 5. The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.

- 6. When class A3H, A3A or A3J emissions are used, the power of any unwanted emission supplied to the antenna transmission line on any discrete frequency shall, when the transmitter is driven to full peak envelope power, be in accordance with the following table:
 - a) Transmitters in use or installed before 1 January 1982:1

Separation Δ in kHz between the frequency of the unwanted emission 2 and the assigned frequency 3	Minimum attenuation below peak envelope power
1·6 < Δ ≤ 4·8	28 dB
4·8 < Δ ≤ 8	38 dB
8 < Δ	43 dB without exceeding the power of 50 mW

Transmitters using reduced carrier or suppressed carrier emission may, as far as out-of-band emissions ⁴ and those spurious emissions which are a result of the modulation process but do not fall in the out-of-band spectrum ⁵ are concerned, be tested for compliance with this regulation by means of a two-tone-audio input signal with a frequency separation between the tones such that all intermodulation products occur at frequencies at least 1.6 kHz removed from the assigned frequency.

b) Transmitters installed after 1 January 1982:1

Separation Δ in kHz between the frequency of the unwanted emission ² and the assigned frequency ³	Minimum attenuation below peak envelope power 31 dB				
$1.5 < \Delta \leqslant 4.5$	31 dB				
4·5 < Δ ≤ 7·5	38 dB				
7·5 < ∆	43 dB without exceeding the power of 50 mW				

Transmitters using reduced carrier or suppressed carrier emission may, as far as out-of-band emissions ⁴ and those spurious emissions which are a result of the modulation process but do not fall in the out-of-band spectrum ⁵ are concerned, be tested for compliance with this regulation by means of a two-tone-audio input signal with a frequency separation between the tones such that all intermodulation products occur at frequencies at least 1.5 kHz removed from the assigned frequency.

¹ All administrations recognize the need to reduce the level of unwanted emissions and will therefore endeavour to ensure that the new requirements will be met by all newly designed transmitters under their jurisdiction as soon as practicable before 1 January 1982.

² Unwanted emission*: Expression covering spurious radiations ⁶ and out-of-band emissions.

³ The assigned frequency is 1 400 Hz higher than the carrier frequency (see No. 445A).

⁴ Out-of-band emission *: Emission on a frequency or frequencies of the out-of-band spectrum. ⁵

⁵ Out-of-band spectrum (of an emission)*: The part of the power density spectrum (or the power spectrum when the spectrum consists of discrete components) of an emission which is outside the necessary bandwidth, with the exception of spurious radiations. ⁶

⁶ Spurious radiation (of a radio emission)*: Radiation at a frequency, or frequencies, outside the necessary band, the level of which may be reduced without affecting the corresponding transmission of information; spurious radiation includes harmonic radiation, parasitic radiation and unwanted intermodulation products which are remote from the necessary band.

^{*} These definitions have been adopted for the purpose of Appendix 17A only.

ANNEX 48

Revision of Appendix 18 to the Radio Regulations

Appendix 18 to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 18

Mar2

Table of Transmitting Frequencies in the Band 156 – 174 MHz for Stations in the Maritime Mobile Service

(see No. 287 and Articles 27 and 35)

- Note 1: For assistance in understanding the Table, see notes a) to q) below.
- Note 2: Channels 01 to 28, except 15 and 17, correspond to the channels of Appendix 18 to the Radio Regulations, Geneva, 1959, and channels 15, 17, and 60 to 88 correspond to those additional channels made available for assignment in accordance with the provisions of Appendix 18 Mar to the Radio Regulations, Geneva, 1967 (see Resolution No. Mar2 14).
- Note 3: Channel designators 60 to 88 were chosen for the additional channels in order to separate them clearly from the original channels.

		Г			1			_		
Channel desig-	Notes	frequ	smitting uencies MHz) Inter-		Port operations		Ship movement		Public	
nators		Ship stations	Coast stations	ship	Single fre- quency	Two fre- quency	Single fre- quency	Two fre- quency	corres- pon- dence	
	60	j)	156-025	160-625			17		9	25
01		i)	156-050	160-650	<u> </u>		10		15	8
	61		156-075	160-675			23	-	3	19
02			156-100	160-700			8		17	10
	62		156-125	160-725			20		6	22
03		i)	156-150	160-750			9		16	9
	63	i)	156-175	160-775			18		8	24
04			156-200	160-800			11		14	7
	64		156-225	160-825			22		4	20
05			156-250	160-850			6		19	12
	65		156-275	160-875			21		5	21
06		h)	156-300		ı					
	66		156-325	160-925			19		7	23
07			156-350	160-950			7		18	11
	67	n)	156-375	156-375	10	10		9		
08			156-400		2					
	68	p)	156-425	156-425		6		2		
09		0)	156-450	156-450	5	5		12		
	69	p)	156-475	156-475	9	11		4		
10		n)	156-500	156-500	3	9		10		
	70	0)	156-525		6					
11		p)	156-550	156-550		3		l		
	7 i	p)	156-575	156-575		7		6		
12		p)	156-600	156-600		1		3		
	72	0)	156-625		7.					
13		p)	156-650	156-650	4	4		5]
	73	n)	156-675	156-675	- 8	12		11		
14		p)	156-700	156 700		2		7		
	74	p)	156-725	156-725		8		8		
15		g) l)	156-750	156-750	12	14				
L	75	m)	Guard-band 156-7625 - 156-7875 MHz							

Channel desig- nators		Notes	Transm freque (MH	ncies	Inter-	Port operations		Ship movement		Public corres-
			Ship stations	Coast stations	ship	Single fre- quency	Two fre- quency	Single fre- quency	Two fre- quency	pon- dence
16			156.800	156-800	DISTRI					
	76	m)		Guard bar	nd 156-8					
17		g) l)	156-850	156-850	13	13				
	77		156-875		11					
18		Ŋ	156-900	161-500			3		22	
	78		156-925	161-525			12		13	27
19		Ŋ	156-950	161-550			4		21	
	79	ſ)p)	156-975	161-575			14		1	
20		D	157-000	161-600			1		23	
	80	f)p)	157-025	161-625			16		2	
21		ſ) i)	157-050	156.050						·
				or			5		20	
-				161-650	ļ		ļ			
	18	\sqcup	157-075	161-675			15		10	28
22		Ŋ	157-100	161.700			2		24	
	82		157-125	161.725			13		11	26
23		θ	157-150	156-150			ĺ			_
				or 161·750						5
 -	83	<i>i)</i>	157-175	156-175						
	03	"	157-175	or						16
L				161-775						
24			157-200	161-800						4
	84		157-225	161-825			24		12	13
25			157-250	161-850						3
	85		157-275	161-875						17
26			157-300	161-900				-		. 1
	86	<i>q</i>)	157-325	161-925						15
27			157-350	161-950						2
	87		157-375	161-975						14
28			157-400	162-000						6
	88	j)	157-425	162-025						18

NOTES REFERRING TO THE TABLE

- a) The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
- b) The figures in the columns headed "Port operations", "Ship movement" and "Public correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
- c) Administrations may designate frequencies in the intership, port operations and ship movement services for use by light aircraft and helicopters to communicate with ships or participating coast stations in predominantly maritime support operations under the conditions specified in Nos. 952, 952B, 952B, 952C, 952D and 952E. However, the use of the channels which are shared with public correspondence shall be subject to prior agreement between interested and affected administrations.
- d) The channels of the present Appendix, with the exception of 06, 15, 16, 17, 75 and 76, may also be used for high-speed data and facsimile transmissions, subject to special arrangement between interested and affected administrations.
- e) Except in the United States of America, the channels of Appendix 18, preferably two adjacent channels from the series 87, 28, 88, with the exception of 06, 15, 16, 17, 75 and 76, may be used for narrow-band direct-printing telegraphy and data transmission, subject to special arrangement between interested and affected administrations.
- f) The two-frequency channels for port operations (18, 19, 20, 21, 22, 79 and 80) may be used for public correspondence, subject to special arrangement between interested and affected administrations.
- g) Until 1 January 1983, the effective radiated power of ship stations on channels 15 and 17 shall not exceed 1 W.

- h) The frequency 156.300 MHz (channel 06) (see No. 953) may also be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. Ship stations shall avoid harmful interference to such communications on channel 06 as well as to communications between aircraft stations, ice-breakers and assisted ships during ice seasons.
- i) In France and in Belgium, the frequencies 156-050, 156-150 and 156-175 MHz are used as ship station frequencies in channels 01, 03 and 63 respectively and as coast station frequencies in channels 21, 23 and 83 respectively when the latter are used in the special semi-duplex public correspondence systems employed with 1 MHz separation between transmit and receive frequencies. These special provisions will cease to be used not later than 1 January 1983.
- j) Channels 60 and 88 can be used subject to special arrangements between interested and affected administrations.
- k) The frequencies in this Table may also be used for radiocommunications on inland waterways in accordance with the conditions specified in No. 287.
- Channels 15 and 17 may also be used for on-board communications provided the effective radiated power does not exceed 1 W, and subject to the national regulations of the administration concerned when these channels are used in its territorial waters. (However, see Recommendation No. Mar2 - 11).
- m) This guard-band will apply after 1 January 1983 (see Nos. 1363 and 1363.1).
- n) Within the European Maritime area and in Canada these frequencies (channels 10, 67, 73) may also be used, if so required, by the individual administrations concerned, for communication between ship stations, aircraft stations and participating land stations engaged in coordinated search and rescue and anti-pollution operations in local areas, under the conditions specified in Nos. 952, 952B, 952B, 952D, and 952E.
- o) The preferred first three frequencies for the purpose indicated in Note c) are 156.450 MHz (channel 09), 156.525 MHz (channel 70) and 156.625 MHz (channel 72).

- p) These channels (68, 69, 11, 71, 12, 13, 14, 74, 79, 80) are the preferred channels for the ship movement service. They may, however, be assigned to the port operations service until required for the ship movement service if this should prove to be necessary in any specific area.
- q) This channel (86) may be used as a calling channel if such a channel is required in an automatic radiotelephone system when such a system is recommended by the C.C.I.R.

Revision of Appendix 19 to the Radio Regulations

Appendix 19 to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 19

Маг2

Technical Characteristics for Transmitters and Receivers used in the Maritime Mobile Service in the Band 156 – 174 MHz

(see Articles 28 and 35, Appendix 18 and Resolution No. Mar2 – 14)

- 1. Only frequency modulation with a pre-emphasis of 6 dB/octave (phase modulation) shall be used.
- 2. The frequency deviation corresponding to 100% modulation shall approach ± 5 kHz as nearly as practicable. In no event shall the frequency deviation exceed ± 5 kHz.
- 3. The frequency tolerance for coast and ship stations shall be 10 parts in 10^6 (see note n) to Appendix 3).
- 4. When transmitting on any of the frequencies designated in the Table in Appendix 18, the emission of each station shall be vertically polarized at the source.
- 5. The audio-frequency band shall be limited to 3 000 Hz.
- 6. It shall be possible to reduce, readily, the mean power of a ship station transmitter to 1 watt or less.

Addition of a new Appendix (Appendix 19A) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 19:

ADD

APPENDIX 19A

Mar2

Characteristics of Equipment used for On-Board Communication in the 450 – 470 MHz Bands

(see Nos. 318B and 318C)

- 1. The equipment should be fitted with sufficient channels for satisfactory operation in the area of intended use.
- 2. The effective radiated power shall be limited to the minimum required for satisfactory operation, but shall in no case exceed 2 W. Wherever practicable the equipment should be fitted with a suitable device to reduce readily the output power by at least 10 dB.
- 3. In the case of equipment installed at a fixed point on the ship, the height of its antenna shall not be more than 3.5 metres above the level of the bridge.
- 4. Only frequency modulation with a pre-emphasis of 6 dB/octave (phase modulation) shall be used.

- 5. The frequency deviation shall not exceed ± 5 kHz.
- 6. The frequency tolerance shall be 5 parts in 10⁶.
- 7. The audio-frequency band shall be limited to 3 000 Hz.
- 8. Control, telemetry and other non-voice signals shall be coded in such a manner as to minimize the possibility of false response to interfering signals.
- 9. If the use of a repeater station is required on board a ship, the following frequency pairs shall be used (see also No. 318C):

457.525 MHz and 467.525 MHz 457.550 MHz and 467.550 MHz 457.575 MHz and 467.575 MHz

Revision of Appendix 20B to the Radio Regulations

Appendix 20B to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 20B

Mar2

Narrow-Band Direct-Printing Telegraph Equipment

(see Articles 28, 28B, 29, 29A and 32)

The equipment for narrow-band direct-printing telegraph systems in the maritime mobile service shall fulfil the following conditions:

- a) The equipment shall accept signals conforming to International Telegraph Alphabet Code No. 2 at a modulation rate of 50 bauds and shall provide similar signals at its output suitable for extension to the public telegraph network.
- b) The modulation rate over the radio path shall not exceed 100 bauds.
- c) Class F1 emissions shall be used, with a frequency shift of 170 Hz (Note 1).
- d) The frequency tolerance of the transmitted signal shall be ± 40 Hz for ship stations, and shall be ± 15 Hz for coast stations (Note 2) (Note 3) (Note 4).

- e) The higher of the emitted frequencies shall correspond to "space" (start), and the lower of the emitted frequencies shall correspond to "mark" (stop) in accordance with the relevant C.C.I.R. Recommendation.
- f) Where an error control system is employed the apparatus should be provided with a simple device to by-pass the error control system to permit transmission and reception over the radio path of uncorrected signals conforming with a) above.
- g) When an error-detecting and correcting system is used for direct-printing telegraphy in the maritime mobile service, a 7-unit ARQ system or a 7-unit forward acting error-correcting and indicating time diversity system, using the same code, shall be employed. Remaining technical characteristics of the error-detecting and correcting equipment should be in accordance with the relevant C.C.I.R. Recommendations.
- h) If a station is equipped with a selective calling system in accordance with the provisions of Appendix 20C and with a direct-printing system in accordance with the provisions of the present Appendix and uses a two block call signal, that station shall be assigned the same identification or selective call number in accordance with Nos. 749A and 783H for both systems.
- i) A station, equipped with a direct-printing system in accordance with the provisions of the present Appendix and using a two block call signal, which has not already been assigned a number in accordance with Nos. 749A and 783H, should be assigned such a number for the direct-printing system.

- j) Conversion from the numerical identification to the 28-bit (4-character) pattern shall be performed according to the relevant C.C.I.R. Recommendations.
- Note 1: When frequency-shift keying is effected by applying audio signals to the input of a single-sideband transmitter particular care should be taken to suppress adequately the residual carrier of the single-sideband modulation process. In addition a suitable choice of the centre audio frequency will minimize the possibility of the residual carrier causing interference to nearby channels. For this reason some administrations have chosen 1 700 Hz as the centre frequency.
- Note 2: For operational purposes the associated receiving equipment should conform to the frequency stability of the transmitters.
- Note 3: These tolerances shall apply to equipment installed after 1 January 1976 and to all equipment after 1 January 1985. For equipment installed before 2 January 1976 the tolerance is 100 Hz for ship station transmitters (with a maximum deviation of 40 Hz for short periods of the order of 15 minutes) and for coast station transmitters the tolerance is 40 Hz.
- Note 4: Stricter tolerances may be desirable, depending on the method of operation of the service and the equipment employed.

Revision of Appendix 20C to the Radio Regulations

Appendix 20C to the Radio Regulations shall be amended as follows:

Paragraph 3 is replaced by the following new text:

MOD 3. A special "all ships call" signal to actuate the receiving selectors on all ships, regardless of their individual code number, shall consist of a continuous sequential transmission of the eleven audio-frequencies given in paragraph 1.2.1. The parameters of the audio-frequency pulses shall be in accordance with paragraphs 1.2.3, 1.2.4, 1.2.5 and 1.2.9. The duration of each audio-frequency pulse, measured between the half-amplitude points, shall be 17 ms ±1 ms and the interval between consecutive pulses, measured between half-amplitude points, shall not exceed 1 ms. The total duration of this "all ships call" signal should be at least five seconds.

Addition of a new Appendix (Appendix 20D) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 20C:

ADD

APPENDIX 20D

Маг2

Linked Compressor and Expander Systems

(see Section I of Article 35 and Appendix 17A)

When linked compressor and expander systems are used in the international maritime mobile radiotelephone service:

- a) the characteristics of the linked compressor and expander equipment shall be in accordance with relevant C.C.I.R. Recommendations:
- b) for optimum performance the characteristics of SSB radio equipment used in conjunction with compressor and expander systems shall be in accordance with Appendix 17A and should, in addition, meet the following requirements:
 - The short-term frequency stability (of the order of 15 minutes) of coast station transmitters should be within ±2 Hz;
 - 2. The short-term frequency stability (of the order of 15 minutes) of ship station transmitters should be within ± 5 Hz;

- 3. To ensure sufficient overall gain stability of the system, for the duration of a call, facilities should be provided in coast station receivers to keep the end-to-end frequency error within ±2 Hz; similarly, facilities should be provided in ship station receivers to keep the end-to-end frequency error within ±5 Hz;
- 4. The maximum permissible amplitude variation in the transmitter over the $350-2\,700$ Hz audio frequency band should be 6 dB and the differential delay should not exceed 3 ms. The receiver should have at least the same standards of performance in these respects;
- 5. If the pilot carrier of a class A3A emission is not used to provide a continuous signal for controlling the frequency and gain of the receiver, for example where class A3J emission is used, the initial tuning procedure will require the provision, for a brief period, of a suitable reference tone (e.g. 1 000 Hz ±1 Hz) at a level of the order of -10 dBm0 ±0.5 dB;
- 6. Where it is desired to use speech inverters or other types of privacy equipment, it should be borne in mind that the upper audio frequency of the speech channel is 2 380 Hz.

Revision of Appendix 21 to the Radio Regulations

Appendix 21 to the Radio Regulations shall be amended as follows:

(see page 294)

MOD

APPENDIX 21 Mar2

Specimen Form of Statement of Account for Radiotelegrams and Radiotelephone Calls except in the Maritime Mobile Service

(see Article 40)

Account between country A and country B

in respect of $\begin{cases} \textit{radiotelegrams} \\ \textit{radiotelephone calls} \end{cases}$

exchanged between a country A and a country B by the intermediary of land stations of country A during the month of ...

Date	Origin	Land station	Desti- nation	Number of		Credit or debit of country A in gold francs		Remarks
				Words	Minutes	Credit	Debit	
		į						
					Totals			
Balance due to country * gold francs								

^{*} A or B as appropriate.

Addition of a new Appendix (Appendix 21A) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after Appendix 21:

(see page 296)

ADD

APPENDIX 21A Mar2

Specimen Form of Statement of Account for Radiotelegrams, Radiotelephone Calls and Radiotelex Calls in the Maritime Mobile Service

(see Article 40A)

Account between country A and country B

 $in \ respect \ of \\ \begin{cases} radiotele grams \\ radiotele phone \ calls \\ radiotelex \ calls \end{cases}$

sent through the coast stations of country A during the month of

Dute	Coast	Origin	Call sign	Desti- nation	Number of		Category	Credit or debit of country A in gold francs		Remarks
	station				Words	Minutes	Cate	Credit	Debit	
,								_		
			4							
				:						
							Totals			
Balance due to country * gold francs										

^{*} A or B as appropriate.

Revision of Appendix 25 MOD to the Radio Regulations

Appendix 25 MOD to the Radio Regulations shall be amended as follows:

MOD

APPENDIX 25 Mar2

Frequency Allotment Plan for Coast Radiotelephone Stations operating in the Exclusive Maritime Mobile Bands between 4 000 and 23 000 kHz

(see Nos. 448 and 457 of the Radio Regulations and Appendix 17 Rev.)

- Note a): The frequencies in column 1 are assigned frequencies (see No. 85) as listed in Appendix 17 Rev. to the Radio Regulations. Each frequency is followed, in parentheses, by the carrier frequency and the channel number (see Section A of Appendix 17 Rev. to the Radio Regulations).
- Note b): The coast radiotelephone stations operating in the exclusive maritime mobile bands between 4 000 and 23 000 kHz must use

the minimum power required to cover their service area. They may in no case use a peak envelope power above 10 kW per channel (see No. 1351C of the Radio Regulations).

Note c): The Plan contained in this Appendix is updated in accordance with the procedure defined in Article 9B of the Radio Regulations, which is reproduced in annex.

Column 1	Column 2	Column 3		
Assigned frequency (carrier frequency) (channel number)	Country or area	Observations		

Note by the General Secretariat:

Appendix 25 Mar2 is published as a separate booklet which also contains the text of Article 9B of the Radio Regulations to which reference is made in Note c) above.

