



**Documents of the World Administrative Radio Conference  
to deal with matters relating to the maritime mobile service (WARC Mar)  
(Geneva, 1967)**

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- This PDF includes Document DT No. 1 - 129.
- The complete set of conference documents includes Document No. 1 - 385, DT No. 1 - 129.

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## MARITIME CONFERENCE

GENEVA, 1967



Document No. DT/1-E

4 August 1967

Original : French/English/  
SpanishPLENARY MEETING

LIST, IN NUMERICAL ORDER, OF THE NUMBERS OF THE  
RADIO REGULATIONS MENTIONED IN  
DOCUMENT No. 103

	Numbers	Competent Committee (according to the suggestions made in Document No. 103)
Art. 7 - <u>Special rules relating to particular services</u>  - Section IV Maritime Mobile Service	438-442 443-444 445-455 456-457	4 5 4 5
Art. 9 - <u>Notification and registration of frequencies in the Master International Frequency Register</u>	486-639 (especially Nos. 541 to 551 and 573 to 586)	5
Art. 12 - <u>Technical characteristics of equipment and emissions</u>	677	4
Art. 20 - <u>Service documents</u>	789-837	6
Art. 22 - <u>Authority of the Master</u>	845-847	6
Art. 23 - <u>Operators' certificates for ship and aircraft stations</u>	848-911	6



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	Numbers	Competent Committee (according to the suggestions made in Document No. 103)
Art. 24 - <u>Class and minimum number of operators for ship and aircraft stations</u>	912-920	6
Art. 25 - <u>Working hours of stations in the Maritime and Aeronautical Mobile Services</u>		
- Section I Preamble	921-922	6
- Section II Coast Stations	923-927	6
- Section IV Ship Stations	929-946	6
Art. 26 - <u>Personnel of Coast and Aeronautical Stations</u>	948	6
Art. 28 - <u>Conditions to be observed by Mobile Stations</u>		
- Section I General provisions	955-964	6
- Section II Special provisions regarding safety	965-969	6
- Section III Ship stations using Radiotelegraphy	970-982	4
- Section IV Ship stations using Radiotelephony	983-991	4
- Section VI Survival craft stations	994-999	4
Art. 29 - <u>General radiotelegraph procedure in the Maritime Mobile and Aeronautical Mobile Services</u>	1000-1062	6
Art. 30 - <u>Calls by radiotelegraphy</u>	1063-1087	6
Art. 31 - <u>Radiotelegraphic call to several stations</u>	1088-1094	6

	Numbers	Competent Committee (according to the suggestions made in Document No. 103)
Art. 32 - <u>Use of Frequencies for Radiotele- telegraphy in the Maritime Mobile and Aeronautical Mobile Services</u>	1095-1028	4
Art. 33 - <u>General Radiotelephone Procedure in the Maritime Mobile Service</u>	1209-1295	6
Art. 34 - <u>Calls by Radiotelephony</u>	1296-1318	6
Art. 35 - <u>Use of Frequencies for Radiotele- phony in the Maritime Mobile Service</u>	1319-1379	4
Art. 36 - <u>Distress Signal and Traffic. Alarm, Urgency and Safety Signals</u>	1380-1495	6
Art. 37 - <u>Order of Priority of Communications in the Mobile Service</u>	1496	6
Art. 38 - <u>Indication of the Station of Origin of Radiotelegrams</u>	1497-1499	6
Art. 39 - <u>Routing of Radiotelegrams</u>	1500-1504	6
Art. 40 - <u>Accounting for Radiotelegrams and Radiotelephone Calls</u>	1505-1559	6



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
**CONFERENCE MARITIME**

GENÈVE, 1967

Addendum N° 4 au  
Document N° DT/2-F/E/S  
28 Septembre 1967

SEANCE PLENIERE  
PLENARY MEETING  
SESION PLENARIA

\_\_\_\_\_  
Liste complémentaire des références à de nouvelles propositions  
qu'il y a lieu d'introduire dans le Document N° DT/2.

\_\_\_\_\_  
Additional list of references to new proposals for inclusion  
in Document No. DT/2.

\_\_\_\_\_  
Lista complementaria de las referencias a nuevas proposiciones  
que deben incluirse en el Documento N.º DT/2.