PARTIAL REVISION OF THE ADDITIONAL RADIO REGULATIONS¹

In its Recommendation No. Mar 6, the World Administrative Radio Conference to deal with Matters Relating to the Maritime Mobile Service held in Geneva in 1967, recommended:

- 1. that a World Administrative Radio Conference be convened:
 - to establish on the basis of single sideband operation a new Frequency Allotment Plan for high-frequency radiotelephone coast stations, covering the channels in the present Appendix 25 as well as the new high-frequency channels made available for maritime radiotelephony;
- to amend the associated provisions of the Radio Regulations;
- 2. that such a conference be convened in 1973;
- 3. that the Administrative Council determine the exact date and place of such a conference, in accordance with No. 64 of the International Telecommunication Convention (Montreux, 1965);
- 4. that this Conference be preceded by a preparatory meeting, in accordance with No. 73 of that Convention.

At its 25th Session (1970), the Administrative Council, after consulting the Members of the Union, decided, in its Resolution No. 678, that the Conference should be held at the beginning of 1974 and that the work of the preparatory meeting referred to in Recommendation No. Mar 6 should be replaced by studies carried out by the I.F.R.B. and the competent C.C.I.R. Study Groups.

¹ Namely the Additional Radio Regulations, Geneva, 1959, as partially revised by the World Administrative Radio Conference to deal with Matters Relating to the Maritime Mobile Service (Geneva, 1967).

At its 26th Session (1971), the Administrative Council instructed the Secretary-General to request administrations to send him their views on the contents of the agenda of this Conference and any other suggestions for the inclusion of particular items in that agenda.

At its 27th Session (1972), the Administrative Council, after examining the replies of administrations to the Secretary-General's enquiry, adopted Resolution No. 704 containing the agenda of the Conference and stipulating that it should meet on 22 April 1974 for a period not in excess of seven weeks.

* *

The World Maritime Administrative Radio Conference accordingly convened on the appointed date, considered and revised, in conformity with its agenda, the relevant parts of the Radio Regulations and of the Additional Radio Regulations. Particulars of the revision of the Additional Radio Regulations are given in Annexes AR 1 to 15 hereto.

The revised provisions of the Additional Radio Regulations shall form an integral part of the Additional Radio Regulations which are annexed to the International Telecommunication Convention. They shall come into force on 1 January 1976, upon which date the provisions of the Additional Radio Regulations which are cancelled or modified by this revision shall be abrogated.

* *

The delegates signing this revision of the Additional Radio Regulations hereby declare that, should an administration make reservations concerning the application of one or more of the revised provisions of the Additional Radio Regulations, no other administration shall be obliged to observe that provision or those provisions in its relations with that particular administration.

* *

Members of the Union shall inform the Secretary-General of their approval of the revision of the Additional Radio Regulations by the World Maritime Administrative Radio Conference, Geneva, 1974. The Secretary-General will inform Members of the Union regarding receipt of such notifications of approval as they are received.

In witness whereof the delegates of the Members of the Union represented at the World Maritime Administrative Radio Conference, Geneva, 1974, have signed in the names of their respective countries this revision of the Additional Radio Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to each Member of the Union.

Done at Geneva, 8 June 1974

(The signatures follow)

(The signatures following the revision of the Additional Radio Regulations are the same as those which follow the revision of the Radio Regulations (see pages 5 to 38) with the exception of that of the United States of America and the Territories of the United States of America which did not sign it.)

ANNEX AR 1

Revision of Article 1 of the Additional Radio Regulations

The title of Article 1 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Application of the Telegraph Regulations and the Telephone Regulations to Radiocommunications except in the Maritime Mobile Service

ANNEX AR 2

Addition of a new Article (Article 1A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 1:

ADD Mar2

ARTICLE 1A

Application of the Telegraph Regulations and the Telephone Regulations to Radiocommunications in the Maritime Mobile Service

- 2004A § 1. The provisions of the Telegraph Regulations and the Mar2 Telephone Regulations and the Protocols annexed thereto, taking into account C.C.I.T.T. Recommendations, shall apply to radiocommunications in so far as the provisions of the Radio Regulations do not provide otherwise.
- 2004B § 2. (1) With the exceptions mentioned in the following Articles, Mar2 radiotelegrams are drawn up and treated in accordance with the provisions of the Telegraph Regulations for telegrams, taking into account C.C.I.T.T. Recommendations.
- **2004C** (2) The use of groups of letters from the International Code of Mar2 Signals is permitted in radiotelegrams in the maritime mobile service.
- 2004D § 3. Since the word RADIO or AERADIO, as the case may be, Mar2 is always included in the list of stations and in the address of a radiotelegram, as part of the name of the land station, this word must not be given as a service indication at the beginning of the preamble in the transmission of a radiotelegram.

ANNEX AR 3

Revision of Article 4 of the Additional Radio Regulations

The title of Article 4 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Charges for Radiotelegrams except in the Maritime Mobile Service

ANNEX AR 4

Addition of a new Article (Article 4A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 4:

ADD Mar2

ARTICLE 4A

Charges for Radiotelegrams in the Maritime Mobile Service

Section I. General. Full-rate Radiotelegrams

2062AA § 1. The charge for a radiotelegram originating in and/or in-Mar2 tended for a mobile station comprises, according to circumstances:

2062AB Mar2	a)	the mobile station charge or charges accruing to the mobile station of origin or destination, or to both of these stations;
2062AC Mar2	b)	the land station charge or charges accruing to the land station or stations (see No. 2062AJ) which participate in the transmission;
2062AD Mar ²	c)	the land-line charge;
2062AE Mar2	d)	the accessory charges for special telegram services requested by the sender.
005017 0 0 (1)	75.1	

2062AF § 2.(1) The land station charge and the mobile station charge, as Mar2 well as the land-line charge, are fixed on the basis of a word rate; for each full-rate radiotelegram, however, a minimum charge for seven words shall be made.

- 2062AG (2) In conformity with Article 43 ¹ of the Convention the rate Mar2 shall be expressed in gold francs. The rate shall be the same in the two directions for radiotelegrams transmitted over the same route.
- 2062AH (3) Administrations shall notify to the Secretary-General the Mar2 rates fixed by them.
- 2062AI § 3. (1) When a single land station is used as an intermediary Mar2 between mobile stations, only one land station charge is collected. If the land station charge applicable to traffic with the mobile station of origin is different from that applicable to traffic with the mobile station of destination, the higher of these two charges is collected.
- 2062AJ (2) When, at the request of the sender, two land stations are ware used as intermediaries between two mobile stations, the land station charge of each station is collected and also the land-line charge for the section between the two stations.
- 2062AK § 4. The retransmission service by mobile stations is governed Mar2 by Article 10A of these Regulations.
- 2062AL § 5. In the case of radiotelegrams orginating in or destined for a Mar2 country, which pass through land stations of that country, the land-line charge per word applicable to the transmission over the internal telecommunication system of that country is notified in gold francs to the Secretary-General by the administration to which the land stations are subject.
- 2062AM § 6.(1) For the purpose both of transmission and of international accounting, the word count of the office of origin is decisive in the case of radiotelegrams destined for mobile stations, and that of the mobile station of origin is decisive in the case of radiotelegrams originating in mobile stations.

¹ Article 30 of the Malaga-Torremolinos Convention (1973).

2062AN (2) Nevertheless, when a radiotelegram is expressed wholly or Mar2 partly either:

- in one of the languages of the country of destination (in the case of radiotelegrams originating in mobile stations), or
- in one of the languages of the country to which the mobile station is subject (in the case of radiotelegrams destined for mobile stations),

and when the radiotelegram contains combinations or alterations of words contrary to the usage of that language, the office or the mobile station of destination, as the case may be, has the right to recover from the addressee the amount of the charge not collected. Where payment is refused, the radiotelegram may be withheld.

2062AO § 7. The total charge for radiotelegrams is collected from the Mar2 sender, with the exception of:

2062AP Mar2 a) express charges to be collected on delivery (see C.C.I.T.T. Recommendations):

2062AQ Mar2 b) charges applicable to radiotelegrams to be redirected at the request of the addressee as provided under C.C.I.T.T. Recommendations:

2062AR Mar2

c) the charges applicable to inadmissible combinations or alterations of words, observed by the office or mobile station of destination (see No. 2062AN) which are collected from the addressee.

2062AS § 8. Mobile stations must be acquainted with the tariffs Mar2 necessary for charging for radiotelegrams. However, they are authorized, where necessary, to obtain such information from land stations; rates furnished by land stations are expressed in gold francs.

2062AT § 9. The land station or mobile station charges for Mar2 radiotelegrams concerning stations not yet included in the appropriate list of stations are fixed, as part of its duties, by the office which collects the charge. The mobile station charges pertaining to radiotelegrams in-

tended for mobile stations, the names or call signs of which are replaced by the indication of the route followed or by any other equivalent indication (see No. 2011), are also fixed, as part of its duties, by the office which collects the charge. They are the normal rates notified by the administration(s) concerned.

- 2062AU § 10. (1) No new rate and no modification, either general or of detail, Mar2 relative to the tariff shall be effective for countries other than those which establish the new rate or rate modification until 15 days after its notification by the Secretary-General, excluding the day of despatch, and it shall not be applied until the first of the month following the expiration of this period.
- 2062AV (2) If there are several notifications, the date of the first only is Mar2 to be considered in reckoning the interval.
- 2062AW (3) The interval of 15 days shall be reduced to 10 days for Mar2 modifications intended to equalize rates with those already notified for competing routes.
- 2062AX (4) Nevertheless, for radiotelegrams originating in mobile Mar2 stations, modifications of tariffs are not applicable until a month after the periods laid down in No. 2062AU.
- 2062AY (5) No exceptions shall be made to the provisions of Nos. Mar2 2062AU to 2062AX.

Section II. Reduced-rate Radiotelegrams

- A. Radiotelegrams of Immediate General Interest
- 2062AZ § 11. The provisions of Nos. 2046 to 2051 are applicable to the Mar2 maritime mobile service.
 - B. Radiotelegrams relating to Medical Advice
- 2062BA § 12. The provisions of No. 2052 are applicable to the maritime Mar2 mobile service.

C. Meteorological Radiotelegrams

2062BB § 13. The provisions of Nos. 2053 to 2057 are applicable to the Mar2 maritime mobile service.

D. Press Radiotelegrams

- 2062BC § 14. Press telegrams from a mobile station to a land station shall Mar2 be admitted as press radiotelegrams.
- 2062BD § 15. The minimum number of chargeable words for press Mar2 radiotelegrams shall be fixed at 14.
- 2062BE § 16. (1) The land station and mobile station charges are reduced by Mar2 50 per cent. The conditions of acceptance specified in C.C.I.T.T. Recommendations should be taken into account for these radiotelegrams. For those radiotelegrams which are addressed to a destination in the country of the land station, the land-line charge to be collected is one-half of the land-line charge applicable to an ordinary radiotelegram.
- 2062BF (2) Press radiotelegrams destined for a country other than that Mar2 of the land station are subject to the press rate in force between the country of the land station and the country of destination.

E. Radiotelegrams concerning Persons Protected in Time of War by the Geneva Conventions of 12 August 1949

2062BG § 17. (1) Radiotelegrams concerning persons protected in time of Mar2 war by the Geneva Conventions of 12 August 1949, are accepted under the conditions specified in number 4 of the Annex to the Telegraph Regulations (Geneva, 1973), taking into account C.C.I.T.T. Recommendations, and shall bear the service indication RCT placed before the address.

2062BH (2) The land station charge and the mobile station charge for radiotelegrams bearing the service indication RCT shall be decreased in the same proportion as the charge for transmission on the general network of telecommunication channels (see C.C.I.T.T. Recommendations).

Revision of Article 5 of the Additional Radio Regulations

The title of Article 5 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Charges for Radiotelephone Calls in the Aeronautical Mobile Service

Addition of a new Article (Article 5A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 5:

ADD Mar2

ARTICLE 5A

Charges for Radiotelephone Calls in the Maritime Mobile Service

Section I. Mobile Station Charge, Land Station Charge, Land-Line Charge

2087AA § 1. Unless special arrangements between the administrations

Mar2 and/or the recognized private operating agencies concerned are in

effect, the following rules shall be applied as regards charging for
radiotelephone calls in the maritime mobile service.

2087AB § 2. The charge for a radiotelephone call originating in and/or Mar2 intended for a mobile station comprises, according to circumstances:

2087AC

a) the mobile station charge or charges accruing to the mobile station of origin or destination, or to both of these stations;

2087AD b) the land station charge or charges accruing to the land station or land stations (see No. 2087AL) which participate in the transmission;

2087AE c) the land-line charge or charges;

2087AF d) the supplementary charges for special facilities requested by the person who booked the call (see Nos. 2087AV to 2087AZ).

- 2087AG § 3. (1) If no uniform charges apply in respect of the land stations Mar2 of a country, different land station charges for radiotelephone calls shall be fixed for the medium frequency, high frequency and very high frequency bands. Calls of a duration of three minutes or less are charged as for three minutes. In the case of calls whose duration exceeds three minutes, a charge per minute is made for the period in excess of three minutes, any fraction of a minute being charged as for one minute. The charge per minute is one-third of the charge for three minutes.
- 2087AH (2) In the case of radiotelephone calls originating in or destined Mar2 for a country which pass through land stations of that country, the charges applicable to the transmission over the internal telecommunication system of that country are notified in gold francs to the Secretary-General.
- 2087AI (3) The mobile station charge will in principle be the same for mobile stations of the same nationality. If no uniform charges apply in respect of mobile stations of the same nationality, different mobile station charges for radiotelephone calls may be fixed for the MF, HF and VHF bands.
- 2087AJ (4) The land and mobile station charges for radiotelephone Mar2 calls shall be expressed in gold francs; administrations shall notify to the Secretary-General the rates fixed by them.
- 2087AK § 4. (1) When a single land station is used as an intermediary for a Mar2 radiotelephone call between two mobile stations, only one land station charge is collected. If the land station charge applicable to traffic with the mobile station booking the radiotelephone call is different from that applicable to traffic with the mobile station called, the higher of these two charges is collected.
- 2087AL (2) When, at the request of the person booking the Mar2 radiotelephone call, two land stations are used as intermediaries for a radiotelephone call between two mobile stations, the appropriate land station charge of each station is collected and also the land-line charge between the two land stations.

- 2087AM § 5. (1) When handled through a land station the chargeable dura-Mar2 tion of a radiotelephone call will be fixed at the end of the call by the land station; if two land stations are participating in the handling of the radiotelephone call, the opinion of that land station will prevail which has accepted the call from the originating mobile station. The decision of this land station will also be valid for international accounting.
- 2087AN (2) The chargeable duration of a radiotelephone call between Mar2 two mobile stations in direct communication with each other will be fixed by the mobile station in which the call originates.
- 2087AO § 6. (1) When, through any fault of the service, the booking of a Mar2 radiotelephone call is not followed by the calling and called stations being placed in communication, no charge shall be payable. If the amount of the charge has been paid, it shall be refunded.
- 2087AP (2) In order to simplify operating and accounting procedures, Mar2 administrations may decide that no charge shall be payable when a requested connection has not been set up, whatever the reason.
- 2087AQ (3) However, administrations may decide to collect charges in Mar2 cases where there is no fault of service. In that case the basis of charging shall be notified to the Secretary-General for inclusion in the List of Coast Stations.
- 2087AR (4) When, through any fault of the service, the correspondents
 Mar2 experience difficulty in the course of a radiotelephone conversation, the chargeable duration of the call shall be reduced to the total time during which speech conditions have been satisfactory.
- 2087AS § 7. The total charge for a radiotelephone call is normally Mar2 collected from the calling station with the exception of collect calls (if collect calls are admitted). For collect calls, the charge shall be payable by the called subscriber.

- 2087AT § 8. Mobile stations must be acquainted with the tariffs Mar2 applicable to radiotelephone calls. However, they are authorized, where necessary, to obtain such information from land stations; rates furnished by land stations are expressed in gold francs.
- 2087AU § 9. The rules prescribed in Nos. 2062AU to 2062AY shall be Mar2 applied as regards the interval before the application of new rates.

Section II. Supplementary Charge

- 2087AV § 10. Unless special arrangements between the administrations Mar2 and/or the recognized private operating agencies concerned are in effect, supplementary charges for personal calls (from mobile station to land) and collect calls, if admitted, shall be applied.
- 2087AW §11.(1) The charge for these special call facilities may be based on Mar2 the land-line charge only.
- 2087AX (2) However, administrations may decide to calculate the Mar2 charge for these special facilities on the total call charge for a threeminute call.
- 2087AY (3) In either case the amount shall be calculated on the basis Mar2 applied in the normal international relation concerned.
- 2087AZ (4) When the booking of a radiotelephone call which is liable to Mar2 the payment of a supplementary charge (for example, a collect call) is accompanied by a booking of a personal call, only one supplementary charge shall be collected.

Addition of a new Article (Article 5B) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 5A:

ADD Mar2

ARTICLE 5B

Charges for Radiotelex Calls in the Maritime Mobile Service

Section I. Mobile Station Charge, Land Station Charge, Land-Line Charge

2087BA § 1. Unless special arrangements between the administrations Mar2 and/or the recognized private operating agencies concerned are in effect, the following rules shall be applied as regards charging for radiotelex calls in the maritime mobile service.

2087BB § 2. The charge for a radiotelex call originating in and/or in-Mar2 tended for a mobile station comprises, according to circumstances:

2087BC Mar2 a) the mobile station charge or charges accruing to the mobile station of origin or destination, or to both of these stations:

2087BD Mar² b) the land station charge or charges accruing to the land station or land stations which participate in the transmission:

2087BE

c) the land-line charge or charges;

Mar2 2087BF Mar2

d) the charges for accessory services requested by the person who booked the call (see Nos. 2087BW to 2087BZ).

- 2087BG § 3. (1) If no uniform charges apply in respect of the land stations of Mar2 a country, different land station charges for radiotelex calls shall be fixed for the MF, HF and VHF bands. The charge for a manually operated or semi-automatic radiotelex call is fixed on a time basis. Calls of a duration of three minutes or less are charged as for three minutes. In the case of calls whose duration exceeds three minutes, a charge per minute is made for the period in excess of three minutes, any fraction of a minute being charged as for one minute. The charge per minute is one-third of the charge for three minutes.
- 2087BH (2) Fully automatic radiotelex calls should be charged by one Mar2 of the following two methods, taking into account C.C.I.T.T. Recommendations:
 - a) charging minute by minute;
 - b) charging by periodic pulses of the type used in the national automatic service.
- 2087BI (3) In the case of radiotelex calls originating in or destined for a Mar2 country which pass through land stations of that country, the charges applicable to the transmission over the internal telecommunication system of that country are notified in gold francs to the Secretary-General.
- 2087BJ (4) The mobile station charge will in principle be the same for Mar2 mobile stations of the same nationality. If no uniform charges apply in respect of mobile stations of the same nationality, different mobile station charges for radiotelex calls may be fixed for the MF, HF and VHF bands.
- 2087BK (5) The land and mobile station charges for radiotelex calls Mar2 shall be expressed in gold francs; administrations shall notify to the Secretary-General the rates fixed by them.

- 2087BL § 4. (1) When a single land station is used as an intermediary for a Mar² radiotelex call between two mobile stations, only one land station charge is collected. If the land station charge applicable to traffic with the mobile station booking the radiotelex call is different from that applicable to traffic with the mobile station called, the higher of these two charges is collected.
- 2087BM (2) When, at the request of the person booking the radiotelex Mar2 call, two land stations are used as intermediaries for a radiotelex call between two mobile stations, the appropriate land station charge of each station is collected and also the land-line charge between the two land stations.
- 2087BN § 5. (1) When handled through a land station, the chargeable Mar2 duration of a radiotelex call will be fixed at the end of the call by the land station; if two land stations are participating in the handling of the radiotelex call, the opinion of that land station will prevail which has accepted the call from the originating mobile station. The decision of this land station will also be valid for international accounting.
- 2087BO (2) The chargeable duration of a radiotelex call between two Mar2 mobile stations in direct communication with each other will be fixed by the mobile station in which the call originates.
- 2087BP § 6. (1) When, through any fault of the service, the booking of a Mar2 radiotelex call is not followed by the calling and called stations being placed in communication, no charge shall be payable. If the amount of the charge has been paid, it shall be refunded.
- 2087BQ (2) In order to simplify operating and accounting procedures, Mar2 administrations may decide that no charge shall be payable when a requested connection has not been set up, whatever the reason.
- 2087BR (3) However, administrations may decide to collect charges in Mar2 cases where there is no fault of service. In that case the basis of charging shall be notified to the Secretary-General for inclusion in the List of Coast Stations.

- 2087BS (4) When, through any fault of the service, difficulty is experienced in the course of a radiotelex call, the chargeable duration of the call shall be reduced to the total time during which transmission conditions have been satisfactory.
- 2087BT § 7. The total charge for a radiotelex call is normally collected Mar2 from the calling station with the exception of collect calls (if collect calls are admitted). For collect calls, the charge shall be payable by the called subscriber.
- 2087BU § 8. Mobile stations must be acquainted with the tariffs Mar2 applicable to radiotelex calls. However, they are authorized, where necessary, to obtain such information from land stations; rates furnished by land stations are expressed in gold francs.
- 2087BV § 9. The rules prescribed in Nos. 2062AU to 2062AY shall be Mar2 applied as regards the interval before the application of new rates.

Section II. Supplementary Charge

- 2087BW § 10. Unless special arrangements between the administrations Mar2 and/or the recognized private operating agencies concerned are in effect, the supplementary charges for accessory services, if admitted, shall be applied.
- 2087BX § 11.(1) The charge for accessory services may be based on the Mar2 land-line charge only.
- 2087BY (2) However, administrations may decide to calculate the Mar2 charge for accessory services on the total call charge for a three-minute call.
- 2087BZ (3) In either case the amount shall be calculated on the basis Mar2 applied in the normal international relation concerned.

Revision of Article 6 of the Additional Radio Regulations

The title of Article 6 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Radio Air Letters

Addition of a new Article (Article 6A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 6:

ADD Mar2

ARTICLE 6A

Radiomaritime Letters

2106A § 1. Each administration may organize a service of Mar2 radiomaritime letters between ships at sea and its land stations. Such correspondence is transmitted by radio between the ships and the land stations. They may be forwarded on the land section:

2106B

a) wholly or partly by post (ordinary or airmail);

Mar2

2106C Mar²

- b) exceptionally by telegraph, in which case delivery is subject to the periods of delay fixed for letter telegrams.
- 2106D § 2. Radio retransmission of radiomaritime letters is not per-Mar2 mitted in the mobile service.
- 2106E § 3. Radiomaritime letters shall be addressed only to places in Mar2 the country in which the land station is situated, unless it is indicated in the List of Coast Stations that the station concerned will accept such traffic for onward transmission by post to places in other countries.
- 2106F § 4. Radiomaritime letters bear the service indication SLT. This Mar2 indication precedes the address.

- 2106G § 5. Except as otherwise provided in this Article, radiomaritime Mar2 letters may be accepted, taking into account C.C.I.T.T. Recommendations relating to letter telegrams.
- 2106H § 6. Special telegram services are admitted, provided the ad-Mar2 ministrations or recognized private operating agencies concerned accept them, taking into account C.C.I.T.T. Recommendations.
- 2106I § 7. The address must enable delivery to be effected without in-Mar² quiry or requests for information. Registered or abbreviated addresses are admitted when, exceptionally, radiomaritime letters are forwarded telegraphically on the land section.
- 2106J § 8. (1) The land station charge shall include the postal charge (by Mar² ordinary letter or airmail letter) due for routing in the country to which the land station is subject. An additional charge may be collected where delivery is to be made to a country other than that to which the land station is subject.

2106K (2) The following charges are added where applicable:

Mar2

2106L Mar2

- charges due for authorized accessory services and, if necessary, the further charge mentioned in No. 2106J;

2106M Mar2

- the land-line charge when transmission on the land section is exceptionally by telegraph.

- 2106N § 9. Radiomaritime letters rank for radio transmission after Mar2 ordinary radiotelegrams on hand. Those which have not been transmitted within 24 hours of handing-in are sent concurrently with ordinary radiotelegrams.
- The normal rules of accounting as regards radiocom-**21060** § 10. Mar2 munications are applicable to radiomaritime letters.
- 2106P § 11. (1) When a radiomaritime letter fails to reach its destination Mar2 due to the failure of the postal service, only the charges in respect to the services not carried out are refunded.

2106Q (2) Reimbursement of charges is admitted when, through the Mar2 fault of the telegraph or radiotelegraph service, a radiomaritime letter has not reached its destination, as well as in the cases provided for in Article 12 of the Telegraph Regulations (Geneva, 1973), taking into account C.C.I.T.T. Recommendations.

Revision of Article 7 of the Additional Radio Regulations

The title of Article 7 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Special Radiotelegrams. Paid Service Indications except in the Maritime Mobile Service

Addition of a new Article (Article 7A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 7:

ADD Mar2

ARTICLE 7A

Special Telegram Services in the Maritime Mobile Service

2123A Special telegram services are admitted, taking into account Mar2 C.C.I.T.T. Recommendations and provided the administrations or recognized private operating agencies concerned accept them.

Revision of Article 8 of the Additional Radio Regulations

Article 8 of the Additional Radio Regulations shall be amended as follows:

Replace Regulation No. 2127 by the following new text:

MOD 2127 § 3. On the morning of the day following that day on which a radiotelegram to a mobile station is treated as undelivered by the land station, the latter shall advise the office of origin which notifies the sender. The mobile station charge and the charges for the special telegram services not performed shall be refunded to the sender.

Revision of Article 10 of the Additional Radio Regulations

The title of Article 10 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Retransmission by Mobile Stations, except in the Maritime Mobile Service

Addition of a new Article (Article 10A) to the Additional Radio Regulations

The following new Article shall be added to the Additional Radio Regulations after Article 10:

ADD Mar2

ARTICLE 10A

Routine Retransmission by Maritime Mobile Stations

- 2158A § 1. (1) When a land station cannot reach the mobile station for Mar2 which a radiotelegram is destined, the land station may, in order to forward the radiotelegram to its destination, have recourse to the help of another mobile station provided that the latter consents. The radiotelegram is then transmitted to this other mobile station. The help of the latter is given free of charge.
- 2158B (2) The same provision is also applicable to traffic from mobile Mar2 stations to land stations, when necessary.
- 2158C (3) The station assisting in the free retransmission in accor-Mar2 dance with the provisions of Nos. 2158A and 2158B must enter the service abbreviation QSP... (name of the mobile station) at the end of the preamble of the radiotelegram.
- 2158D (4) In order that a radiotelegram thus forwarded may be conMar2 sidered as having reached its destination, the station which has made
 use of this indirect route must have obtained the regular acknowledgement of receipt, either direct or by an indirect route, from the mobile
 station for which the radiotelegram was destined or from the land
 station to which it was to be forwarded, as the case may be.

Revision of Article 13 of the Additional Radio Regulations

The title of Article 13 of the Additional Radio Regulations shall be amended as follows:

MOD Mar2

Radiocommunications for Multiple Destinations (not applicable in the Maritime Mobile Service)

FINAL PROTOCOL

At the time of signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, the undersigned delegates take note of the following statements made by signatory delegations:

T

PEOPLE'S REPUBLIC OF ALBANIA

Since the Albanian Delegation was unable to attend the Plenary Meeting, it wishes to enter certain reservations in writing concerning the report of Committee 2 (Credentials).

Firstly, we do not recognize the credentials of the Phnom Penh puppet regime, which was brought to power by the American imperialists to serve the purposes of their aggression against the people of Cambodia. It represents nobody. The only legitimate government possessing the necessary right to represent the people of Cambodia in international relations, including international organizations, and the only government expressing its aspirations, is the Royal Government of National Unity of Kambudja, stemming from the United Front of Kambudja.

Secondly, the Albanian Delegation is opposed to the recognition of the credentials presented by the Saigon clique, which is nothing other than a handful of people who do not enjoy the support of the people and who are maintained in power by the political, military, economic and other assistance provided by the United States of America.

Thirdly, we do not recognize the credentials of the representatives of the South Korean authorities, which constitute an illegal régime that in no way represents the interests of the South Korean people. The only legitimate and authentic representative of the national interests and national aspirations of the Korean people is the Government of the People's Democratic Republic of Korea.

The Albanian Delegation therefore entirely rejects as null and void that part of the report of Committee 2 (Credentials) which deals with the credentials of the above-mentioned representatives.

H

ALGERIA (ALGERIAN DEMOCRATIC AND POPULAR REPUBLIC)

The Delegation of Algeria states that its signature of the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974 and any subsequent approval of the Acts by its Government do not entail any obligation towards Members who are not recognized by the Government of the Algerian Democratic and Popular Republic.

Ш

BELGIUM

The Delegation of Belgium, in signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, notes that, although the number of frequencies registered for its use in the new Appendix 25 does not fall short of its requirements, the number of sharing arrangements is nevertheless such that in many cases it will be very difficult to use the frequencies. It hopes that the new procedures envisaged for such cases will enable considerable improvements to be made when necessary but, in any case, it reserves the right of its Administration to initiate any action in future which it considers might help to bring about a solution if difficulties arise

IV

FEDERATIVE REPUBLIC OF BRAZIL

In signing the Final Acts of this Conference, the Brazilian Delegation wishes to make the following declaration:

Appendix 25 Mar2 has been made without taking account either of operational and technical criteria or of the various proposals from administrations for the revision of Appendix 25 MOD.

The date of implementation of Appendix 25 Mar2 together with the procedures described in Article 9B will make the situation even worse and it is therefore impossible, at the present time, to assess the possible repercussions on the operation of the maritime mobile service.

The Brazilian Delegation declares that its Government will make every effort to follow Appendix 25 Mar2 and Article 9B but that, in view of the above facts, it reserves the right, if the interests of the country make it necessary and after informing other Members of the Union which may be concerned or affected, to take such measures as may be required to protect its maritime radiotelephony interests.

V

UNITED REPUBLIC OF CAMEROON

The Delegation of the United Republic of Cameroon reserves on behalf of its Government the right to adopt any measures which it may consider appropriate to safeguard its interests with regard to comments made by any of the Member countries of the I.T.U. inasmuch as they may jeopardize its telecommunications services.

VI

CHILE

With regard to the statement made by the Delegation of the Republic of Cuba at this Conference and contained in Final Protocol No. X:

- Chile regrets that, at this technical and administrative conference on Maritime Telecommunications, political statements having no bearing on the subject of the Conference should have been made and
- categorically rejects the ideas expressed by the distinguished delegate of the Republic of Cuba in paragraph 1 of the aforementioned Final Protocol.

VII

PEOPLE'S REPUBLIC OF CHINA

1. The Lon Nol clique is a handful of Cambodian national scum and a puppet régime manipulated by imperialists. It is illegal from its very inception. It absolutely cannot represent the Cambodian people to sign the Final Acts of the Maritime Conference, Geneva, 1974.

The Paris Agreements on the Viet-Nam questions have in fact recognized that there exist two administrations in south Viet-Nam: the Provisional Revolutionary

Government of the Republic of South Viet-Nam and the Saigon Administration. Under such circumstances, it is inappropriate for the Saigon Administration to attend the I.T.U. Maritime Conference unilaterally. In the circumstances in which north and south Korea have reached an agreement in principle on the independent and peaceful reunification of Korea, it is unreasonable for the south Korean authorities to send representatives to the Maritime Conference on its own. Therefore, the representatives of the Saigon Administration and the south Korean authorities have no right to sign the Final Acts of the Maritime Conference on their own.

2. The Chinese Delegation makes reservations on the provisions regarding the registration of frequencies in the Radio Regulations and on the allocation and utilization of frequencies other than those the maritime mobile services shall use in the bands exclusively for these services, as well as on the provisions for the assignment and recording of the positions of geostationary satellites.

VIII

REPUBLIC OF KOREA

Α

The Delegation of the Republic of Korea, on behalf of its Government, hereby:

- declares that any reservations made in connection with, or any declarations
 made against the validity of its representation of the Republic of Korea in this
 World Administrative Radio Conference are without foundation and without
 legal effect;
- declares, therefore, that the Korean Delegation rejects any reservations made by any delegations concerning the representation of the Republic of Korea; and
- declares, in this connection, that the Korean Delegation most energetically rejects the irresponsible and absurd observations (Final Protocol No. VII) made by the Delegation of China, which are neither in conformity with normal conduct of this Conference nor have any relevance to its work.

В

The Delegation of the Republic of Korea makes, on behalf of its Government, the following statements:

It is deeply regrettable that the Delegation of Cuba has once again engaged in political polemics which have nothing to do with this highly technical conference.

The Korean Delegation most energetically rejects the irresponsible and absurd observations made by the Delegation of Cuba, which are neither in conformity with normal conduct of this Conference nor have any relevance to its work.

C

The Delegation of the Republic of Korea makes, on behalf of its Government, the following statements:

It is regrettable that the Albanian Delegation has once again engaged in political polemics, a legacy of the Cold War era, in such a highly technical conference as the World Maritime Administrative Radio Conference.

The Korean Delegation categorically rejects the irresponsible observation made by the Albanian Delegation concerning the representation of the Republic of Korea, which is mentioned in Final Protocol No. I.

ΙX

REPUBLIC OF THE IVORY COAST

To safeguard the interests of its Government, the Delegation of the Republic of the Ivory Coast to the World Maritime Administrative Radio Conference, Geneva, 1974, reserves the right of the former to take any measures it considers necessary with respect to reservations made by other delegations on signature of the Final Acts of the Conference.

Х

CUBA

The Delegation of Cuba to the World Maritime Administrative Radio Conference, Geneva, 1974, makes the following statement in connection with the signing of the Final Acts:

 That the delegates of the Chilean Military Junta have no moral or legal authority to represent Chile. The delegates of Chilean fascism represent in any case the interests of their imperialist bosses of I.T.T.; we therefore raise a specific objection to the credentials of the appointed delegates of the fascist Junta of Chile.

- 2. The Saigon Administration cannot represent South Viet-Nam as a whole. Under the Paris Agreement on Viet-Nam, two Administrations are recognized: the Provisional Revolutionary Government of South Viet-Nam and the Saigon Régime. The only rightful representative of the South Vietnamese people is the Provisional Revolutionary Government of South Viet-Nam.
- 3. It deplores the failure to invite the People's Democratic Republic of Korea to attend this Conference. The Administration of South Korea cannot sign on behalf of Korea as a whole.

XI

DENMARK AND SWEDEN

The Delegations of Denmark and Sweden express regrets that the Conference did not respond in a positive way to Resolution No. 37 of the Plenipotentiary Conference (Montreux, 1965) by making transfers of provisions to the Telegraph Regulations and the Telephone Regulations, Geneva, 1973 and/or to C.C.I.T.T. Recommendations.

As a result of inaction with regard to the subject matter of Resolution No. 37 (Montreux, 1965), there may be conflicts between provisions of the Radio Regulations and the Additional Radio Regulations on the one hand, and provisions of the Telegraph Regulations and the Telephone Regulations, Geneva, 1973, and C.C.I.T.T. Recommendations on the other, from the date of entry into force of the Radio Regulations and the Additional Radio Regulations, as amended at Geneva, 1974 and, in any event, such conflicts will be created and increase over future years as C.C.I.T.T. Recommendations are adopted and amended.

In these circumstances the Delegations of Denmark and Sweden have to make the following reservation to be included in the Final Acts of the Conference:

In signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, the Delegations of Denmark and Sweden formally

declare that their Administrations reserve their rights to apply, or not to apply, the provisions of Articles 38, 40 and 40A in the Radio Regulations and the provisions of the Additional Radio Regulations.

This reservation is made in view of the fact that many provisions which were formerly common to the Radio Regulations, the Additional Radio Regulations, the Telegraph Regulations and the Telephone Regulations have been deleted from the Telegraph Regulations and the Telephone Regulations or transferred to C.C.I.T.T. Recommendations where they can and will be amended more often than is possible in the Radio Regulations and the Additional Radio Regulations. The resulting conflicts in similar provisions may create difficulties which it is the purpose of this reservation to avoid.

XII

UNITED STATES OF AMERICA

The Delegation of the United States of America formally declares that the United States of America does not, by signature of these Final Acts on its behalf, accept any obligations in respect of the Frequency Allotment Plan for Coast Radiotelephone Stations Operating in the Exclusive Maritime Mobile Bands between 4 000 kHz and 23 000 kHz and the associated implementing procedures, and that, although the United States of America will observe the provisions of the Plan and implementing procedures to the extent practicable, pending the results of a future World General Administrative Radio Conference, the United States of America reserves its right to take such measures as may be necessary to protect its maritime radiotelephony interests.

XIII

FRANCE

In signing the Final Acts of the Conference, the French Delegation wishes to make the following statement:

The Conference has adopted a channel allotment plan for the maritime mobile radiotelephone service and the regulatory provisions associated with it. In applying the decisions of the Conference on the subject, many difficulties can be foreseen, particularly owing to the overloading of all channels and the impossibility of assessing at the present time the effects of the changes which will have to be made to the Plan before it comes into force.

Despite the intensive development of the French radiotelephone service, France has submitted only a very limited number of allotment requests to the Conference. It will nevertheless endeavour to apply the planned provisions in cooperation with all other administrations concerned, but the French Delegation reserves on behalf of its country the right to take any action it considers necessary to protect its radiocommunications in the HF maritime mobile radiotelephone service.

XIV

REPUBLIC OF INDIA

The Administration of the Republic of India notes that the revision of Appendix 25 MOD was not based on technical criteria and, as such, needs considerable effort on the part of all administrations to make it workable in practice. The Administration of the Republic of India will contribute to the maximum possible extent, within the limitations of its needs, to make the plan a success. It sincerely hopes that other administrations will also do the same.

XV

REPUBLIC OF INDONESIA

The Delegation of the Republic of Indonesia is aware of the main objective of the Union of facilitating relations and cooperation between the people by means of telecommunication services; it is also aware of the purpose of gathering together in conferences to reach mutual understanding and agreements.

Nevertheless, to safeguard the interests of its country, the Delegation of the Republic of Indonesia, in signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, declares that it reserves the right of its Government to take any further action in accordance with the constitution and law of the Republic of Indonesia.

XVI

REPUBLIC OF IRAQ

The Delegation of the Republic of Iraq states that by signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, and by any subsequent approval of the Acts by its Government, it does not recognize in any way any member or party which is not recognized by the Government of the Republic of Iraq and that it has no obligation whatsoever in this respect.

XVII

STATE OF ISRAEL

1. The State of Israel refrained from submitting to the Conference additional frequency requirements for future needs of its maritime mobile services. This course of action has been followed on the assumption that the sharing pattern on its existing allotments and assignments will be improved, in the frame of an improved frequency plan.

The Delegation of the State of Israel reiterates its statement that the sharing pattern reflected in the Annex to Appendix 25 Mar2 is not adequate even for its existing maritime mobile services.

2. The Delegation of the State of Israel reserves on behalf of its Government the right to adopt any measures which it may consider appropriate to safeguard its interests with regard to comments made by any of the countries Members of the Union – inasmuch as they may jeopardize its telecommunication services.

XVIII

ITALY

In signing the Final Acts of this Conference, the Italian Delegation wishes to make the following statement:

The Conference has revised Appendix 25 MOD and has established an Allotment Plan which has not been perfected and which is associated with procedures for its updating by additions or amendments.

Since these procedures always result in the inclusion in the Plan of new allotments, the Plan which comes into force on 1 January 1978 may, as a result of the amendments and additions introduced after 1 January 1976, prove to be substantially different from that approved by this Conference.

It is therefore impossible at the present time to assess what repercussions it may have on the operation of the maritime mobile service.

In view of the foregoing and since the Plan as established seems difficult to apply, the Italian Delegation, while tendering its assurance that every effort will be made to ensure that HF operations in the maritime mobile service will be carried out in conformity with the Plan, reserves the right of its country, after consultation with other Members of the Union which may be concerned or affected, not to consider itself bound by this Plan if its application should prove impossible in practice and to take all necessary steps to maintain the HF links between Italian coast stations and ships at sea.

XIX

KHMER REPUBLIC

The Delegation of the Khmer Republic to the World Maritime Administrative Radio Conference deplores the interference of the Pekin and Albanian Delegations in the internal affairs of a sovereign State.

It does not wish the said Conference, convened to deal with technical and administrative questions of maritime radiocommunications, to be turned into a political platform and declares null and void the coarse and defamatory remarks made concerning its Government by the Pekin Delegation and its Albanian acolyte, remarks which betray the activity of subversion, expansion and hegemony carried on in this region of the world and particularly in the Khmer Republic.

XX

REPUBLIC OF LIBERIA

The Delegation of the Republic of Liberia to the World Maritime Administrative Radio Conference, Geneva, 1974, reserves the right of its Government to take any action it may consider appropriate to safeguard its interests, should the reservations made by other countries jeopardize its telecommunication services.

XXI

ISLAMIC REPUBLIC OF MAURITANIA

The signing of the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, by the Delegation of the Islamic Republic of Mauritania does not involve any obligation on its Government to apply all the measures adopted.

If necessary, its Government reserves the right to adopt any other measures that may be necessary to safeguard its interests.