Page du DT/2 Page of DT/2 Página del DT/2	Réf. des propositions à insérer Serial No. to be added N.º de ref. que debe agregarse	Nº du Doc. dans lequel la proposition a été publiée Doc. No. in which the proposal has been published N.º del Doc. en el que la proposición ha sido publicada	Page Página
1	2	3	4
70	J/173(93) MOD 451	173	1
	J/173(94) ADD 451A	"	1
117	ALG/179(1) Tableau d'attribu- tion d'indicatifs d'appel Table of Allocation of Call Signs Cuadro de atribución de distintivos de llamada	179	-
257	USA/Add. 22(85) ADD 1159A ADD 1159B	Add. au Doc. 22	1
337	HOL/183(37) ADD 1336A	183	1
538	G/178(101) App.15	178	1 - 13
554	J/173(95) App.15	173	2
635	D/184(30) App.18	184	1 - 4

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
**CONFERENCE MARITIME**

**GENÈVE, 1967**

Addendum N° 3 au  
Document N° DT/2-F/E/S  
22 septembre 1967

SEANCE PLENIERE  
PLENARY MEETING  
SESIÓN PLENARIA

Liste complémentaire des références à de nouvelles propositions  
qu'il y a lieu d'introduire dans le Document N° DT/2.

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Additional list of references to new proposals for inclusion  
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Lista complementaria de las referencias a nuevas proposiciones  
que deben incluirse en el Documento N.º DT/2.



Page du DT/2 Page of DT/2 Página del DT/2	Réf. des propositions à insérer Serial No. to be added N.º de ref. que debe agregarse	Nº du Doc. dans lequel la proposition a été publiée Doc. No. in which the proposal has been published N.º del Doc. en el que la proposición ha sido publicada	Page Página
1	2	3	4
3	GRC/160 (1) MOD 36	160	2
13	GRC/160 (5) SUP 171-172	160	6
69	GRC/160 (1) MOD 449	160	2
141	HOL/167 (35) MOD 863	167	-
"	HOL/167 (36) ADD 863A	167	-
227	GRC/160(5) SUP 1095-1105	160	6
546	GRC/160(2) App. 15	160	3-4 et 7
593	GRC/160(2) App. 17	160	3-4 et 9
"	GRC/160(4) "	"	5
670	GRC/160(3) App. 25	"	4
759	J/158(92) Point 3	158	3

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES  
**CONFERENCIA MARÍTIMA**

**GINEBRA, 1967**

Addendum N.º 2  
al Documento N.º DT/2-S  
21 de septiembre de 1967

SESIÓN PLENARIA

1. En el Documento N.º DT/2 e inmediatamente después de la página 170, insértense las páginas 170A/170B y 170C adjuntas.
  2. Sólo concierne al texto francés.
  3. Página 311. Sólo concierne al texto francés.
  4. Trasládense las proposiciones F/111(154) y G/65(78) de la página 313 a la página 317.
- 



Proposiciones relativas  
al Artículo 27

Estaciones de aeronave y estaciones aeronauticas

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## CAPÍTULO VII

### Condiciones de funcionamiento de los servicios móviles

#### ARTÍCULO 27

##### Estaciones de aeronave y estaciones aeronáuticas

- 949** § 1. Excepto en los casos en que este Reglamento disponga lo contrario, el servicio móvil aeronáutico podrá regirse por acuerdos especiales concertados por los gobiernos interesados (véase el artículo 43 del Convenio).
- 950** § 2. Cuando no existan acuerdos especiales relativos al curso y a la contabilidad de la correspondencia pública en las estaciones del servicio móvil aeronáutico, se aplicarán las disposiciones correspondientes del presente Reglamento.
- 951** § 3. (1) Las estaciones de aeronave podrán comunicar con las estaciones del servicio móvil marítimo, ajustándose para ello a las disposiciones del presente Reglamento relativas al servicio móvil marítimo.
- 952** (2) Con este fin, conviene que las estaciones de aeronave utilicen las frecuencias atribuidas al servicio móvil marítimo. Sin embargo, teniendo en cuenta las interferencias que pueden causar las estaciones de aeronave al volar a gran altura, no utilizarán las frecuencias de las bandas de dicho servicio superiores a 30 Mc/s, en una zona determinada, sin previo acuerdo de todas las administraciones afectadas por la posibilidad de que se cause interferencia. En particular, las estaciones de aeronave que funcionen en la Región I no utilizarán frecuencias de las bandas superiores a 30 Mc/s atribuidas al servicio móvil marítimo en virtud de acuerdos entre las administraciones de esa Región.
- 953** (3) No obstante, las estaciones de aeronave podrán utilizar las frecuencias de 156,30 Mc/s y 156,80 Mc/s, pero, únicamente, para fines de seguridad.
- 954** (4) Cuando las estaciones de aeronave transmitan o reciban correspondencia pública por conducto de estaciones del servicio móvil marítimo, se ajustarán a todas las disposiciones aplicables a la transmisión de dicha correspondencia en el servicio móvil marítimo (véanse, en particular, los artículos 37 a 40).