XXII

FEDERAL REPUBLIC OF NIGERIA

In signing the Final Acts of the World Maritime Administrative Radio Conference, Geneva, 1974, the Delegation of the Federal Republic of Nigeria reserves for its Government the right to take such action as it may consider necessary to safeguard its interests should any country fail in any way to comply with the requirements of the Final Acts of this Conference or should any reservations by any country jeopardize the telecommunication services of the Federal Republic of Nigeria.

IIIXX

REPUBLIC OF PANAMA

The Delegation of the Republic of Panama reserves on behalf of its Government the right to take any action it considers necessary to safeguard its interests should any observations made by any of the countries Members of the Union be such as to jeopardize its telecommunications services.

XXIV

KINGDOM OF THE NETHERLANDS

The Administration of the Netherlands expresses its concern with regard to the consequences of the implementation of Appendix 25 Mar2 and its associated Resolutions.

It is believed that the shortage of available information and the disregard of the operational and technical criteria, on which the revision of Appendix 25 MOD should have been based, have prevented the realization of a workable plan.

Whilst the principle of equal rights of all countries to meet their requirements for radiotelephony channels is adhered to, it is felt, however, that the lengthy discussions on this general theme have hampered the Conference in studying and considering various proposals from administrations for the revision of Appendix 25 MOD.

At least some of these proposals were aimed at a recognition of these rights.

It is further believed that the procedures laid down in Article 9B of the Radio Regulations will result in an even worse situation, which may, quite likely, affect the developing countries in particular.

XXV

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

In signing the Final Acts of the present Conference, the Delegation of the United Kingdom of Great Britain and Northern Ireland wishes to make the following statement:

The present Conference has drawn up an allotment plan in further modification of Appendix 25 with associated procedures for implementing the plan. It is evident from these procedures that the plan, as drawn up by the present Conference, may be radically altered as soon as it comes into effect after 1 January 1978; and that it is impossible in June 1974 to foresee the effect of the changes that may come about as a result of the expansion of this rapidly developing service during this interim period. Although the United Kingdom will make every effort to operate in accordance with the plan the United Kingdom Delegation reserves the right of its Government, after consultation with other members of the I.T.U. concerned and affected, not to be bound by the plan and its associated provisions and to take any steps necessary to protect the high-frequency radiotelephony service provided by its coast stations to the shipping of the world.

XXVI

REPUBLIC OF THE SENEGAL

Α

The Delegation of the Republic of the Senegal wishes to state that its reason for voting against the adoption of the Revised Plan of Appendix 25 MOD as it appears in these Final Acts was that it wished to have the possibility at this stage of including its additional frequency requirements therein. It hopes that after the entry into force of the Plan its needs will be met through the appropriate procedure and with the understanding of all administrations.

В

The Delegation of the Republic of Senegal to the World Maritime Administrative Radio Conference, Geneva, 1974, reserves on behalf of its Government the right to take any action it considers necessary to safeguard its legitimate interests with respect to whatever reservations may be made by Delegations in signing the Final Acts of the Conference.

XXVII

UNITED REPUBLIC OF TANZANIA

To safeguard the interests of its Government, the Delegation of the United Republic of Tanzania to the World Maritime Administrative Radio Conference, Geneva, 1974, reserves the former's right to take any measures it considers necessary in connection with reservations made by other Delegations in signing the Final Acts of the Conference.

XXVIII

REPUBLIC OF VENEZUELA

The Delegation of the Republic of Venezuela reserves on behalf of its Government the right to take any measures which it may consider appropriate to safeguard its interests should any observations made by any of the countries Members of the Union be such as to jeopardize its telecommunication services.

XXIX

REPUBLIC OF VIET-NAM

Α

The Delegation of the Republic of Viet-Nam rejects the unfounded comments contained in the third paragraph of Final Protocol No. I submitted by the representatives of the Tirana régime.

Moreover, the Delegation of the Republic of Viet-Nam does not recognize the credentials of the representatives of the notoriously despotic concentration-camp Tirana régime.

В

The Delegation of the Republic of Viet-Nam rejects as completely unfounded all the remarks which appear in Final Protocols Nos. X (Cuba) and VII (China).

Any interpretation to the effect that the Paris Agreement on Viet-Nam (1973) recognizes the existence of two administrations in South Viet-Nam is false.

The Paris Agreement recognizes only one legal and constitutional government in South Viet-Nam, the Government of the Republic of Viet-Nam.

C

The Delegation of the Republic of Viet-Nam rejects the statement made in Final Protocol No. XXX by Yugoslavia and declares it null and void.

It is null because the credentials of the Delegation of the Republic of Viet-Nam have been recognized in due form by Committee 2, the Credentials Committee of the Conference.

It is void because it introduces a political question involving the internal affairs of the Republic of Viet-Nam.

XXX

SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA

The Delegation of the Socialist Federal Republic of Yugoslavia would like to state that the representatives of the authorities from Saigon are not truly representative of the people of Viet-Nam and therefore cannot sign the final documents which will be adopted by the Conference.

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Relating to the Abrogation of obsolete Resolutions and Recommendations of the World Administrative Radio Conference, Geneva, 1967, and a Resolution of the World Administrative Radio Conference for Space Telecommunications, Geneva, 1971

The World Maritime Administrative Radio Conference, Geneva, 1974, considering

- a) that all necessary action has been taken on the following Resolutions and Recommendations of the World Administrative Radio Conference, Geneva, 1967:
 - Resolution No. Mar 10 Relating to the Transfer of certain Frequency Assignments for Coast Radiotelegraph Stations in the Frequency Bands Allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kc/s;
 - Resolution No. Mar 12 Relating to the Implementation of the New Arrangement of Radiotelegraphy and Radiotelephony Bands Allocated to the Maritime Mobile Service between 4 000 and 27 500 kc/s;
 - Resolution No. Mar 13 Relating to the Use of Class of Emission A3B by Radiotelephone Stations in the Maritime Mobile Service in the Bands between 4 000 and 23 000 kc/s;
 - Resolution No. Mar 16 Relating to the Introduction of a Radiocommunication Operator's General Certificate for the Maritime Mobile Service;
 - Resolution No. Mar 18 Relating to the Examination of Pertinent Portions of the Revised International Code of Signals;
 - Recommendation No. Mar 1 Relating to a Reprint of the Radio Regulations and of the Additional Radio Regulations;

- Recommendation No. Mar 7 Relating to Harmonic Relationship and Channel Spacing in the High Frequency Bands used by Ship Stations for Radiotelegraphy;
- Recommendation No. Mar 8 Relating to the Study of a Selective Calling System for future operational Requirements of the Maritime Mobile Service:
- b) that the following Resolutions of the World Administrative Radio Conference, Geneva, 1967, were replaced as indicated:
 - Resolution No. Mar 6 Relating to the Use of Single Sideband Technique in the Radiotelephone Maritime Mobile Service Bands between 4 000 and 23 000 kc/s, by Resolution No. Mar2 13;
 - Resolution No. Mar 8 Relating to the Notification of Ship Station Frequencies used for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems, by Resolution No. Mar2 8;
 - Resolution No. Mar 9 Relating to the Unauthorized Use of Frequencies in the Bands Allocated to the Maritime Mobile Service, by Resolution No. Mar 2 15;
 - Resolution No. Mar 14 Relating to the Channel Spacing of Transmitting Frequencies Allotted to the International Maritime Mobile Service for Radiotelephony in the Band 156-174 Mc/s, by Resolution No. Mar2-14;
- c) that the following Resolution and Recommendation of the World Administrative Radio Conference, Geneva, 1967, are now obsolete:
 - Resolution No. Mar 3 Relating to the Classes of Emissions to be used for Remote-Controlled Coast Stations in the Maritime Mobile Radiotelephone Service;
 - Recommendation No. Mar 4 Relating to Transmission by Television of Port Radar Images to Ships;

d) that Resolution No. Spa2 – 5 of the World Administrative Radio Conference for Space Telecommunications, Geneva, 1971, Relating to the Use of the Band 156-174 MHz by the Maritime Mobile-Satellite Service, was considered and found to be no longer necessary;

resolves

that all the said Resolutions and Recommendations are abrogated.

RESOLUTION No. Mar2 - 2

Relating to the Implementation of the New Arrangement of Radiotelegraphy and Radiotelephony Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 27 500 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974, considering

a) that each of the high-frequency radiotelegraphy and radiotelephony bands allocated exclusively to the maritime mobile service by the Administrative Radio Conference, Geneva, 1959, and modified by the World Administrative Radio Conference, Geneva, 1967, has been further modified;

- b) that a considerable number of both ship and coast stations will be transferred from existing frequencies to the new frequencies and channels designated by the present Conference;
- c) that changes in frequency assignments should be made as soon as possible so that the advantages of the new arrangement of bands may be realized at the earliest opportunity;
- d) that the transfer of assignments should be made with the least possible disruption of the service rendered by each station;
- e) that the transfer of assignments should be made in such a manner that harmful interference between stations involved is avoided during the implementation period;

resolves

- 1. that the implementation of the decisions made by the present Conference relating to the new arrangement of the high-frequency bands allocated to the maritime mobile service should follow an orderly procedure for the transfer of the existing services from the old to the new assignments and for the introduction of new services:
- 2. that administrations shall make every effort to implement the new arrangement in accordance with the time schedule in Annexes 1 and 2.

Annex 1

Step of implementation (bands 4 000 - 23 000 kHz)	From old band (kHz)	To new band (kHz)	Starting date	Completion date
Step 1 a) Vacate old high traffic ship bands	4 172-25 - 4 178 6 258-25 - 6 267 8 341-75 - 8 356 12 503-25 - 12 534 16 660-5 - 16 712 22 184-5 - 22 222-5	-	As soon as possible	1 June 1976
b) Vacate old low traffic ship bands and commence using new A1 Morse telegraphy bands	8 435.4 - 8 459.5 12 561 - 12 564 12 652.3 - 12 689	{12 526·75 - 12 539·6 12 564 - 12 652·3 }16 705·8 - 16 719·8	As soon as possible	1 June 1976
Step 2 a) Transfer frequency assignments in coast radiotelegraphy bands in accordance with Resolution No. Mar2 - 3	4 349.4 - 4 361 6 493.9 - 6 514 8 704.4 - 8 728.5 13 070.8 - 13 107.5 17 196.9 - 17 255 22 561 - 22 624.5	4 219-4 - 4 231 6 325-4 - 6 345-5 8 435-4 - 8 459-5 12 652-3 - 12 689 16 859-4 - 16 917-5 22 310-5 - 22 374	2 June 1976	31 July 1976

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Annex 1 (continued)

Step 2 b) Transfer ship calling frequencies to new telegraphy calling frequencies cies Step 3 a) Commence using new ship and coast digital selective calling frequencies 4 178 4 1 6 267 - 6 2 8 356 - 8 3 12 534 - 12 5 16 712 - 16 7 22 222.5 - 22 2	1 7	-	
Step 3 a) Commence using new ship and coast digital selective calling fre	74 See Appendix 15C 61 48	2 June 1976	31 May 1977
	Ship station frequencies 4 187.6 6 281.4 8 375.2 12 562.3 12 562.8 16 749.9 16 750.4 22 248 and 22 248.5 Coast station frequencies 4 357 6 506 8 718.5 13 100 13 100.5 17 232 17 232.5 22 595 and 22 595.5	\rightarrow 1 June 1977	_ (continued)

Annex 1 (continued)

Step of implementation (bands 4 000 - 23 000 kHz)	From old band (kHz)	To new band (kHz)	Starting date	Completion date
Step 3 b) Vacate old narrow-band direct- printing telegraphy ship frequencies and commence using new ship and coast paired and non-paired narrow-band direct-printing telegra- phy frequencies (except non-paired frequencies in the 8 MHz band)	6 248 - 6 258-25	See Appendix 15A for paired frequencies and Appendix 15B for non-paired frequencies	1 June 1977	30 June 1977
Step 4 Transfer ship wide-band radiotele- graphy to new frequency bands	4 142.5 - 4 146.6 6 216.5 - 6 224.6 8 288 - 8 300 12 431.5 - 12 439.5 16 576 - 16 596.4 22 112 - 22 139.5	4 166 - 4 170 6 248 - 6 256 8 331·5 - 8 343·5 12 483 - 12 491 16 640 - 16 660 22 164 - 22 192	} 1 July 1977	15 July 1977
Step 5 ¹ a) Transfer simplex radiotelephony to new frequency bands	4 139·5 - 4 142·5 6 210·4 - 6 216·5 8 281·2 - 8 288 12 421 - 12 431·5 16 565 - 16 576 22 094·5 - 22 112	4 143.6 - 4 146.6 6 218.6 - 6 224.6 8 291.1 - 8 297.3 12 429.2 - 12 439.5 16 587.1 - 16 596.4 22 124 - 22 139.5	} 16 July 1977	31 December 1977 (continued)

¹ The period from 16 July 1977 to 31 December 1977 should be used to prepare for changeover to the new arrangement of duplex radiotelephone channels.

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Annex 1 (concluded)

	Step of implementation (bands 4 000 - 23 000 kHz)		From old band To new band (kHz) (kHz)		Completion date	
paired r	nce using new ship non- parrow-band direct-printing thy frequencies in the pand	8 331.5 - 8 341.75	See Appendix 15B	16 July 1977	_	
coast do	nce using new ship and uplex radiotelephone chan- accordance with Resolu- Mar2 – 12	-	Ship 4 139·5 - 4 143·6 6 210·4 - 6 218·6 8 281·2 - 8 291·1 12 421 - 12 429·2 16 565 - 16 587·1 22 094·5 - 22 124 Coast 4 357·4 - 4 361 6 506·4 - 6 514	00 01 G.M.T. I January 1978		
			8 718 9 - 8 728 5 13 100 8 - 13 107 5 17 232 9 - 17 255 22 596 - 22 624 5			

Annex 2

Step of implementation (25 MHz band)		From old band (kHz)			Completion date	
Step 1 a) Vacate old ship c	alling band	25 076 - 25 082-5	<u></u> .	As soon as possible	I June 1976	
b) Transfer ship wo		25 082-5 - 25 090-1	25 090 1 - 25 110	As soon as possible	1 June 1976	
Step 2 Commence using n band direct-printing quencies	-	-	25 076 - 25 090-1	2 June 1976		

Relating to the Transfer of certain Frequency Assignments of Stations operating in the Bands allocated exclusively to Coast Radiotelegraphy in the Maritime Mobile Service between 4 000 and 23 000 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that the frequency band limits for coast radiotelegraphy have been modified as a result of the revision of Appendices 15 and 17 to the Radio Regulations;
- b) that the new limits of the frequency bands for coast radiotelegraphy are:

4 219·4 — 4 349·4 kHz 6 325·4 — 6 493·9 kHz 8 435·4 — 8 704·4 kHz 12 652·3 — 13 070·8 kHz 16 859·4 — 17 196·9 kHz 22 310·5 — 22 561 kHz

recognizing

that the new arrangement of the frequency usage within the frequency bands allocated to the maritime mobile service should be carried out in several steps and that the transfer of certain frequency assignments in the coast radiotelegraphy bands governs any subsequent arrangements and should therefore be one of the steps of the new arrangement;

resolves

1. that the frequency assignments to stations in the coast radiotelegraphy bands which, on 1 June 1976, are recorded in the Master International Frequency Register, shall be transferred as follows:

- any frequency assignment f in the 4 349.4 4 361 kHz band shall be transferred to the frequency f-130 kHz;
- any frequency assignment f in the 6 493.9 6 514 kHz band shall be transferred to the frequency f-168.5 kHz;
- any frequency assignment f in the 8 704.4 8 728.5 kHz band shall be transferred to the frequency f-269 kHz;
- any frequency assignment f in the 13 070·8 13 107·5 kHz band shall be transferred to the frequency f-418·5 kHz;
- any frequency assignment f in the 17 196.9 17 255 kHz band shall be transferred to the frequency f 337.5 kHz;
- any frequency assignment f in the 22 561 22 624.5 kHz band shall be transferred to the frequency f-250.5 kHz;
- 2. that between 2 June and 31 July 1976, administrations shall transfer the transmitting frequencies of their stations as indicated in paragraph 1 above. Administrations shall notify the I.F.R.B. of these transfers, in accordance with the provisions of Section I of Article 9 of the Radio Regulations;
- 3. provided that the notices received by the I.F.R.B. in accordance with paragraph 2 above do not contain any changes in the basic characteristics of the originally recorded assignment, other than the assigned frequency, the I.F.R.B. shall record the change in the Master Register. The dates to be entered in the appropriate parts of Column 2 shall be those of the original assignment. Should any other change in the basic characteristics of the original assignment be notified, this change shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;
- 4. that on 1 August 1976, the I.F.R.B. shall also include in the Master Register, in respect of each original assignment the transfer of which has not at that time been notified to the Board, a provisional entry determined in accordance with paragraph 1 above. For such provisional entries, the dates in

Column 2 recorded for the original assignment shall be retained. The original entries shall be retained in the Master Register but with a special remark in the Remarks Column and any dates in Column 2a shall be transferred to Column 2b;

- 5. that 30 days after 1 August 1976, the I.F.R.B. shall send to those administrations which have not yet notified the transfer of frequency assignments to their stations in accordance with paragraphs 1 and 2 above, an extract from the Master Register showing the relevant entries contained therein on their behalf, and shall remind them of the provisions of this Resolution:
- 6. that if, 120 days after the despatch of these extracts, an administration has still not notified to the I.F.R.B. the transfer of an existing assignment in accordance with paragraphs 1 and 2 above, the corresponding provisional new entry shall be deleted from the Master Register. The original entry shall be retained, without a date in Column 2 and with a suitable remark in the Remarks Column. The administration concerned shall be informed of this action; if, however, that administration notifies the transfer during the 120 days' period, the provisions of paragraph 3 above shall apply;
- 7. that, in those cases where the foregoing transfer procedure will result in an increase in the probability of a specific frequency assignment causing or experiencing harmful interference, the I.F.R.B. shall render all necessary assistance to the administrations concerned in order to solve the problem. In so doing, the I.F.R.B. shall apply the provisions of No. 534 or Nos. 629 to 633 of the Radio Regulations, as the case may be.

Relating to the Implementation of the New Channelling Arrangement for A1 Morse Radiotelegraphy in the Bands allocated to the Maritime Mobile Service between 4 000 and 27 500 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that Recommendation No. Mar 7 of the World Administrative Radio Conference, Geneva, 1967, requested administrations to study the problems relating to the future use of harmonic relationship in ships' radio equipment;
- b) that the present Conference has provided for use by ship stations calling and working frequencies for A1 Morse telegraphy which are not harmonically related;
- c) that it is desirable to implement the new channelling arrangement as soon as possible;

recognizing

- a) that there is a need to provide an amortization period for radio equipment dependent upon the harmonic relationship of calling and working frequencies:
- b) that developments and advances in technique, and in frequency synthesizers in particular, have led to more stable and reliable radio equipment;

resolves

1. that ship stations dependent upon harmonically related calling and working frequency assignments made prior to 1 January 1976 may continue

to use such of their assignments as are within the ship calling and working bands for A1 Morse telegraphy shown in Appendix 15;

- 2. that, as soon as possible, ships should utilize equipment which is capable of operating in accordance with the new channelling arrangement contained in Appendix 15D for the frequencies required for their service;
- 3. that, after 1 January 1976, new installations of equipments shall be capable of operating in accordance with the new channelling arrangement contained in Appendix 15D for the frequencies required for their service.

RESOLUTION No. Mar2 - 5

Relating to the Introduction of New Calling Procedures for HF A1 Morse Telegraphy

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that there is a need for more effective utilization of the radio frequency spectrum and of the time of operational personnel on board ships;
- b) that it is desirable to improve the effectiveness of calling in the HF A1 Morse telegraphy bands;

- c) that the present Conference has adopted a new calling procedure for the HF A1 Morse telegraphy bands (Articles 29 and 32 and Appendix 15C);
- d) that the effectiveness of the new calling procedure requires agreement between administrations with respect to the groups specified in Appendix 15C in accordance with a planned distribution of coast stations on a regional and traffic basis;
- e) that the administrations at the present Conference have agreed to the Distribution Plan of Coast Stations (annexed to this Resolution) arranged by countries and areas into four groups to ensure a better distribution of calls;

resolves

that these new arrangements should become fully operational at 0001 G.M.T. on 1 June 1977;

instructs the Secretary-General

- 1. to circulate this Resolution to all administrations not represented at the present Conference which are responsible for coast stations in countries or areas designated in the Distribution Plan in order to obtain their agreement to the Plan or an adjustment of the Plan to meet their needs;
- 2. in the light of the foregoing consultation with the administrations concerned, to publish the Distribution Plan as soon as practicable as an annex to the List of Coast Stations;

invites

administrations which are providing an international public correspondence service to indicate for publication in the List of Coast Stations, the periods of service during which watch will be maintained on the common and, if necessary, the group channel or channels;

invites further

administrations which wish to enter into a group in the Distribution Plan, or administrations included in the Plan wishing to make a modification in the Plan, to coordinate as far as possible their proposed changes with other interested and affected administrations which are designated in the group concerned. An administration which has decided to enter into a group or change from a designated group in the Distribution Plan shall inform the Secretary-General of its decision and it shall be published in the Annex to the List of Coast Stations;

instructs the Secretary-General further

that, in advance of the publication of any revision of the Distribution Plan in the List of Coast Stations, any variation in the Plan should be notified through the monthly Operational Bulletin.

Distribution Plan for Group Channels HF A1 Morse Coast Stations by Countries and Areas

Group 1		Group 2		Group 3		Group 4	
Azores Afars and Issas Angola Bahamas Bahrain Bangladesh (People's Republic of) Bermuda Brazil (Federative Republic of) Canada (West Coast and Western Arctic) Chile Cyprus (Republic of) Ivory Coast (Republic of the) Ecuador Spain (Canary Islands) United States of America (East Coast) Ethiopia France India (Republic of) (West) Ireland Israel (State of) Kenya (Republic of) Liberia (Republic of) Malagasy Republic Martinique (French Department) Mauritius New Caledonia and Dependencies New Hebrides Oman (Sultanate of) Philippines (Republic of the)	French Polynesia Puerto Rico Reunion (French Department) Roumania (Socialist Republic of) United Kingdom of Great Britain and Northern Ireland Singapore (Republic of) Switzerland (Confederation of) S. Thome and Principe Union of Soviet Socialist Republics (Ukraine and South Asia)	Afars and Issas Algeria (Algerian Democratic and Popular Republic) Netherlands Antilles Saudi Arabia (Kingdom of) (West) Barbados Belgium Cameroon (United Republic of) Cape Verde Islands Christmas Islands (Indian Ocean) Colombia (Republic of) Congo (People's Rep. of the) Cook Islands Korea (Republic of) Costa Rica Cuba Dahomey (Republic of) Dominican Republic Egypt (Arab Republic of) United States of America (Gulf Coast) Falkland Islands (Malvinas) France Gabon Republic Gambia (Republic of the) Greece Hong Kong Hungarian People's Republic Italy Khmer Republic Lebanon	Martinique (French Department) Mexico New Caledonia and Dependencies New Hebrides Panama (Republic of) Paraguay (Republic of) Netherlands (Kingdom of the) Peru Poland (People's Republic of) French Polynesia Reunion (French Department) United Kingdom of Great Britain and Northern Ireland (22 MHz only) Sudan (Democratic Republic of the) Sri Lanka (Ceylon) (Republic of) Czechoslovak Socialist Republic Thailand Union of Soviet Socialist Republics (North West and Far East) Yemen Arab Republic	Alaska (State of) Argentine Republic Burma (Socialist Republic of the Union of) Canada (East Coast and Eastern Arctic) China (People's Republic of) Denmark United States of America (West Coast) Finland Ghana Guam Guinea-Bissau Guinea (Republic of) Guyana Hawaii (State of) Iran Iceland Jamaica Libyan Arab Republic Madeira Mariana Islands Morocco (Kingdom of) Mozambique Nauru (Republic of) Nigeria (Federal Republic of) Norway Pakistan German Democratic Republic Sweden Trinidad and Tobago	Turkey Union of Soviet Socialist Republics (Far East and European Area) Venezuela (Republic of) Yugoslavia (Socialist Federal Republic of)	Albania (People's Republic of) Germany (Fed. Rep. of) Saudi Arabia (Kingdom of) (East) Australia Bulgaria (People's Republic of) China (People's Republic of) (Province of Taiwan) Spain (except the Canary Islands) Fiji Equatorial Guinea (Republic of) India (Republic of) India (Republic of) Iraq (Republic of) Iraq (Republic of) Japan Jordan (Hashemite Kingdom of) Kuwait (State of) Malaysia Malta Mauritania (Islamic Republic of) New Zealand Papua New Guinea Pitcairn Island Portugal Syrian Arab Republic Solomon Islands American Samoa Senegal (Republic of the) Seychelles Sierra Leone South Africa (Rep. of)	Surinam Togolese Republic Tunisia Union of Soviet Socialist Republics (European Area and Arctic) Uruguay (Oriental Republic of) Viet-Nam (Republic of) Yemen (People's Dem. Rep. of) Zaire (Republic of)

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Relating to the Implementation of the Rearrangement of the Coast Radiotelegraphy and Radiotelephony Bands between 4 000 and 27 500 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that each of the high-frequency radiotelegraphy and radiotelephony bands allocated exclusively to the maritime mobile service by the Administrative Radio Conference, Geneva, 1959, was modified by the World Administrative Radio Conference, Geneva, 1967;
- b) that these Conferences set up procedures, to be followed by administrations, relating to the implementation of the rearrangements;
- c) that the I.F.R.B. was provided with the necessary instructions to carry out those procedures;

recognizing

- d) that certain administrations have not yet applied these procedures for some of their frequency assignments and that these assignments are now within the bands allocated to other uses in the maritime mobile service;
- e) that, as a result, harmful interference is likely to be caused to services rendered by stations operating in accordance with the Radio Regulations;

resolves

1. that the assignments referred to in d) above shall be treated as follows:

- 1.1 the I.F.R.B. will send relevant extracts from the Master Register to the administrations concerned, within 30 days from 1 January 1976, advising them that, in accordance with the terms of the present Resolution, the assignments concerned are to be transferred to the appropriate bands within a period of 180 days after the despatch of the extracts;
- 1.2 if an administration does not notify the transfer within the prescribed period, the original entry shall be retained in the Master Register without a date in Column 2 and with a suitable remark in the Remarks Column. The administration concerned shall be advised of this action.
- 2. that, if an administration so desires, the I.F.R.B. shall give it all necessary assistance. In so doing, the I.F.R.B. shall apply the provisions of Nos. 629 to 633 of the Radio Regulations.

Relating to the Use and Notification of Paired Frequencies
Reserved for Narrow-Band Direct-Printing Telegraph
and Data Transmission Systems in the HF Bands allocated
to the Maritime Mobile Service

(see Appendix 15A)

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

a) that certain sections of the HF bands allocated to the maritime mobile service have been reserved for narrow-band direct-printing telegraph and data transmission systems for use on a paired frequency basis only;

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- b) that the number of paired frequencies in each band is limited;
- c) that although several administrations have systems in operation, the general introduction of such systems is still in the early stages;
- d) that a future competent conference may provide for wider bands for narrow-band direct-printing than those available at present;
- e) that for this reason it is inopportune to draw up a plan at present but that such a plan might later be rendered necessary by the congested state of channels;
- f) that, however, interim measures have to be taken by administrations and by the I.F.R.B. to provide for the orderly introduction of these new paired frequencies;

resolves

- 1. that paired frequencies in the HF bands reserved for narrow-band direct-printing telegraphy between coast stations and ship stations shall be used by these stations, and shall be notified and recorded in the Master International Frequency Register, in the following manner:
 - 1.1 assignments of pairs of frequencies for transmission and reception shall be made solely to coast stations. Ship stations of any nationality shall use by right for their transmissions the receiving frequencies of the coast stations with which they exchange traffic;
 - 1.2 to achieve efficient frequency usage each administration shall choose the pairs of frequencies to be assigned to coast stations according to its requirements, with the assistance of the I.F.R.B.;
 - 1.3 the assignments thus selected and brought into service shall be notified to the I.F.R.B. on notices as shown in Appendix 1 to the Radio Regulations and administrations shall supply the basic characteristics listed in Section A or B of that Appendix, as appropriate. If the assignments conform to the Table of Frequency

Allocations, to the related provisions of the Radio Regulations and to the present Resolution, the Board shall enter them for information in Part 1A of its weekly circular and in the Master Register. No date will be entered in Column 2 of the Master Register and no finding resulting from a technical examination of compatibility with an existing assignment will be issued. However, the date of receipt of the notice by the Board will be entered in Part 1A of the weekly circular and in the Remarks Column of the Master Register. A reference to the present Resolution shall also be entered in the Remarks Column;

- 1.4 any notice not in conformity with the above-mentioned provisions of the Radio Regulations or with the present Resolution shall be returned to the notifying administration by the I.F.R.B., together with any suggestion which the Board may be able to submit in this respect;
- 1.5 should difficulties arise between countries using the same channel, the matter shall be settled by mutual arrangements between the administrations concerned;
- 2. that a future competent conference be invited to examine any difficulties which may have arisen in the application of this Resolution and to take a decision, if necessary, on the status to be given to the above-mentioned assignments or on the conditions for drawing up a plan for the bands and systems in question. The entries in the Master Register under this Resolution shall in no way prejudge any decisions which may be taken by the aforementioned conference;
- 3. that the present Resolution shall apply to assignments of paired frequencies for narrow-band direct-printing telegraphy as shown in 1.1 above, notwithstanding any other provisions of the Radio Regulations and existing Resolutions of Administrative Radio Conferences that may conflict with this Resolution.

Relating to the Notification of Non-Paired Ship Station Frequencies used for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems

(see Appendix 15B)

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that certain sections of the HF bands allocated to the maritime mobile service are reserved for narrow-band direct-printing telegraph and data transmission systems operating on a non-paired frequency basis;
- b) that although several administrations have systems in operation, the general introduction of such systems is still in the early stages;
- c) that in consequence the present Conference is not in a position to decide the extent to which it is necessary to regulate the orderly use of frequencies for the transmission by ship stations of non-paired direct-printing telegraph signals or on what basis this might be done;
- d) that these questions should be considered by a subsequent competent conference;
- e) that the existing provisions of the Radio Regulations do not provide administrations with appropriate guidance for the period between the coming into force of the Final Acts of the present Conference and the coming into force of those of the conference mentioned in d) above;

resolves

1. that, during the period referred to in e) above, any administration operating or bringing into operation non-paired narrow-band direct-printing

telegraph or data transmission systems for ships, shall notify to the International Frequency Registration Board, for recording in the Master International Frequency Register, the frequencies on which ship stations participating in the service will be required to transmit;

- 2. that these notices concerning frequencies used for reception by coast stations shall not be subject to technical examination by the Board, and that the assignments notified shall be recorded in the Master Register for information only, bearing no date in Column 2, but with a suitable remark in the Remarks Column merely referring to this Resolution;
- 3. that these entries in the Master Register shall not prejudge any decisions which may be taken by the conference referred to in d) above.

RESOLUTION No. Mar2 - 9

Relating to the Power Limits for Coast Radiotelephone Stations operating in the Maritime Mobile Bands between 1 605 and 4 000 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

a) that, under No. 1322BA of the Radio Regulations, coast radiotelephone stations employing class A3H, A3A or A3J emissions and operating in the maritime mobile bands between 1 605 and 4 000 kHz shall at no time use peak envelope power in excess of 5 kW when they are situated north of parallel 32°N and 10 kW when they are situated south of parallel 32°N:

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- b) that a number of coast radiotelephone stations which have been brought into use and notified to the International Frequency Registration Board for inclusion in the Master Register have peak envelope power listed in Column 8 in excess of the maximum powers defined in No. 1322BA;
- c) that there is an urgent need to reduce harmful interference in these bands:

resolves

- 1. that by 1 January 1976 the administrations concerned shall reduce the peak envelope power of their coast radiotelephone stations to a value not exceeding that laid down in No. 1322BA and shall so notify the I.F.R.B. in accordance with Section I of Article 9 of the Radio Regulations;
- 2. that, provided the notice received by the I.F.R.B. in accordance with paragraph 1 above does not contain any change in the basic characteristics of the original recorded assignment, other than the power reduction, the I.F.R.B. shall record the change in the Master Register; the dates of the original assignment in the appropriate parts of Column 2 shall be maintained. Should any other change be notified in the basic characteristics of the original assignment, the notice shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;
- 3. that 30 days after the date referred to in paragraph 1 above, the I.F.R.B. shall send to those administrations which have not notified the reduction of power of their coast radiotelephone stations in accordance with paragraph 1 above, an extract from the Master Register showing the relevant entries contained therein on their behalf, and shall remind them of the provisions of this Resolution;
- 4. that if, 90 days after the date specified in paragraph 1, an administration has still not notified to the I.F.R.B. the reduction of power in accordance with this Resolution, the I.F.R.B. shall apply the provisions of No. 621 of the Radio Regulations.

Relating to the Power Limits for Coast Radiotelephone Stations operating in the Maritime Mobile Bands between 4 000 and 23 000 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that under No. 1351C of the Radio Regulations coast radiotelephone stations employing class A3H, A3A or A3J emissions and operating in the maritime mobile bands between 4 000 and 23 000 kHz shall at no time use peak envelope power in excess of 10 kW;
- b) that a number of assignments to coast radiotelephone stations recorded in the Master International Frequency Register have powers listed in Column 8 in excess of 10 kW peak envelope power;
- c) that there is an urgent need to reduce harmful interference in these bands;

resolves

- 1. that, notwithstanding the provisions of Resolution No. Mar 2-12 relating to the date of entry into force of Appendix 25 Mar 2, the administrations concerned shall, by 1 January 1976, reduce the peak envelope power of their coast radiotelephone stations to a value not exceeding 10 kW and shall so notify the I.F.R.B. in accordance with Section I of Article 9 of the Radio Regulations;
- 2. that, provided the notice received by the I.F.R.B. in accordance with paragraph 1 above does not contain any change in the basic characteristics of the original recorded assignment, other than the power reduction, the I.F.R.B. shall record the change in the Master Register; the

dates of the original assignment in the appropriate parts of Column 2 shall be maintained. Should any other change be notified in the basic characteristics of the original assignment, the notice shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;

- 3. that 30 days after the date referred to in paragraph 1 above, the I.F.R.B. shall send to those administrations which have not notified the reduction of power of their coast radiotelephone stations in accordance with paragraph 1 above, an extract from the Master Register showing the relevant entries contained therein on their behalf, and shall remind them of the provisions of this Resolution;
- 4. that if, 90 days after the date referred to in paragraph 1 above, an administration has still not notified to the I.F.R.B. the reduction of power in accordance with this Resolution, the I.F.R.B. shall apply the provisions of No. 621 of the Radio Regulations.

RESOLUTION No. Mar2 - 11

Relating to Coordination Prior to Notifying to the I.F.R.B. Frequency Assignments pursuant to Resolution No. Mar2 – 12

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

a) that the change of coast radiotelephone station frequencies on 1 January 1978 as a result of the entry into force of Appendix 25 Mar2 might create difficulties in sharing a given channel among the administrations to which the channel is allotted;

- b) that these sharing difficulties may affect the service rendered by the coast stations of each administration concerned unless there are appropriate means of coordinating the use of each channel in Appendix 25 Mar2 before that Appendix comes into force;
- c) the essential duties of the I.F.R.B. defined in Article 10 of the International Telecommunication Convention (Malaga-Torremolinos, 1973) and its functions defined in Article 8 of the Radio Regulations;

resolves

- 1. that by 1 January 1976, administrations shall send to the I.F.R.B. provisional notices of frequency assignments in conformity with Appendix 25 Mar2, which they propose to bring into use on 1 January 1978, together with any useful information on technical and operational conditions;
- 2. upon receipt of this information, the I.F.R.B. shall examine the possibilities in each channel of sharing between the administrations concerned and submit to these administrations by 1 January 1977 such recommendations as may enable the improvement of the sharing possibilities;
- 3. that the I.F.R.B., in making the above examination, shall take into account the latest results of the study by the C.C.I.R. concerning the technical and operational sharing criteria in relation to the use of HF coast radiotelephone channels in the bands allocated exclusively to the maritime mobile service (see Recommendation No. Mar2-7); the I.F.R.B. may, if necessary, ask the administrations to supply additional information to facilitate the examination.

RESOLUTION No. Mar2 - 12

Relating to the Implementation of Appendix 17 Rev., Section A, and Appendix 25 Mar2

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that it has adopted a uniform spacing of 3.1 kHz for all duplex radiotelephone channels in the exclusive maritime mobile bands between 4 000 and 23 000 kHz, thus providing for additional duplex radiotelephone channels;
- b) that it has further provided for additional radiotelephone channels by means of a rearrangement of the exclusive maritime mobile bands between 4 000 and 27 500 kHz (see Resolution No. Mar2 2);
- c) that in Recommendation No. Mar 6, the World Administrative Radio Conference, Geneva, 1967, recommended that the present Conference be convened in order to establish a new Frequency Allotment Plan for high-frequency radiotelephone coast stations;
- d) that in conformity with Resolution No. Mar2-13, class A3 emissions by ship stations and all class A3B emissions will cease by 1 January 1978;
- e) that consequent upon a) to d) inclusive, Appendix 17 Rev., Section A and Appendix 25 Mar2 have been drawn up by the present Conference;
- f) that provision has to be made for recording the new allotments in the Master International Frequency Register to bring it up to date;

resolves

1. that the present Appendix 25 MOD will remain in force up to and including 31 December 1977 except as far as the provisions of No. 1351C of the Radio Regulations and Resolution No. Mar2-10 are concerned;

- 2. that as from 1 January 1978, Appendix 17, Sections A and B, shall be replaced by Appendix 17 Rev., Section A;
- 3. that as from 1 January 1978, Appendix 25 MOD to the Radio Regulations shall be replaced by Appendix 25 Mar2 which contains the radiotelephone channels of the maritime mobile service as they are listed in Appendix 17 Rev., Section A;
- 4. that at 0001 G.M.T. on 1 January 1978, coast and ship radiotelephone stations shall change their transmitting and receiving frequencies to bring them into conformity with Appendix 17 Rev., Section A;
- 5. that on 1 January 1978, the allotments included in Appendix 25 MOD which were listed in the Master International Frequency Register in accordance with the provisions of paragraph 2.1 c) of Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959, and the provisions of Resolution No. Mar 11 of the Administrative Radio Conference, Geneva, 1967, shall be cancelled;
- 6. that on the same date the allotments included in Appendix 25 Mar2 shall be recorded in the Master International Frequency Register; thereafter, the provisions of No. 639EV of the Radio Regulations shall apply;
- 7. that administrations shall notify to the I.F.R.B. in accordance with the provisions of Article 9 of the Radio Regulations the frequencies assigned to their coast radiotelephone station indicating, in the Remarks Column, the channel numbers of the corresponding allotments in Appendix 25 Mar2 and the previous frequency assignments to be replaced;
 - 7.1 that provided the notice received by the I.F.R.B. is in accordance with Appendix 25 Mar2 and the other pertinent provisions of the

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Radio Regulations, the I.F.R.B. shall record the assignment in the Master Register with the date 7 June 1974 in Column 2a and delete the original entry;

- 7.2 that notices received by the I.F.R.B. relating to frequency assignments notified before 1 January 1978 to which no allotments correspond in Appendix 25 Mar2 shall be entered in the Master Register with their existing 2b dates against the channels indicated by the administration; the original entries shall be deleted;
- 7.3 that on 1 April 1978, the I.F.R.B. shall examine all assignments in the frequency band allocated exclusively to the maritime mobile service between 4 000 and 23 000 kHz, with respect to their conformity with frequencies listed in Appendix 17 Rev., Section A, and shall send to those administrations which have not yet notified the transfer of frequency assignments to their coast radiotelephone stations, in accordance with paragraph 7 above, an extract from the Master Register showing the relevant entries contained therein on their behalf and shall remind them of the provisions of this Resolution;
- 8. that on 1 June 1978, an entry in respect of which the I.F.R.B. has not received a notice of change shall be maintained and the corresponding date in Column 2a or 2b shall be replaced by the date of 1 January 1976 in Column 2b, and in each case a special remark will be entered in the Remarks Column of the Master Register;
- 9. that if the provisions of paragraph 4 of Resolution No. Mar2-10 or those of paragraph 8 of the present Resolution were applied to a frequency assignment, this assignment cannot be re-established with a date in Column 2a unless the administration concerned applies the procedure of Article 9B vis-a-vis all other administrations which have allotments in the same channel entered in the Plan after 1 January 1976 in the first case and 1 January 1978 in the second case;

10. that the revised provisions of Article 9 of the Radio Regulations (Nos. 540 to 551, Nos. 577 to 586 and No. 635) shall enter into force on 1 January 1978. Until that date, administrations and the I.F.R.B. shall apply the relevant provisions of Article 9 as adopted by the Administrative Radio Conference, Geneva, 1959, and mentioned in the Annex to the present Resolution.