Ref.

NZL/131(29)

MOD

953

Artículo 27

3) No obstante, las estaciones de aeronave podrán utilizar las frecuencias ~~156,30 Mc/s~~ y 156,80 Mc/s ~~y, pero, únicamente,~~ para fines de socorro, urgencia y seguridad. Podrán utilizar también la frecuencia 156,30 Mc/s, pero únicamente para fines de seguridad.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Addendum No. 1 to  
Document No. DT/2-E  
20 September 1967  
Original : French

PLENARY MEETING

NOTE BY GENERAL SECRETARIAT

Page III of Document No. DT/2 states that extra pages would be provided to introduce all proposals appearing in documents issued after Document No. 118.

The preparation of these supplementary pages would, however, tend to delay the issue of documents. For this reason new proposals are simply referred to in the attached list by means of references to the documents in which they appear and also to the appropriate page of Document No. DT/2.



Page du DT/2 Page of DT/2 Página del DT/2	Réf. des propositions à insérer Serial No. to be added N.º de ref. que debe agregarse	Nº du Doc. dans lequel la proposition a été publiée Doc. No. in which the proposal has been published N.º del Doc. en el que la proposición ha sido publicada	Page Página
1	2	3	4
3	B/137(11) MOD 36	137	4
"	B/139(58) ADD 37A	139	1
"	B/142(109) MOD 41	142	5
"	B/142(110) ADD 41.1	142	5
4	NZL/135(2) ADD 68A	135	1
5	B/137(12) ADD 84A	137	4
"	B/137(13) ADD 84B	137	4
17	B/143(124) SUP 200	143	1
"	CAN/145(40) MOD 200	145	1
41	AUT/120(1) MOD 287	120	1
"	B/142(122) MOD 287	142	11
54	USA/125(82) MOD 445	125	3
57	AUS/122(12) MOD 447	122	11
"	AUS/122(13) MOD 448	122	11-14
"	" (14) ADD 448A	"	"
"	" (15) SUP 449	"	"
"	" (16) SUP 450	"	"
"	" (17) MOD 451	"	"
"	" (18) MOD 452	"	"
"	" (19) MOD 452.1	"	"
"	" (20) MOD 453	"	"
"	" (21) MOD 453.1	"	"
"	" (22) MOD 454	"	"
"	B/137(14) ADD 450A	137	4
"	B/137(20) MOD 453	137	7
61	CAN/145(41) MOD 455	145	2
"	ISR/130(4) MOD 454	130	3
77	NZL/134(17) SUP 457	134	2
"	NZL/131(25) ADD 457A	131	1
85	B/138(32) MOD 500	138	10
"	NZL/134(18) MOD 500	134	2
89	B/138(33) MOD 540	138	10
"	NZL/134(19) MOD 540	134	2