ANNEX

Provisions applicable until 1 January 1978 to frequency assignments to coast radiotelephone stations for transmission and for reception in the bands allocated exclusively to the maritime mobile service between 4 000 and 23 000 kHz:

......

540 (5) The provisions of Nos. 537 to 539 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25, 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

- § 19. (1) Examination of Notices concerning Frequency Assignments to Radiotelephone Coast Stations in the Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kHz for Radiotelephone Coast Stations (see No. 500).
- 542 (2) The Board shall examine each notice covered by No. 541 to determine whether the notified assignment is in conformity with an allotment in Section I or Section II of the Allotment Plan contained in Appendix 25 to these Regulations, i.e. whether the frequency, the area of allotment, the power and any limitations are those specified in that Appendix.

543

(3) Any frequency assignment for which the finding is favourable with respect to No. 542 shall be recorded in the Master Register (see also No. 540). The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.

544

(4) If a notice relates to an amendment to an assignment in conformity with an allotment in Section I or Section II of the Allotment Plan, which is only a change in the characteristics (including the frequency) of the emission of a radiotelephone coast station, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the Table in Appendix 17, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.

545

- (5) In the case of a notice which is not in conformity with the provisions of Nos. 542 or 544, the Board shall examine this notice with respect to the probability of harmful interference to the service rendered by a radiotelephone coast station for which a frequency assignment:
 - a) is in conformity with one of the allotments in Section I or II of the Plan and is already recorded in the Master Register or may be so recorded in the future; or
 - b) was recorded in the Master Register on a frequency specified in Appendix 17 as a result of a favourable finding with respect to Nos. 544 or 545; or
 - was recorded in the Master Register on a frequency specified in Appendix 17 after an unfavourable finding with respect to Nos. 544 or 545,

but has not, in fact, caused harmful interference to any frequency assignment to a radiotelephone coast station previously recorded in the Master Register.

546

(6) According to the finding of the Board with respect to No. 545, further action shall be in accordance with the provisions of Nos. 509 to 518 inclusive, or Nos. 532 to 534 inclusive, as appropriate, it being understood that in those provisions No. 545 shall be read for Nos. 501 and 502.

547

§ 20. (1) Examination of Notices concerning Frequencies used for Reception by Radiotelephone Coast Stations in the Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kHz for Radiotelephone Ship Stations (see Nos. 487 and 500).

548

(2) The Board shall examine each notice covered by No. 547 to determine whether the notified assignment corresponds to a frequency associated, according to Appendix 17, with a frequency allotted to the notifying administration under Section I or Section II of the Allotment Plan contained in Appendix 25 to these Regulations.

549

(3) Any frequency assignment for which the finding is favourable with respect to No. 548 shall be recorded in the Master Register. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.

550

(4) Where a notice relates to an amendment to an assignment of a frequency which is associated, according to Appendix 17, with a frequency allotted to the notifying administration under Section I or Section II of the Plan, and this amendment is only a change in the characteristics (including the frequency) of the emission of radiotelephone ship stations, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the

Table in Appendix 17, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.

551 (5) Any assignment of a frequency for reception by a radiotelephone coast station which is not in conformity with No. 548 shall be recorded in the Master Register. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section III of this Article.

- § 27. (1) Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kHz for Radiotelephone Coast Stations.
- 578 (2) If the finding is favourable with respect to No. 542, the date of 3 December 1951 shall be entered in Column 2a in the case of an allotment in Section I of the Plan; in the case of an allotment in Section II, the date of 4 December 1951 shall be entered in Column 2b.
- 579 (3) If the provisions of No. 544 are found to be applicable, the date originally entered in Column 2a or 2b, as the case may be, shall be retained
- 580 (4) For all other cases referred to in No. 541, the relevant date shall be entered in Column 2b (see Nos. 510, 514, 515, 518, 533 and 534).
- 581 (5) For assignments to stations other than radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 525, 526, 530 and 531).

- § 28. (1) Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kHz for Radiotelephone Ship Stations.
- (2) If the finding is favourable with respect to No. 548, the date of 3 December 1951 shall be entered in Column 2a if the associated allotment appears in Section I of the Plan; if it appears in Section II, the date of 4 December 1951 shall be entered in Column 2b.
- 584 (3) If the provisions of No. 550 are found to be applicable, the date originally entered in Column 2a or 2b, as the case may be, shall be retained.
- 585 (4) In all other cases covered by No. 547, the date of receipt of the notice by the Board shall be entered in Column 2b.
- 586 (5) For assignments other than assignments of frequencies for reception by radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 525, 526, 530 and 531).

635 § 47. The provisions of Sections V, VI (excepting No. 619) and VII of this Article shall not be applied to frequency assignments in conformity with the Allotment Plans contained in Appendices 25, 26 and 27 to these Regulations.

RESOLUTION No. Mar2 - 13

Relating to the Use of Single Sideband Technique in the Radiotelephone Maritime Mobile Service Bands between 4 000 and 23 000 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) Recommendation No. 28 and Resolution No. 3 of the Administrative Radio Conference, Geneva, 1959;
- b) Recommendation No. 3 contained in the Final Report of the Panel of Experts convened for the purpose of devising ways and means of reducing the congestion in the bands between 4 and 27.5 MHz, Geneva, 1963;
- c) the desirability of replacing double sideband emissions by single sideband emissions as early as possible in the maritime mobile service bands between 4 000 and 23 000 kHz;
- d) that the preliminary action to achieve the conversion from double sideband emissions to single sideband emissions has been completed in compliance with Resolution No. Mar 6 of the World Administrative Radio Conference, 1967;

resolves

that, unless otherwise specified in the Final Acts of the present Conference, radiotelephone stations in the maritime mobile service operating in the bands between 4 000 and 23 000 kHz shall comply with the following provisions:

1. new installation of double sideband equipment in ship stations shall not be permitted;

- 2. coast stations shall use only single sideband emissions;
- 3. until 1 January 1978, coast and ship stations equipped for single sideband operation shall be able to use class A3H emissions in addition to class A3A and A3J emissions;
- 4. exceptionally, until 1 January 1978, coast and ship stations may use class A3B emission;
- 5. as from I January 1978, class A3A and A3J emissions only shall be authorized.

RESOLUTION No. Mar2 - 14

Relating to the Channel Spacing of Frequencies allocated to the Maritime Mobile Service in the Band 156-174 MHz

(see Appendix 18 and Article 35)

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) the expanding use of the maritime mobile frequencies in the VHF bands between 156 and 174 MHz;
 - b) the increasing demand for VHF channels for port operations;
- c) the increasing demand for VHF channels for public correspondence in the maritime mobile service:

- d) the need for VHF channels for the ship movement service;
- e) the need to provide VHF channels for uses other than radiotelephony, such as facsimile and narrow-band direct-printing telegraphy;
- f) the need to provide VHF channels for communication between helicopters or light aircraft and ships in connection with anti-pollution, search and rescue, ice breaking and the operation of ships;

noting

that, in consequence of the revision of the Radio Regulations (Geneva, 1959) made by the World Administrative Radio Conference, Geneva, 1967,

- a) the channel spacing for the maritime mobile VHF radiotelephone service is being reduced from 50 kHz to 25 kHz;
- b) additional channels have been obtained by interleaving the 25 kHz channels midway between the 50 kHz channels of Appendix 18 to the Radio Regulations, Geneva, 1959, and have been numbered from 60 to 88;
 - c) the 25 kHz channels should be allocated on an international basis:
- d) the transition from a channel spacing of 50 kHz to that of 25 kHz was scheduled as follows:

2.	date by which the modifications specified in paragraph d) 1 shall be completed for all existing equipments 1 January 197
3.	capability to receive transmissions with a maximum deviation of ± 15 kHz and after which the modification of coast station receivers should take place as early as practicable to meet the selectivity requirements for a channel spacing
	of 25 kHz 1 January 1973
4.	date by which all new equipments shall conform to 25 kHz standards 1 January 1975
5.	date by which all equipments shall conform to 25 kHz standards and all interleaved channels may be generally introduced 1 January 1983

resolves

- 1. that administrations may, in areas where this is found to be necessary, authorize the use of channels 60 to 88, excluding channels 75 and 76 which were designated as guard-bands for channel 16;
- 2. that the technical characteristics of equipment for 25 kHz channel spacing in the maritime mobile VHF service shall be in accordance with Appendix 19;
- 3. that, by 1 January 1983, all equipments shall conform to 25 kHz standards; thereafter, all interleaved channels may be generally introduced.

RESOLUTION No. Mar2 - 15

Relating to the Unauthorized Use of Frequencies in the Bands allocated to the Maritime Mobile Service

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that monitoring observations of the use of frequencies in the band $2\,170-2\,194$ kHz and the bands allocated exclusively to the maritime mobile service between 4 063 and 25 110 kHz show that a number of frequencies in these bands are still being used by stations of services other than the maritime mobile service, notably by high-powered broadcasting stations, some of which are operating in contravention of No. 422 of the Radio Regulations;
- b) that these stations are causing harmful interference to the maritime mobile service and that a considerable number of emissions, the sources of which could not be positively identified, were observed in these bands;
- c) that radio is the sole means of communication of the maritime mobile service:

considering in particular

d) that it is of paramount importance that the distress and safety channels be kept free from harmful interference, since they are essential for the protection of the safety of life and property;

resolves to urge administrations

1. to ensure that stations of services other than the maritime mobile service abstain from using frequencies in distress and safety channels and

their guard-bands and in the bands allocated exclusively to that service, except under the conditions expressly specified in Nos. 115, 208, 209, 211, 213 or 415 of the Radio Regulations;

- 2. to continue to make every effort to identify and locate the source of any unauthorized emission capable of endangering human life and property, and to communicate their findings to the I.F.R.B.;
- 3. to participate in the monitoring programmes that the I.F.R.B. may organize pursuant to the present Resolution;
- 4. to request their Governments to enact such legislation as is necessary to prevent stations located off their coasts operating in contravention of No. 422 of the Radio Regulations;

requests the International Frequency Registration Board

- 1. to continue to organize monitoring programmes, at regular intervals, in the distress and safety channels and their guard-bands, and, in the bands allocated exclusively to the maritime mobile service between 4 063 and 25 110 kHz, with a view to identifying the out-of-band stations;
- 2. to take the necessary steps with a view to the elimination of the emissions of out-of-band stations which cause or are likely to cause harmful interference to the maritime mobile service:
- 3. to seek, as appropriate, the cooperation of administrations in identifying the sources of out-of-band emissions by all available means, and in securing the cessation of these emissions.

RESOLUTION No. Mar2 - 16

Relating to References in the Radio Regulations and Additional Radio Regulations to the Telegraph Regulations and the Telephone Regulations, Geneva, 1958

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that the Telegraph Regulations and the Telephone Regulations, Geneva, 1973, enter into force on 1 September 1974;
- b) that the revised provisions of the Radio Regulations and Additional Radio Regulations adopted by this Conference will not enter into force until some time after 1 September 1974;

resolves

that in the period between 1 September 1974 and the date of entry into force of the revised provisions of the Radio Regulations and Additional Radio Regulations, references in the Radio Regulations and the Additional Radio Regulations to the Telegraph Regulations and Telephone Regulations shall be considered as referring to the Telegraph Regulations and the Telephone Regulations, Geneva, 1958, including the annexed Final Protocols.

RESOLUTION No. Mar2 - 17

Relating to the Establishment of a Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that provision has been made in Appendix 11 to the Radio Regulations for the carriage by ship stations of a manual for use by the maritime mobile and maritime mobile-satellite services;
- b) that the World Administrative Telegraph and Telephone Conference, Geneva, 1973, revised the Telegraph Regulations and the Telephone Regulations, and adopted new provisions to meet the requirements of the telegraph and telephone services including the transfer of certain provisions from the Regulations to the C.C.I.T.T. Recommendations;

resolves

- 1. that those provisions of
 - a) the Radio Regulations (including Appendices thereto) and the Additional Radio Regulations, as revised by the World Maritime Administrative Radio Conference, Geneva, 1974,
 - b) the Telegraph Regulations and the Telephone Regulations,
 - c) the International Telecommunication Convention, and
 - d) the C.C.I.T.T. Recommendations of the Vth C.C.I.T.T. Plenary Assembly, Geneva, 1972,

which are applicable or useful to stations in the maritime mobile and maritime mobile-satellite services shall be assembled by the Secretary-General for inclusion in a revision of the manual entitled "Manual for Use by the Maritime Mobile Service" published in 1968;

- 2. that the Secretary-General shall publish a revision of this manual in the form of loose-leaf amendments, bearing a new title "Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services" and shall make it available at least six months prior to the date of entry into force of the revisions adopted by the present Conference;
- 3. that the Secretary-General may consult the following administrations on questions relating to tasks entrusted to him in accordance with paragraphs 1 and 2 above:

United States of America
France
Italy
Kingdom of the Netherlands
United Kingdom of Great Britain and
Northern Ireland
Sweden;

4. that the Secretary-General shall publish such amendments, as are applicable, of the C.C.I.T.T. Recommendations after each C.C.I.T.T. Plenary Assembly.

RESOLUTION No. Mar2 - 18

Relating to Technical Cooperation with the Developing Countries in Maritime Telecommunications

The World Maritime Administrative Radio Conference, Geneva, 1974,

noting

that the assistance the Union has commenced to render to developing countries, in the field of maritime telecommunications, in collaboration with other organizations, notably the Inter-Governmental Maritime Consultative Organization (I.M.C.O.), has been promising;

conscious of

- a) the need for the developing countries to increase their own shipping activities and attract foreign maritime traffic in order to develop their trade;
- b) the important role that telecommunications play in maritime activities throughout the world, from the economic and safety aspects;
- c) the possibility of providing adequate safety and improved economy in shipping activities by a relatively modest investment in the installation and operation of maritime telecommunication facilities;

considering

- a) that in many developing countries there is a need to increase the efficiency of the services for:
 - safety of navigation and safety of life at sea;
 - commercially viable port operations; and
 - public correspondence for passengers and crews;
- b) that in this regard the Union's technical cooperation activities could be extended to render very valuable assistance to these countries;

resolves to request the Secretary-General

1. to offer the assistance of the Union to the developing countries endeavouring to improve their maritime telecommunications, especially by providing technical advice in the establishment, operation and maintenance of equipment and by assisting in training staff;

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2. in this context, to seek the collaboration of I.M.C.O., the United Nations Conference for Trade and Development (UNCTAD) and other specialized agencies of the United Nations, as appropriate; and

3. to seek the aid of the United Nations Development Programme and other sources of financial support, to enable the Union to render sufficient and effective technical assistance in the field of maritime telecommunications, when necessary in collaboration with other specialized agencies concerned;

to urge Member countries

to support, to the extent of their capabilities and their technical advancement, the Union's technical cooperation with the developing countries in the field of maritime telecommunications by facilitating the recruitment of experts for missions to and in developing countries, by receiving students from developing countries who have been awarded a fellowship by the Union, by providing lecturers to seminars arranged by the Union and, upon request, by giving technical advice to the Union;

to invite the developing countries

to include, as needed, in their country programmes for external technical assistance, projects in the field of maritime telecommunications and to support inter-country projects in this field.

RESOLUTION No. Mar2 – 19

Relating to the Introduction of a Digital Selective Calling System to meet the Requirements of the Maritime Mobile Service

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that there is an urgent need for a single digital selective calling system to provide for the world-wide requirements of the maritime mobile service:
- b) that the Inter-Governmental Maritime Consultative Organization (I.M.C.O.) had indicated to the present Conference, as well as to the C.C.I.R., its requirements for a general purpose selective calling system capable of facilitating the transmission and reception of all communications;
- c) that Articles 7, 19, 28A, 32, 33 and 35 of the Radio Regulations provide for the use of such a system;
- d) that the studies, in response to C.C.I.R. Question 9/8, concerning the operational and technical characteristics of such a system, are in an advanced stage;
- e) that in the Radio Regulations, the technical provisions relating to systems are mainly based upon the Recommendations of the C.C.I.R.;
- f) that Plenary Assemblies of the C.C.I.R. are held triennially whereas Administrative Radio Conferences, which are empowered to modify the Radio Regulations making substantial use of the Recommendations of the C.C.I.R., are held less frequently and less regularly;

is of the opinion

- a) that the Plenary Assemblies of the C.C.I.R. are likely to make appropriate Recommendations as to the operational and technical characteristics of a single digital selective calling system;
- b) that administrations should be afforded the opportunity to take advantage of the current C.C.I.R. Recommendations on selective calling systems for the maritime mobile service;

¹I.M.C.O. Resolution No. A.283 (VIII)

therefore resolves that

- 1. the C.C.I.R. be invited, in response to Question 9/8, to complete its studies and establish as soon as possible Recommendations for the operational and technical characteristics of a digital selective calling system;
- 2. each Plenary Assembly of the C.C.I.R. should arrange for the Secretary-General of the I.T.U. to be informed of those Recommendations of the C.C.I.R. which affect the operational and technical criteria relating to the introduction of a single digital selective calling system for the maritime mobile service;
- 3. following the distribution to administrations of the relevant C.C.I.R. texts, the Secretary-General shall write to administrations asking them to indicate within 120 days which of the C.C.I.R. Recommendations, or which specific operational and technical criteria defined in the Recommendations referred to in 1 above, they agree to use in applying the pertinent provisions of the Radio Regulations;
- 4. after this period the Secretary-General shall distribute to administrations a summary of the replies received.

RESOLUTION No. Mar2 - 20

Relating to the Use of Class A3A and A3J Emissions for Distress and Safety Purposes on the Carrier Frequency 2 182 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

noting

- a) that the Radio Regulations require the use on the carrier frequency 2.182 kHz of:
 - class A3 or A3H emissions by ship, aircraft and survival craft stations;
 - class A3H emissions by coast stations;
 - the classes of emission, specified in Appendix 20A, by emergency position-indicating radiobeacons;
- b) that the main object of these provisions is to maintain reliable distress and safety communications by using proven techniques;

noting also

- a) the Final Report of the Panel of Experts, Geneva, 1963;
- b) the relevant C.C.I.R. studies concerning single sideband techniques, in particular those relating to Question 19/8;

recognizing

that the use of class A3A and A3J emissions on the carrier frequency 2 182 kHz would provide the operational advantages inherent in single sideband techniques;

considering

a) that a large number of equipments employing class A3 and A3H emissions will still be in use for distress and safety purposes on 1 January 1982;

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b) that single sideband equipment must be designed to work with closer frequency tolerances and higher technical standards than those necessary for double sideband equipment;

- c) that equipment designed for safety purposes, particularly survival craft equipment, should:
 - be capable of reliable operation in varying environments, and after long periods of storage;
 - be easy to operate by an inexperienced person in all circumstances;
 - be relatively low priced;
- d) that the requirement for direction-finding and homing must be satisfied:
- e) that the need to transmit and receive the two-tone radiotelephone alarm signal, including signals from emergency position-indicating radiobeacons, must also be satisfied, taking into account the frequency tolerances in Appendix 20A and the relevant C.C.I.R. Recommendations;

resolves

- 1. that study of the use of class A3A and A3J emissions for distress and safety purposes is required;
- 2. that this study should be completed in time for a decision on the date for the final conversion to class A3A and A3J emissions on the carrier frequency 2 182 kHz to be made by the next competent World Administrative Radio Conference;

requests the C.C.I.R.

to study the above-mentioned subject as a matter of urgency and, if possible, to issue Recommendations sufficiently in advance of the above-mentioned conference:

requests the Secretary-General

to communicate this Resolution to the Inter-Governmental Maritime Consultative Organization;

invites the Inter-Governmental Maritime Consultative Organization

to consider the matter as part of the study currently being undertaken of the maritime distress and safety system.

RESOLUTION No. Mar2 - 21

Relating to the Use of Class A3A and A3J Emissions on the Carrier Frequencies 4 136.3 kHz and 6 204 kHz used to Supplement the Carrier Frequency 2 182 kHz for Distress and Safety Purposes

The World Maritime Administrative Radio Conference, Geneva, 1974,

noting

- a) that the Radio Regulations permit, until 1 January 1984, the use, on the carrier frequencies 4 136.3 kHz and 6 204 kHz, of class A3H emissions by coast, ship and aircraft stations (see No. 1351I of the Radio Regulations);
- b) that the main object of these provisions is to maintain reliable distress and safety communications using proven techniques;

noting also

a) the Final Report of the Panel of Experts, Geneva, 1963;

As from 1 January 1978 these frequencies are to be replaced by the carrier frequencies 4 125 kHz and 6 215.5 kHz, respectively.