1	2			3	4
95	B/138(34)		SUP 541-551	138	10
96	NZL/134(20)		SUP 541-551	134	3
99	AUS/122(23)	MOD	573	122	15
"	B/138(35)	MOD	573	138	10-11
100	NZL/134(21)	MOD	573	134	3
105	B/138(36)		SUP 577-586	138	11
"	NZL/134(22)		SUP 577-586	134	4
109	B/138(37)	MOD	635	138	11
"	NZL/134(23)	MOD	635	134	4
113	B/138(38)	MOD	677	138	11
117	NZL/135(3)	MOD	736	135	1
121	B/141(79)		SUP 760	141	1
151	B/143(126)	ADD	874A	143	2
"	B/143(127)	ADD	883A	143	2
170	NZL/135(1)	ADD	937A	135	5
173	B/138(39)		SUP 956	138	11
177	B/140(65), (66), (67)	MOD	974, 975 976	140	1
178	USA/20(33)Rev.	MOD	974	125	2
179	ISR/130(6)	MOD	980	130	3
183	B/140(68), (69), (70)	MOD MOD	984(p.1) 985, 986 (p.2)	140	1-2
"	B/140(71)	ADD	986A	140	2
186	USA/16(12)Rev.	MOD	984	125	3
191	B/140(72)	MOD	992	140	2
195	B/140(73)	MOD	995	140	2
"	B/140(74)	MOD	996	140	3

1	2			3	4
198	B/142(111)	ADD	999A	142	5
"	B/142(112)	ADD	999B	142	6
"	B/142(113)	ADD	999C	142	6
200	G/60(21)	ADD	999A	60	8
202	NZL/131(26)	ADD	998A	131	2
"	NZL/135(4)	ADD	999A, 999B, 999C	135	2
211	B/141(80)	MOD	1005	141	1
"	RFA/6(12)	MOD	1005	6	18
216	ISR/130(7)	MOD	1013	130	4
"	ISR/130(8)	ADD	1013A	130	4
"	ISR/130(9)	MOD	1015	130	5
224	ISR/130(10)	ADD	1077A	130	5
233	B/140(75)	ADD	1106A	140	3
"	B/140(76)	SUP	1113	140	3
238	B/140(77)	MOD	1134	140	3
240	B/140(78)	MOD	1137	140	4
249	AUS/122(24)	MOD	1149	122	16
"	AUS/122(25)	ADD	1150A	122	16
"	B/142(98)	MOD	1145	142	1
"	B/138(40)	MOD	1146	138	12
"	B/142(99)	MOD	1149	142	1
"	B/142(100)	ADD	1149A	142	1
"	B/142(101)	MOD	1150	142	2
"	B/142(102)	MOD	1151	142	2
"	B/142(103)	ADD	1151A	142	2
"	B/142(104)	MOD	1152	142	2
"	B/142(105)	MOD	1153	142	2
"	B/137(9)	MOD	1156	137	3
"	B/137(10)	SUP	1157	137	3
"	B/138(41)	MOD	1158	138	12
257	ISR/130(11)	MOD	1168	130	5
261	AUS/122(26)	MOD	1173	122	16
"	AUS/122(27)	MOD	1174	122	17
"	AUS/122(28)	MOD	1175	122	17
"	AUS/122(29)	SUP	1176	122	17
"	AUS/122(30)	MOD	1177	122	17

1	2	3	4
262	B/138(42) MOD	1175	138
"	ISR/130(12) ADD	1174A	130
"	ISR/130(13) ADD	1177A	130
267	AUS/122(31) ADD	1180A	122
"	AUS/122(32) SUP	1181-1187	122
"	AUS/122(33) MOD	1188	122
"	AUS/122(34) MOD	1192	122
"	AUS/122(35) MOD	1196	122
"	AUS/122(36) SUP	1197-1199	122
"	AUS/122(37) MOD	1200	122
"	AUS/122(38) SUP	1201	122
"	AUS/122(39) ADD	1201A	122
"	AUS/122(40) ADD	1201B	122
"	B/138(43) MOD	1180	138
"	B/138(44) MOD	1181	138
"	B/138(45) MOD	1182	138
"	B/138(46) MOD	1184	138
"	B/138(47) MOD	1187	138
"	B/138(48) MOD	1189	138
"	B/138(49) MOD	1191	138
"	B/142(106) MOD	1192	142
"	B/142(107) ADD	1192A	142
"	B/138(50) MOD	1193	138
"	B/138(51) MOD	1197	138
275	AUS/122(41) SUP	1205-1206	122
"	B/137(15) ADD	1206A	137
"	B/137(16) ADD	1206B	137
"	B/137(17) ADD	1206C	137
"	ISR/130(14) MOD	1192	130
"	USA/123(67) NOC	1180	123
"	USA/123(68) MOD	1181	123
"	USA/123(69) NOC	1182	123
"	USA/123(70) MOD	1183	123
"	USA/123(71) NOC	1184	123
"	USA/123(72) MOD	1185	123
"	USA/123(73) NOC	1186	123
"	USA/123(74) NOC	1187	123
283	B/141(81) ADD	1216A	141
"	B/141(82) ADD	1216B	141
"	RFA/6(13) ADD	1216A	6
"	RFA/6(13) ADD	1216B	6