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b) relevant C.C.I.R. studies concerning single sideband techniques, in particular, those relating to Question 19/8;

recognizing

that the use of class A3A and A3J emissions on the carrier frequencies 4 136.3 kHz and 6 204 kHz¹ would provide the operational advantages inherent in single sideband techniques;

considering

- a) that a large number of equipments employing class A3H emissions will still be in use for distress and safety purposes after 1 January 1978;
- b) that equipment employing class A3A and A3J emissions must be designed to work with closer frequency tolerances and higher technical standards than those necessary for equipment employing class A3H emission and envelope detection in the receiver;
- c) that equipment designed for safety purposes should, in all circumstances, be capable of reliable operation and be easy to operate by an inexperienced person;

resolves

that study is required of the use of class A3A and A3J emissions for distress and safety purposes and that this study should be completed in advance of the agreed date for the cessation of class A3H emissions on the carrier frequencies 4 125 kHz and 6 215.5 kHz;²

¹ As from 1 January 1978 these frequencies are to be replaced by the carrier frequencies 4 125 kHz and 6 215.5 kHz, respectively.

 $^{^2}$ These frequencies will have replaced the carrier frequencies 4 136-3 kHz and 6 204 kHz as from 1 January 1978.

requests the C.C.I.R.

to study this subject as a matter of urgency and, if possible, to issue Recommendations well in advance of the next competent World Administrative Radio Conference:

requests the Secretary-General

to communicate this Resolution to the Inter-Governmental Maritime Consultative Organization;

invites

- 1. the Inter-Governmental Maritime Consultative Organization to consider the matter as part of the study currently being undertaken of the maritime distress and safety system;
- 2. the next competent World Administrative Radio Conference to consider this matter further.

RESOLUTION No. Mar2 - 22

Relating to Accounting for Public Correspondence in Maritime Radiocommunications

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

a) that the existing methods of accounting for public correspondence in maritime radiocommunications are complex and expensive for

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administrations and the recognized private operating agencies concerned with such accounting.

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

resolves

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

requests the C.C.I.T.T.

- 1. to undertake a study of the annexed question as a matter of urgency with a view to reducing, as soon as possible, the work load upon administrations and recognized private operating agencies concerned with radio-maritime accounting;
- 2. to ask administrations to send delegates particularly concerned with maritime accounting to the relevant Study Group meetings;

3. to ensure that the results of the study are included in the Study Group Reports to its Sixth Plenary Assembly in 1976 and that these Reports, as approved by that Plenary Assembly, are distributed to the administrations of all Members of the Union before 1 January 1977 to enable them to prepare proposals for the World Administrative Radio Conference foreseen for 1979;

invites

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

ANNEX

NEW QUESTION TO THE C.C.I.T.T.

What amendments to the principles and methods of accounting for public correspondence in maritime radiocommunications are necessary to improve present methods, including accounting for ship charges, and to provide for foreseeable future developments?

RESOLUTION No. Mar2 - 23

Relating to the Interpretation of the Provisions affecting the Public Correspondence Services

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that the World Administrative Telegraph and Telephone Conference, Geneva, 1973, has adopted simplified Telegraph Regulations and Telephone Regulations containing basic provisions only;
- b) that the above Conference has transferred detailed provisions concerning operational and rate-fixing procedures from the Telegraph Regulations and the Telephone Regulations, to the C.C.I.T.T. Recommendations;
- c) that the above Conference, in pursuance of Resolution No. 37 of the Plenipotentiary Conference, Montreux, 1965, had taken steps (see Article 13 of the Telegraph Regulations and Article 9 of the Telephone Regulations) to introduce into the Telegraph Regulations and into the Telephone Regulations:
 - such provisions, if any, as the present Conference may deem necessary to incorporate into these Regulations;
 - such provisions of the Radio Regulations and Additional Radio Regulations (1971 Revision) as the present Conference may see fit to transfer;
 - any amendment of the provisions or any new provisions of the Radio Regulations or the Additional Radio Regulations adopted by the present Conference;
- d) that the World Administrative Telegraph and Telephone Conference, Geneva, 1973, foresaw that difficulties might arise from the foregoing (see Opinion No. 2 of the Telegraph Regulations and Opinion No. 3 of the Telephone Regulations);
- e) that in implementing the principles of the Regulations (Article 1 of the Telegraph and of the Telephone Regulations), administrations and recognized private operating agencies should comply with the C.C.I.T.T. Recommendations, including any instructions forming part of those Recommendations;

- f) that the Telegraph and Telephone Regulations shall apply to radiocommunications in so far as the Radio Regulations and the Additional Radio Regulations do not provide otherwise;
- g) that various administrations, for example those of Denmark, Norway and Sweden, have submitted to the present Conference detailed proposals for revision of all or part of Chapter IX of the Radio Regulations, and of the Additional Regulations;

recognizing

- a) that Chapter IX of the Radio Regulations and the Additional Radio Regulations in particular contain many provisions which stem from previous Telegraph and Telephone Regulations and in many cases are simply duplications of provisions in the said Regulations;
- b) that with certain exceptions the radio traffic in the maritime mobile service is handled in accordance with the requirements of the Telegraph and Telephone Regulations and the related C.C.I.T.T. Recommendations;
- c) that the provisions of the Radio Regulations and the Additional Regulations, as revised by the present Conference, will remain in force for the next six to seven years:
- d) that the corresponding provisions which are now to be found in the C.C.I.T.T. Recommendations will be amended because their nature makes them more easily adaptable according to changing operating conditions, and because the C.C.I.T.T. has been instructed by the World Administrative Telegraph and Telephone Conference, Geneva, 1973, to continue to study the questions in the study programme concerning the simplification of the public telegram service and the revision or elaboration of Recommendations relating to the telex service;
- e) that difficulties may arise from this situation if no action is taken by this Conference;

resolves

that a study of those parts of Chapter IX of the Radio Regulations and of the Additional Radio Regulations not already included in the study carried out in accordance with Resolution No. Mar2-22, should be undertaken with a view to the inclusion of these parts in the C.C.I.T.T. Recommendations:

requests the C.C.J.T.T.

- 1. to undertake a study of the annexed Question as a matter of urgency;
- 2. to ask administrations to send representatives particularly concerned with the maritime public correspondence services to take part in this study;

recommends

- 1. that the results of the study be included in the Study Group Reports to the Sixth Plenary Assembly of the C.C.I.T.T. in 1976 and that these Reports, as approved by that Assembly, be distributed to the administrations of all Members of the Union before 1 January 1977 to enable them to prepare proposals for the World Administrative Radio Conference foreseen for 1979, on what provisions, if any, should be included in the Radio Regulations;
- 2. that administrations and recognized private operating agencies bring into use the amended C.C.I.T.T. texts as soon as possible, following their approval by the C.C.I.T.T. Plenary Assembly.

ANNEX

NEW QUESTION TO THE C.C.I.T.T.

To what extent is it useful and desirable to revise those parts of Chapter IX of the Radio Regulations and those of the Additional Radio Regulations not already included in the study carried out under Resolution No. Mar2-22 and to transfer them to the C.C.I.T.T. Recommendations?

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RECOMMENDATION No. Mar2 - 1

Relating to the Use of Low Power Radiolocation Stations in the Bands between 1 605 and 2 850 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that in many coastal areas there is an increasing need for short-range radiolocation facilities providing an accuracy of a few metres;
- b) that, for physical reasons and in view of the multi-user mode of operation required, this need can best be met in the frequency bands between 1 605 and 2 850 kHz;
- c) that these radiolocation stations require low powers, narrow bandwidths and small portions of the frequency spectrum widely spread over the bands mentioned so as to accommodate several stations in the same area;
- d) that owing to the present provisions of the Table of Frequency Allocations many of these stations are only able to operate subject to the uncertainties arising from No. 115 of the Radio Regulations;
- e) that the present Conference is not in a position to alter this situation:

invites administrations

1. to study the possibility of affording adequate protection for low power radiolocation stations operating in coastal areas, e.g. by providing a limited number of specific frequencies for this purpose in the bands between 1 605 and 2 850 kHz;

2. to submit proposals on this matter for consideration by the next appropriate World Administrative Radio Conference;

recommends

that in the meantime countries should explore the possibility of concluding bilateral, multilateral or regional arrangements to provide adequate protection for these stations.

RECOMMENDATION No. Mar2 - 2

On the Choice of a Frequency in the Mobile Maritime Bands between 1 605 and 3 800 kHz to be reserved for Safety Requirements

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that MF radiotelephony is of increasing usefulness for the safety of ships since:
 - the International Convention on Safety of Life at Sea (London, 1960) requires that cargo ships of 300 tons gross tonnage and upwards but less than 1,600 tons gross tonnage, unless fitted with a radiotelegraph station, shall be fitted with a radiotelephone station;
 - ii) the Inter-Governmental Maritime Consultative Organization recommends ¹ that ships compulsorily fitted with either a radiotelegraph (i.e. 1,600 tons gross tonnage and upwards) or a radiotelephone installation shall have in addition facilities for listen-

¹ Resolution A.217 (VII).

ing continuously, while at sea, on the radiotelephone distress frequency; that the fitting of radiotelegraph ships with a radiotelephone transmitter capable of operating in the 2 MHz band should be encouraged; and that each administration should consider introducing a national requirement that ships to which the Convention on Safety of Life at Sea (London, 1960) does not apply should be fitted with a radiotelephone distress frequency watch receiver;

- b) that, notwithstanding, in many areas the watch on the MF radiotelephone distress frequency is very difficult because of the large number of routine traffic calls sent on that frequency;
- c) that similar difficulties would occur even if watch and alarm systems more advanced than those used at present were adopted;
- d) that in some areas MF radiotelephone traffic is constantly increasing;

requests

the C.C.I.R. to undertake, as a matter of urgency, the study of the technical and operational aspects of these matters;

recommends

that the next appropriate World Administrative Radio Conference determine, in the light of the results of the work of the C.C.I.R.:

- a) a frequency reserved for transmitting to the exclusion of any routine traffic calls distress calls and messages and, possibly, urgency signals and messages, safety signals and certain safety messages;
- b) a frequency, different from the preceding, for voice or selective calling for routine traffic;
 - c) suitable guard-bands for both these frequencies.

Relating to the Improvement of the Present Use by the Maritime Mobile Service of the Bands between 1 605 and 4 000 kHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that the present distribution of frequencies to stations of the maritime mobile service in the bands betwenn 1 605 and 4 000 kHz derives its origin from the Plans and Lists adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, but that, since 1959, the assignment of frequencies to such stations is governed by the procedure of Article 9 of the Radio Regulations;
- b) that consequently no plan for assignments in the maritime mobile service bands between 1 605 and 4 000 kHz is now in force;
- c) that the present situation in these bands entails considerable draw-backs such as:
 - no fixed channel spacing,
 - no fixed duplex frequency spacing, and
 - no international shore-to-ship, ship-to shore and intership channels;
- d) that the introduction of single sideband technique in the maritime mobile radiotelephone service on the basis of the provisions of Resolution No. Mar 5 of the World Administrative Radio Conference, Geneva, 1967, has already started, and that the conversion from double sideband to single sideband will continue in accordance with the time-table and the supplementary technical specifications adopted by that Conference and as amended by the present Conference;

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e) that the introduction of the single sideband technique will only partly remove the existing drawbacks;

- f) the desirability of achieving a more effective use of the frequency bands allocated to the maritime mobile service between 1 605 and 4 000 kHz, for example, by:
 - creating an international channel plan, preferably for all these bands allocated to the maritime mobile service;
 - using, where necessary, paired single sideband assignments with fixed channel spacing;
 - establishing an appropriate world-wide frequency assignment plan or regional plans;
- g) that the present Conference is not authorized to deal with all the tasks referred to in f) above;
- h) that it is desirable to have proposals for the technical bases for the work to be undertaken;

invites administrations

to study the problem and to communicate to the Union the results of their studies together with their views and proposals;

recommends

that the next competent World Administrative Radio Conference study:

- the establishment of a channel plan which should include some common international shore-to-ship, ship-to-shore and intership channels, to be used by the maritime mobile service in the bands between 1 605 and 4 000 kHz;
- the means for establishing as soon as possible, if necessary after the Conference, regional assignment plans which take account of the world-wide needs of the maritime mobile service;

consequently invites

the Administrative Council to include in the draft agenda of the next competent World Administrative Radio Conference such items as will enable that Conference to take the necessary decisions.

RECOMMENDATION Mar2 - 4

Relating to the Use of the Carrier Frequencies 4 136.3 kHz and 6 204 kHz¹ to supplement the Carrier Frequency 2 182 kHz for Distress and Safety and for Call and Reply Purposes in the Zone of Regions 1 and 2 South of Latitude 15° North, but including Mexico, and in the Zone of Region 3

South of Latitude 25° North

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that in some areas of the world it is not practicable to provide reliable coverage for distress and safety purposes on the international radiotelephony distress frequency 2 182 kHz, because of the great distances between coast stations keeping watch on this frequency;
- b) that a large number of ships equipped only for radiotelephony make voyages in these areas during which they are often out of range of coast stations keeping watch on the carrier frequency 2 182 kHz;
- c) that to overcome this problem many administrations in the above-mentioned zones have established watches at their coast stations for distress and safety and for call and reply purposes on the carrier frequencies 4 136.3 kHz and 6 204 kHz; and that these watches have proved to be effective supplements to those kept on 2 182 kHz;

¹ As from 1 January 1978, the carrier frequencies 4 136·3 kHz and 6 204 kHz are to be replaced by the carrier frequencies 4 125 kHz and 6 215·5 kHz, respectively.

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d) that provision is made in the Radio Regulations for the carrier frequency 4 136.3 kHz¹ to be used in the zone of Regions 1 and 2 south of latitude 15° North, including Mexico, and in the zone of Region 3 south of latitude 25° North and also for the carrier frequency 6 204 kHz¹ to be used in the zone of Region 3 south of latitude 25° North as supplementary frequencies to 2 182 kHz for distress and safety and for call and reply purposes;

e) that it could be in the interests of ships equipped only for radiotelephony and operating in these zones to have facilities to send and receive on the carrier frequencies 4 136.3 kHz and 6 204 kHz 1 when calls on 2 182 kHz might be ineffective;

recommends

- 1. that administrations bring to the notice of the operators of ships under their jurisdiction which are equipped only for radiotelephony that certain land stations as indicated in the List of Coast Stations provide facilities for distress and safety and for call and reply purposes on the carrier frequency 4 136·3 kHz¹ to supplement the carrier frequency 2 182 kHz in the zone of Regions 1 and 2 south of latitude 15° North, including Mexico, and in the zone of Region 3 south of latitude 25° North and also for the carrier frequency 6 204 kHz¹ to be used in the zone of Region 3 south of latitude 25° North;
- 2. that administrations whose ships are equipped only for radiotelephony consider that, although it is not mandatory for ship and coast stations to provide facilities for sending and receiving on the carrier frequencies 4 136.3 kHz and 6 204 kHz, ¹ it may be essential for the safety of radiotelephony ships operating in the above-mentioned zones to have such facilities.

¹ As from 1 January 1978, the carrier frequencies 4 136-3 kHz and 6 204 kHz are to be replaced by the carrier frequencies 4 125 kHz and 6 215-5 kHz, respectively.

Relating to the Introduction of an Additional Tone after the Radiotelephone Alarm Signal transmitted by Coast Stations

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that coast stations receive numerous radiotelephone alarm signals which cannot be identified because no voice announcement follows the alarm or because the announcement is unintelligible owing to low modulation or interference:
- b) that coast stations have an obligation to take action to identify all alarm signals received and to alert search and rescue services for subsequent action:
- c) that many radiotelephone alarm signals which precede the MAYDAY RELAY announcement are from coast stations at considerable distances from the receiving coast stations;
- d) that it could be of considerable value if the radiotelephone alarm signal transmitted by coast stations were distinguishable from that transmitted by ship stations;

recognizing

- a) that no characteristics introduced to distinguish the radiotelephone alarm signal transmitted by coast stations from that transmitted by ship stations should affect the normal reception of the radiotelephone alarm signal;
- b) that proposals have been made to the present Conference to add a single tone following the radiotelephone alarm signal transmitted by coast stations, and that practical tests conducted in the North Sea area during the present Conference indicate that a 1 300 Hz tone for a period of 10 seconds is suitable:

REC Mar2-6 427

c) that the cost of the necessary changes to existing equipment in coast stations is expected to be small;

recommends

that the radiotelephone alarm signal transmitted by coast stations be followed by a single tone of 1 300 Hz, for a period of 10 seconds (see No. 1466AA).

RECOMMENDATION No. Mar2 – 6

Relating to the Frequencies in Appendix 17, Section C, and Appendix 17 Rev., Section B of the Radio Regulations, provided for World-Wide Use by Ships of all Categories and by Coast Stations

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that the frequencies indicated in the table of single sideband transmitting frequencies for simplex (single-frequency) operation and for intership cross-band (two-frequency) operation are not yet in world-wide use for communications between ship and coast stations;
- b) that there is a world-wide need for ocean-going vessels to be able to communicate with coast stations of any administration;

recommends

- 1. that, as far as possible, administrations provide a service on these frequencies at their main coast radiotelephone stations;
- 2. that administrations notify to the Secretary-General the particulars of these services for publication in the List of Coast Stations in accordance with Nos. 815 and 924 of the Radio Regulations.

RECOMMENDATION No. Mar2 - 7

Relating to the Improved Use of the HF Radiotelephone Channels for Coast Stations in the Bands allocated exclusively to the Maritime Mobile Service

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that a large number of requests for HF radiotelephony allotments was submitted to the Conference;
- b) that the number of channels resulting from the revision of Appendix 17 is not sufficient to satisfy these requirements in optimum conditions;
- c) that the resulting sharing patterns have been formed mainly by operational considerations;
- d) that after the present Conference the optimal use of the HF radiotelephony channels in the bands allocated exclusively to the maritime mobile service will be of even greater importance;
- e) that on each channel administrations should afford one another an equivalent quality of service;

f) that technical means are being developed to facilitate the common use of frequencies by neighbouring coast stations of different administrations or by a coast station operating on behalf of more than one administration, and that these may soon become available;

recommends

- 1. that administrations make every effort to reach mutually satisfactory operational arrangements, which may include:
 - different time-sharing arrangements;
 - differentiated hours of opening;
 - on a voluntary and regional basis, the use of HF radiotelephone channels in an order of overflow priority;
- 2. that administrations employ every practicable means, which may include those mentioned above, to ensure that the best possible use is made of the HF coast radiotelephone channels in the bands allocated to the maritime mobile service:

invites administrations

- 1. when assigning frequencies in the HF bands to coast stations, to take into account the special rules contained in No. 413 and the provisions of No. 694 of the Radio Regulations;
- 2. to ensure that coast stations:
 - use the frequency band and the minimum power appropriate to the propagation conditions and the nature of the service;
 - use directional antennae whenever possible;
 - give appropriate instructions to ship stations in accordance with No.
 1291 of the Radio Regulations;

requests the C.C.J.R.

- 1. to study all technical and operational sharing criteria relating to the use of HF coast radiotelephone channels in the bands allocated exclusively to the maritime mobile service, including the choice of available channels by electronic or other means to facilitate multiple access to the channels, and to complete this study before the next competent World Administrative Radio Conference;
- 2. to make every effort to obtain provisional results of this study as soon as possible, and in any case not later than 1 July 1976, with a view to facilitating the application of Resolution No. Mar2 11.

RECOMMENDATION No. Mar2 - 8

Relating to the Use of Frequency Bands between 23 000 and 27 500 kHz by the Maritime Mobile Service

The World Maritime Administrative Radio Conference, Geneva, 1974.

- a) that the 25 MHz band is very useful for the long-distance maritime radiocommunications;
- b) that the present exclusive frequency allocations in the 25 MHz band to the maritime mobile service are not sufficient to meet the growing needs of maritime radiotelephony and narrow-band direct-printing in that band;
- c) that the frequency bands between 25 010 and 25 070 kHz, 25 110 and 25 600 kHz and 26 100 and 27 500 kHz are allocated to the maritime mobile service on a shared basis with other services:

d) that with such shared use there is a possibility of harmful interference over long distances between assignments of different services and that the radio spectrum is not utilized in a rational way;

recommends

1. that administrations, when making frequency assignments to stations of the maritime mobile service operating in the bands 25 010 - 25 070 kHz and 26 100 - 26 174.1 kHz, should do so in accordance with the following distribution:

Frequency band

Use

25 010 - 25 070 kHz

Ship stations, telephony, duplex operation; 19 channels spaced 3·1 kHz, with the first carrier frequency at 25 010·5 kHz and the last carrier frequency at 25 066·3 kHz.

26 100 - 26 160 kHz

Coast stations, telephony, duplex operation; 19 channels spaced 3.1 kHz with the first carrier frequency at 26 101 kHz and the last carrier frequency at 26 156.8 kHz.

26 160 - 26 174 · 1 kHz

Coast stations, narrow-band direct-printing telegraphy and data transmission systems (frequencies paired with those in the 25 076 – 25 090·1 kHz band); 28 channels spaced 0·5 kHz, with the first assignable frequency at 26 160·3 kHz and the last assignable frequency at 26 173·8 kHz;

2. that administrations take the afore-mentioned distribution into account when submitting proposals to the next competent World Administrative Radio Conference.

Relating to a Study of the Feasibility of expanding the High-Frequency Bands allocated to the Maritime Mobile Service

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that the maritime mobile high-frequency bands are heavily loaded;
- b) that traffic requirements of the maritime mobile service in these bands are steadily rising;
- c) that ships at sea are completely dependent upon the use of radio for all their telecommunications;
- d) that because of technical developments, some other services now route part of their traffic by other means, e.g. microwave, cable and satellite;
- e) that as a result of these developments the need of these services for high-frequency allocations may have diminished;

considering further

that the present Conference is not competent to deal with frequency bands other than those already allocated to the maritime mobile service;

recommends

that administrations study the problem and take into account the needs of the maritime mobile service for increased allocations in the high-frequency bands when preparing their proposals for the next competent World Administrative Radio Conference.

Relating to the Establishment of a Watch by Coast Stations for Distress Purposes on the Frequency 156.8 MHz

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that the frequency 156.8 MHz has been designated as the international distress frequency for stations in the maritime mobile service operating in the authorized bands between 156 and 174 MHz;
- b) that this frequency is most useful for short range communication and its use in distress situations will materially improve the safety of life at sea, particularly in areas of heavy traffic where an efficient listening watch can be maintained:
- c) that many administrations already provide radio coverage of their coasts on frequencies in the band 156 174 MHz;
- d) that, however, it would be impracticable or unnecessary for some administrations in their prevailing circumstances to provide sufficient coverage of their coasts in the band 156-174 MHz to enable an effective watch to be kept on 156.8 MHz for distress purposes;

recommends

that administrations, where they consider it necessary and practicable, take steps to establish a watch for distress purposes on the coasts of their countries on the frequency 156.8 MHz.

Relating to the Use of Channels 15 and 17 of Appendix 18 by On-Board Communication Stations

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that channels 15 and 17 of Appendix 18 were provided by the World Administrative Radio Conference, Geneva, 1967, for use for internal operational communications on board ships within territorial waters and with an effective radiated power not in excess of 0·1 W, and that this power limit has been raised to 1 Watt by the present Conference;
- b) that considerable use is made of these channels by a number of administrations;
- c) that some administrations have not used these channels for onboard communication because of the shortage of VHF channels for other maritime mobile needs:
- d) that, for the same reason, these administrations wish to have the use of these channels for on-board communication discontinued;

recognizing

- a) that several common channels for on-board communication are necessary internationally to meet world-wide requirements in the future;
- b) that there may be a need for frequencies to provide for the use of repeater stations on large vessels, such as container ships, tankers, etc.;
- c) that additional experience concerning the application and effectiveness of the UHF channels made available for this purpose by the present Conference may be required;

recommends

1. that the next competent World Administrative Radio Conference. determine whether the use of channels 15 and 17 of Appendix 18 is still necessary for on-board communication and, if it is not, the date by which such use should cease;

- 2. that the same Conference review the UHF channels being used for on-board communication stations to determine whether the number of channels and their location in the radio spectrum are satisfactory and meet the requirements of such stations;
- 3. that the same Conference consider the need for additional allocations for use by on-board communication stations on a world-wide basis, including the territorial waters of all countries;
- 4. that due consideration be given by administrations to the technical standards and functioning of such stations to ensure their mutual compatibility in an effective international system of operation;

requests the C.C.J.R.

to study the question whether UHF frequencies can meet the technical and operational requirements of on-board communication stations and report its findings to the next competent World Administrative Radio Conference.

Relating to the Future Use and Characteristics of Emergency Position-Indicating Radiobeacons

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) that according to Article 36 of the Radio Regulations the essential purpose of the emergency position-indicating radiobeacon (EPIRB) signals is to facilitate determining the position of survivors in search and rescue operations;
- b) that Inter-Governmental Maritime Consultative Organization (I.M.C.O.) Resolution A.91 (IV) provides that EPIRBs are intended primarily for homing; however, they may be used for alerting in appropriate circumstances:
- c) that I.M.C.O. Resolution A.217 (VII) recommends that administrations require all ships and vessels, where appropriate, to be equipped with EPIRBs operating on the most appropriate radio frequencies;
- d) that I.M.C.O. is considering compulsory fitting of EPIRBs on all passenger ships and cargo ships of 300 tons gross tonnage and upwards;

considering in particular

that I.M.C.O. has stressed in Resolution A.279 (VIII) the urgent need for unification of the characteristics of EPIRBs;

recognizing

- a) that there are provisions in the Radio Regulations for EPIRBs on the frequencies 2 182 kHz, 121.5 MHz and 243 MHz;
- b) that the World Administrative Radio Conference for Space Telecommunications, Geneva, 1971, in the case of EPIRBs, reserved the

frequency band $406 - 406 \cdot 1$ MHz for the mobile-satellite service solely for the use and development of low-power EPIRB systems using space techniques;

- c) that I.M.C.O. Resolution A.91 (IV) recommends the carrier frequency 2 182 kHz as the first choice operational frequency for EPIRBs;
- d) that the technical characteristics of EPIRBs operating on the carrier frequency 2 182 kHz are contained in Article 36 and Appendix 20A of the Radio Regulations and in C.C.I.R. Recommendation 439;
- e) that Resolution No. Mar 7 of the World Administrative Radio Conference, Geneva, 1967, resolved that EPIRBs operating on the frequencies 121.5 MHz and 243 MHz shall comply with the relevant C.C.I.R. recommendations and the standards and recommended practices of the International Civil Aviation Organization (I.C.A.O.);

recommends

- 1. that in view of their inter-relationship in this matter, I.M.C.O. and I.C.A.O. be invited, as a matter of urgency, to review their concepts for EPIRBs in regard to search and rescue operations and the safety of life at sea:
- 2. that the C.C.I.R. be requested, when I.M.C.O. and I.C.A.O. have stated their concepts, to study technical and operating questions for EPIRBs, including the preferred frequencies, in particular relation to the prime requirement for homing and the technical characteristics of such beacons with regard to the requirement for unification;

requests the Secretary-General

to communicate this Recommendation to the attention of I.M.C.O. and I.C.A.O.

Relating to the Development of Fixed Frequency Radar Beacons (Racons)

The World Maritime Administrative Radio Conference, Geneva, 1974,

having adopted

provisions relating to the development of fixed frequency radar beacons (racons) in the maritime radionavigation service in the two frequency bands $2\,900-2\,920$ MHz and $9\,300-9\,320$ MHz;

- a) that a ship's navigation can often be improved and groundings prevented with the proper use of the ship's radar;
- b) that the use of radar beacons to mark aids and hazards to maritime navigation has provided a significant improvement in the radar navigation of vessels;
- c) that several administrations at present operating swept frequency radar beacons to mark lighthouses, lightships, buoys and other aids or hazards to maritime navigation will continue to do so for an indefinite period of time:
- d) that several administrations also plan to introduce fixed frequency radar beacons at an early date since studies and experiments indicate that for some purposes they are technically and operationally superior to the swept frequency type;
- e) that such radar beacons may require protection from mutual interference and interference from other sources;
- f) that the selection of the technical and other characteristics of radar beacons should be internationally agreed by the maritime interests and coordinated with other users of the same frequency bands whose operations might be affected;

439

requests the C.C.I.R.

to recommend, after consultation with appropriate international organizations, including the International Civil Aviation Organization, the technical parameters to be met by such devices, taking into account electromagnetic compatibility with other services having allocations in the same frequency band;

invites

administrations, the Inter-Governmental Maritime Consultative Organization and the International Association of Lighthouse Authorities to continue to evaluate the operational benefits which would result from the widespread use of fixed frequency radar beacons.

RECOMMENDATION No. Mar2 - 14

Relating to the Frequency Requirements for Shipborne Transponders 1

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that merchant ships of the world are increasing in size and speed;
- b) that every year a significant number of collisions occur involving merchant vessels with resultant loss of life and property and that collisions have a high potential for endangering the natural environment;

¹ A receiver-transmitter which emits a signal automatically when it receives the proper interrogation.

- c) that there is a need to correlate radar targets with vessels making VHF radiotelephone transmissions;
- d) that studies and experiments have shown that shipborne transponders can enhance and supplement radar target images as compared with normal radar images;
- e) that current studies and experimentation relating to shipborne transponders indicate that development of equipment can be expected in the near future which will offer adequate radar image enhancement and target identification and, possibly, data transfer capabilities;
- f) that such shipborne transponders may require protection from interference;
- g) that the selection of the frequency bands and other parameters for these transponders should be coordinated with other users of the radio frequency spectrum whose operations might be affected;

requests the C.C.J.R.

to recommend, after consultation with appropriate international organizations, the most suitable order of frequencies and bandwidth required for this purpose, and the technical parameters to be met by such devices taking into account electromagnetic compatibility with other services having allocations in the same frequency band;

invites

administrations and the Inter-Governmental Maritime Consultative Organization to continue to evaluate the operational benefits which could result from the widespread use of transponders on ships and to consider whether there would be advantage in adopting an internationally approved system for future implementation;

recommends

that, pending further technical and operational developments and evaluation, administrations be prepared at the next competent World Administrative Radio Conference to make the necessary provisions for the use of such devices.

RECOMMENDATION No. Mar2 - 15

Relating to Temporary Provisions covering the Technical and Operational Aspects of the Maritime Mobile-Satellite Service

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that a minimum number of provisions to introduce the maritime mobile-satellite service in an orderly manner has been adopted;
- b) that administrations have, as yet, little or no experience in operating a maritime mobile-satellite service;
- c) that, consequently, it is impossible at the present time to establish comprehensive regulatory provisions covering in detail the technical and operational aspects of such a service;
- d) that, nevertheless, temporary administrative, technical and operational provisions may become necessary before the next competent Administrative Radio Conference;

recommends

that, whilst gaining experience to provide a basis for the adoption of detailed regulations by the next appropriate Administrative Radio Conference, administrations participating in the maritime mobile-satellite service should agree temporary administrative, technical and operational provisions, notify them to the Secretary-General, and invite other administrations to adopt them, without prejudice.

RECOMMENDATION No. Mar2 - 16

Relating to Distress, Urgency and Safety Traffic

The World Maritime Administrative Radio Conference, Geneva, 1974,

having noted

- a) that the Inter-Governmental Maritime Consultative Organization (I.M.C.O.) has completed a policy document on the subject of the future maritime distress system;
 - b) that this document contains:
 - proposed improvements for the near future,
 - a statement of requirements and proposed transitional measures for the distant future;
- c) that I.M.C.O. intends to keep this document under review for adjustment, as necessary;
- d) that a number of improvements for the near future distress system form part of the proposals for the work of the present Conference;

further noting

that studies having a bearing upon distress and safety measures as part of a maritime satellite radiocommunication system form the subject of C.C.I.R. questions and study programmes;

considering

- a) that the I.M.C.O. requirement for the possible future fitting of automatic distress alerting, followed by the automatic transmission of additional information concerning the distress case, is of particular importance;
- b) that automatic distress alerting, followed by the automatic transmission of additional information concerning the distress case, should take place on a single frequency or possibly more frequencies reserved for distress traffic:
- c) that adequate frequencies must be made available for associated requirements for safety calling and communications;
- d) that the transmission and the recorded reception of distress, urgency and safety messages should be able to take place without interruption and irrespective of human attendance;

recommends

- 1. that I.M.C.O. be invited to continue its studies with a view to early implementation of the future distress system;
- 2. that C.C.I.R. continue its studies to determine the role of maritime satellite radiocommunications in a coordinated distress system as well as in safety applications;
- 3. that administrations consider, in the light of continuing technological developments, the need to reserve one or, possibly, more frequencies for distress purposes;

- 4. that administrations consider, in the light of advancing techniques, the introduction of more automated telecommunication systems for the dissemination of distress, urgency and safety messages on a continuous basis, to replace Morse telegraphy and possibly radiotelephony;
- 5. that administrations have as an objective the taking of a decision in this matter at the next appropriate World Administrative Radio Conference.

Relating to the Use of Radiocommunications for Marking, Identifying, Locating, and Communicating with the Means of Transport protected under the Geneva Conventions of 12 August 1949, concerning the Protection of War Victims and any Additional Instruments of those Conventions, as well as for ensuring the Safety of Ships and Aircraft of States not Parties to an Armed Conflict

The World Maritime Administrative Radio Conference, Geneva, 1974,

- a) that it is desirable for the safety of human life to be able to identify and determine the position of the means of transport protected under the Geneva Conventions of 12 August 1949 and any additional instrument of those Conventions:
- b) that several international Conferences have adopted resolutions on this question, notably the 1949 Geneva Diplomatic Conference for the elaboration of international Conventions for the protection of war victims (Resolution 6) and the International Red Cross Conferences of 1930 (Resolution XVII), 1934 (Resolution XXXII), 1965 (Resolution XXX), 1969 (Resolution XXVII) and 1973 (Resolution XIII);

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c) that it is desirable to be able to identify and determine the position of neutral ships and aircraft in times of armed conflict;

- d) that it is for the I.T.U. to fix basic radio regulatory provisions;
- e) that the Administrative Radio Conference, Geneva, 1959, adopted Recommendation No. 34 relating to the use of radiotelegraph and radiotelephone links by Red Cross organizations;
- f) that the Plenipotentiary Conference of the International Telecommunication Union, Malaga-Torremolinos, 1973, adopted Recommendation No. 2 relating to the use of radiocommunications for announcing and identifying hospital ships and medical aircraft protected under the Geneva Conventions of 1949, referring technical questions to the competent Administrative Conferences;
- g) that, to ensure the necessary close coordination, it is desirable to refer the study of problems affecting several services simultaneously to a general World Administrative Radio Conference;

recommends

that the next general World Administrative Radio Conference, planned for 1979, study the technical and administrative aspects of the use of radiocommunications for marking, identifying, locating and communicating with the means of transport protected under the 1949 Geneva Conventions and any additional instruments of those Conventions, and for ensuring the safety of the ships and aircraft of States not parties to an armed conflict.

Relating to Accounting for Public Correspondence in Maritime Radiocommunications

The World Maritime Administrative Radio Conference, Geneva, 1974,

considering

- a) Resolution No. Mar2-22;
- b) that any regulatory provisions proposed by the C.C.I.T.T. in conformity with the above Resolution cannot be formally incorporated into the Radio Regulations before the World Administrative Radio Conference foreseen for 1979:
- c) the detailed proposals for revision of all or part of Chapter IX of the Radio Regulations, and of the Additional Radio Regulations, submitted to the present Conference by the Administrations of Denmark, France, Norway and Sweden:

recommends

- 1. that the C.C.I.T.T. Report include basic as well as detailed provisions, forming a complete set of accounting rules, which should be produced as a C.C.I.T.T. Recommendation entitled "Draft Rules for Accounting in the Maritime Mobile Service";
- 2. that administrations and recognized private operating agencies bring these draft rules into use as soon as possible following their approval by the C.C.I.T.T. Plenary Assembly;
- 3. that administrations make proposals to the next competent World Administrative Radio Conference as to which, if any, of the draft rules should be included in the Radio Regulations.

Relating to Studies of the Interconnection of Maritime Mobile Radiocommunication Systems with the International Telephone and Telegraph Networks

The World Maritime Administrative Radio Conference, Geneva, 1974,

noting

- a) that this Conference has adopted, and included in Article 28A, provisions for the use of a digital selective calling system;
- b) that the C.C.I.R. has adopted Question 9/8 on the subject of a selective calling system for future operational requirements of the maritime mobile service;
- c) that the operational and technical characteristics for a digital selective calling system are in an advanced state of study by the C.C.I.R.;
- d) that the C.C.I.R. has adopted Question 23/8 relating to automated VHF maritime mobile telephone systems;
- e) that the C.C.I.T.T. has adopted Question 15/XIII relating to the interconnection of the different international mobile telephone services mainly of the maritime mobile service and the international telephone network;
- f) that the study of new Questions 7/I and 4/X relating to the interconnection of maritime satellite communication services with the international telex network is proposed to the C.C.I.T.T.;

considering

a) that it is desirable that there be interconnection of radiocommunication systems in the maritime mobile service with the international public telephone and telegraph networks to permit automatic routing of ship-shore traffic to and from national networks;

b) that such interconnection would greatly improve maritime radiocommunications;

urges the C.C.I.R. and the C.C.I.T.T.

to undertake all required studies relating to compatibility between the maritime mobile radiocommunication systems and the international telephone and telegraph systems, including various quality-of-service criteria, to permit the full interconnection of the maritime mobile services with the international telephone and telegraph networks; and

invites administrations

to give priority to these studies in their participation in the work of the C.C.I.R. and the C.C.I.T.T.

RECOMMENDATION No. Mar2 - 20

Relating to the Presentation of Draft Amendments to the Radio Regulations

The World Maritime Administrative Radio Conference, Geneva, 1974,

having noted

- a) that in the proposals submitted by some administrations a uniform method has been utilized for the presentation of modified texts (e.g. underlining of new texts, and crossing out of suppressed texts);
- b) that this uniform method of presentation has proved itself to be very effective during the consideration of the proposed texts;

- c) that if such a uniform method of presentation were followed in the different stages of preparing conference documents (sub-working groups, working groups) it would facilitate the work of delegations and may facilitate the work of the conference;
- d) that the Secretary-General has taken steps to provide guidelines to administrations to assist them in the presentation and lay-out of their proposals to Administrative Conferences in accordance with the provisions of the International Telecommunication Convention and in their coordinated presentation to conferences;

recommends

- 1. that administrations be invited to present their proposals in a uniform manner;
- 2. that guidelines be issued by the Secretary-General to facilitate this presentation;
- 3. that a uniform presentation be used, through the different stages of preparing texts up to working group level, at forthcoming Administrative Radio Conferences.

RECOMMENDATION No. Mar2 - 21

Relating to the Possible Re-arrangement of the Radio Regulations and the Additional Radio Regulations

The World Maritime Administrative Radio Conference, Geneva, 1974,

in view of

the terms of Administrative Council Resolutions Nos. 494, 522, 549 and Decision No. 346 relating to a possible revision of the structure of the Radio Regulations and the Additional Radio Regulations;

considering

- a) Resolution No. 28 entitled "World Administrative Radio Conference for the General Revision of the Radio Regulations", adopted by the Plenipotentiary Conference, Malaga-Torremolinos, 1973;
- b) Recommendation No. Mar 2 of the World Administrative Radio Conference, Geneva, 1967 relating to the regrouping of the Radio Regulations and the Additional Radio Regulations appertaining to the maritime mobile service;
- c) that the additions to the Radio Regulations and the Additional Radio Regulations resulting from the many Administrative Radio Conferences held since 1962 have made them even more difficult to use and increasingly more difficult to revise;
- d) that it would be of considerable assistance to the World Administrative Radio Conference scheduled for 1979 if the Radio Regulations and Additional Radio Regulations had already been re-arranged in a more logical form;
- e) that it would also be of considerable assistance to administrations and to permanent organs of the Union if proposals to the 1979 Conference could be submitted in a form appropriate to the re-arranged Radio Regulations;

recommends

1. that a Working Group should be convened for the purpose of pursuing the study of the possible re-arrangement of the Radio Regulations and the Additional Radio Regulations in order that the administrative Regulations should be separated from the operational Regulations and the latter separated for the various services concerned;

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2. that the Working Group should be composed of experts from administrations assisted by representatives of the permanent organs of the Union each with respect to those parts of the Radio Regulations and the Additional Radio Regulations which are within its duties;

3. that the Working Group should report sufficiently early for its report to be sent to the administrations of all Members of the Union by 1 September 1976;

invites the Administrative Council

at its 29th Session in June 1974

- 1. to request administrations to nominate experts in the fields concerned to serve in the Working Group;
- 2. to make provision for the Working Group to meet and in this connection suggests that it might assist their work if they were to meet in two sessions; firstly, to separate the administrative Regulations from the operational Regulations and secondly, to separate the operational Regulations for the various services;
- 3. to arrange either for a preparatory meeting of the main session of the World Administrative Radio Conference, 1979, to be held early in 1977, or for an appropriate World Administrative Radio Conference scheduled for that time, to take the necessary decisions on the Report of the Working Group, taking into account also the results of the C.C.I.T.T. study in 1976 (see Resolution No. Mar2 23).