1	2			3	4
289	B/141(83)	MOD	1222	141	2
"	RFA/6(14)	MOD	1222	6	19
292	AUS/122(42)	MOD	1236	122	22
"	B/138(52)	MOD	1236	138	13
"	NZL/133(13)	MOD	1236	133	3
295	B/141(84)	MOD	1241	141	3
"	RAF/6(14)	MOD	1241	6	19
300	AUS/122(43)	MOD	1249	122	22
"	AUS/122(44)	MOD	1251	122	22
"	B/138(53)	MOD	1249	138	14
305	NZL/131(27)	MOD	1256	131	2
311	B/141(85)	MOD	1273	141	3
"	B/141(86)	MOD	1287	141	3
"	B/141(87)	MOD	1289	141	4
"	RFA/6(14)	MOD	1273	6	19
"	RFA/6(14)	MOD	1287	6	19
321	B/141(88)	MOD	1302	141	4
"	NZL/133(14)	MOD	1302	133	3
"	NZL/133(14)		SUP 1303	133	4
329	B/136(1)	ADD	1322A	136	1 - 2
333	RFA/4(2)		<u>NOC</u> 1324	4	1
338	USA/16(2)		<u>NOC</u> 1336	16	2
349	USA/16(6 Rev.).	ADD	1339 BU	125	1
357	USA/16(6)		<u>NOC</u> 1340-1349	16	9
363	AUS/122(45)		SUP 1352	122	23
"	AUS/122(46)	MOD	1353	122	23
"	AUS/122(47)		SUP 1354	122	23
"	AUS/122(48)		SUP 1356-1357	122	23
"	B/136(2)	ADD	1351 A	136	2
"	B/138(54)	MOD	1352	138	14
"	B/143(125)	ADD	1352 A	143	1
"	B/138(55)		<u>NOC</u> 1354	138	14
"	B/137(6)		SUP 1356	137	1

1	2	3	4
363	B/138(56) SUP 1356	138	14
"	B/137(7) MOD 1357	137	1
"	B/138(57) MOD 1357	138	14
"	B/137(8) MOD 1358	137	1
368	NZL/133(15) SUP 1352-1354	133	4
"	NZL/133(15) MOD 1356	133	4
369	USA/16(8Rev.) MOD 1351	125	3
370	NZL/131(28) MOD Section IV		
"		Sección IV	131
"	NZL/131(28) MOD 1359	131	1
"	NZL/131(28) ADD 1359A	131	2
"	NZL/131(28) ADD 1359B	131	3
"	NZL/131(28) ADD B. Appel et réponse	131	3
	Call and answer		
	Llamada y respuesta		
"	NZL/131(28) MOD 1360	131	3
"	NZL/131(28) MOD 1361	131	3
"	NZL/131(28) ADD 1361A	131	3
"	NZL/131(28) NOC 1362	131	3
"	NZL/131(28) SUP 1363	131	3
"	NZL/131(28) MOD C Veille	131	4
	Watch		
	Escucha		
"	NZL/131(28) MOD D Trafic	131	4
	Traffic		
	Tráfico		
373	USA/16(11Rev.) MOD 1358-BS	125	2
380	B/139(59) ADD 1363A	139	1
"	B/139(60) ADD 1363B	139	1
387	B/141(89) MOD 1386	141	4
"	B/141(90) MOD 1393	141	4
"	NZL/135(5) ADD 1388A	135	2
"	RFA/6(15) MOD 1386	6	20
"	RFA/6(14) MOD 1393	6	19
397	B/141(91) MOD 1430	141	5
398	RFA/6(14) MOD 1430	6	19
399	B/141(92) MOD 1451	141	5
400	RFA/6(14) MOD 1451	6	19
"	B/141(93) MOD 1460	141	5
"	RFA/6(14) MOD 1460	6	19

1-	2			3	4
405	B/142(114)a(119)	ADD	1476 A- 1476 F	142	6-7
410	NZL/135(5)	ADD	1476 A- 1476 E	135	3
435	B/136(4)	MOD	App 3	136	3
"	B/139(61)	MOD	App 3	139	3
"	B/142(108)	MOD	App 3	142	3-4
441	RFA/94(28)	ABB	b'	94	5
453	B/137(18)	ADD	OD	137	6
"	B/137(19)	ADD	OE	137	6
"	B/142(120)	ADD		142	8
463	ISR/129(2)		App 12	129	1
533	AUS/122(10)		App 15	122	1-5
"	B/138(21)		App 15	138	1-3
"	B/138(22)		App 15	138	1-3
554	ISR/130(3)		App 15	130	1
"	ISR/130(5)		App 15	130	3
"	ISR/130(15)		App 15	130	7
555	NZL/132(6)		App 15	132	2
"	NZL/132(7)		App 15	132	2
"	NZL/133(8)-(12)		App 15	133	1-3
"	NZL/132(24)		6 MHz	132	1
557	USA/17(15)		App 15	17	3
"	USA/18(26 Rev.)		App 15	123	3
563	B/141(94)	MOD	App 16	141	6-8
581	AUS/122(11)		App 17	122	1-9
"	B/138(23)(26)		App 17	138	5-8
619	NZL/133(8)(12)		App 17	133	1-15
627	B/136(3)	ADD	App-17A	136	2-3
635	AUT/120(2)	MOD	App 18	120	2
"	B/139(62)	MOD	App 18	139	3-4
"	B/142(123)	MOD	App 18	142	11



1	2	3	4
647	B/139(63) App 19	139	4
"	G/Add 112(100) ADD App 19A	Add Doc. 112	1-2
665	B/138(27) SUP App 25	138	8
673	NZL/134(16) SUP App 25	134	1
675	USA/124(75) (81) SUP App 25	124	1-5
705	B/141(95) SUP Rec. 22	141	8
"	RFA/6(11) SUP Rec. 22	6	10
715	B/141(96) SUP Rec. 30	141	8
719	B/136(5) --	136	5
763	B/139(64) --	139	5
779	B/141(97) --	141	9
792	F/128(188) --	128	2
799	B/142(121) --	142	10
803	AUT/120(3) Point 7.6/Item 7.6	120	2
"	Punto 7.6 USA/126(83) Utilisation de tech- niques de télécom. spatiales/ Utilization of Space Com. Techniques/ Utilización de técnicas de telecom. espaciales	126	1-2

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/2-E

18 August 1967

Original : French, English,  
Spanish

## PLENARY MEETING

### Note by the General Secretariat

1. In this working document, the various proposals submitted by Administrations and issued as Documents Nos. 1 - 118 have been rearranged in the order of the provisions of the Radio Regulations, and the Additional Radio Regulations.
2. The green pages contain the present provisions of the Regulations to which amendments have been proposed.
3. The proposed amendments to these provisions of the Regulations are reproduced on the white pages in alphabetical order of the symbols of the countries concerned (see attached list).
4. The reference symbols are the same as those appearing on the original documents. They include :
  - a) the symbol of the country or countries which submitted the proposal, followed by a stroke (/)
  - b) the number of the original document containing the proposal,
  - c) a serial number (in brackets) relating to the proposals submitted by each Administration.
5. The same reference symbol generally covers the whole series of proposals appearing on the same page. In cases of this sort, the reference is given only once - opposite the first proposal in the series.
6. To enable proposals to be classified according to their assignment to the various Committees, or in any other way that delegates may see fit, four files are being distributed with the documents.



14 NOV. 1967

LIST OF THE COUNTRY SYMBOLS

AUS	Australia (Commonwealth of)
AUT	Austria
B	Brazil
CAN	Canada
DNK	Denmark
F	France
G	United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man
HOL	Netherlands (Kingdom of the)
I	Italy
IND	India (Republic of)
ISL	Iceland
ISR	Israel (State of)
J	Japan
MDG	Malagasy Republic
NOR	Norway
NZL	New Zealand
POL	Poland (People's Republic of)
RFA	Federal Republic of Germany
S	Sweden
SUI	Switzerland (Confederation of)
URSS	Union of Soviet Socialist Republics
USA	United States of America

Note

Additional pages containing proposals submitted by the under-mentioned countries will be supplied separately for insertion in this Working Document.

Austria	(Document No. 120)
Australia	(Document No. 122)
Brazil	(Documents Nos. 136 to 143)
United States	(Documents Nos. 123 to 126)
France	(Document No. 128)
Israel	(Documents Nos. 129 and 130)
New Zealand	(Documents Nos. 131 to 135)

Proposals relating to

Article 1

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Terms and Definitions



## ARTICLE I

### Terms and Definitions

- 36     *Maritime Mobile Service* : A mobile service between coast stations and ship stations, or between ship stations, in which survival craft stations may also participate.
- 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 movement and the safety of ships and, in emergency, to the safety of persons.
- 41     *Survival Craft Station* : A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.

- USA/17(17) MOD 36 Maritime Mobile Service : A mobile service between coast stations and ship stations, or between ship stations, in which survival craft stations may also participate, and exceptionally between ocean data and ocean data telecommand stations.
- AUS/54(1) MOD 37. Port Operations Service : A maritime mobile service in or near a port, between ~~ocean~~ port stations and ship stations, or between ship stations, in which messages are restricted to those relating to the movement and the safety of ships and, in emergency, to the safety of persons.
- AUS/54(2) ADD 37A. Port Station : A Coast Station in the Port Operations Service

Reasons :

Appendix 10 shows the service document symbol FP meaning Port Station which is not defined. There is a need to retain the symbol FP in service documents particularly in the List of Coast Stations to enable the coast stations providing only a port operations service to be readily identified.

- USA/55(45) ADD 37A Navigation Communications. Safety communications in the maritime mobile service pertaining to the manoeuvring of vessels or the directing of vessel movements. Such communications are primarily for the exchange of information between ship stations and secondarily between ship stations and coast stations.

- USA/22(50) MOD 41 Survival Craft Station: A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.<sup>1)</sup>

- ADD 41.1 <sup>1)</sup> Survival craft stations include devices which are intended to facilitate search and rescue through the functions of alerting, position-indicating beaconry, or communications, the emissions of which are non-directional. Such devices may be small, lightweight, floatable, watertight, shock resistant, self energizing and capable of continuous operations over extended periods.

Ref.

J/89(72)      MOD      41      Survival craft station : A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment 1.

J/89(73)      ADD      41.1      1 Survival craft stations include the emergency position-indicating radio beacons which are intended to indicate the positions of survivors or the location of a mobile station in distress.

RFA/94(20)      ADD      41A      Floatable emergency position-indicating radio beacon. A mobile station in the maritime mobile service intended to facilitate search and rescue through the functions of quasi-alerting and of enabling homing, working automatically when afloat.

- based upon Recommendation 439 C.C.I.R. Oslo 1966

G/60(18)      ADD      68A      Emergency position-indicating radio beacon station :  
A station in the mobile service the emissions of which are intended to facilitate search and rescue operations.

Reasons :

New definition required following the introduction of emergency position-indicating radio beacons.

CAN/40(3)      ADD      76A      Ocean data service : A radiocommunication service intended for the exchange of data between ocean data stations.

ADD      76B      Ocean data station: A station in the ocean data service.

Reasons :

Consequential to the establishment of this new service.



Ref.

USA/17(18)	ADD	<u>84A</u>	<u>Ocean Data Telecommand Station : A station in the maritime mobile service intended to telecommand ocean data stations.</u>
USA/17(19)	ADD	<u>84B</u>	<u>Ocean Data Station : A station in the maritime mobile service intended for the transmission of data collected at the site of the station.</u>

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Proposals relating to  
Article 5

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Frequency Allocations  
10 kc/s to 40 Gc/s

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Nos. 158 and 167

**158**      Limited to coast telegraph stations (A1 and F1 only).

**167**      Only classes A1 or F1, A4 or F4 emissions are authorized in the band 90-160 kc/s for stations of the fixed and maritime mobile services.

Ref.

CAN/46(24)	MOD	158	Limited to coast telegraph stations (A1, <u>A7J</u> and F1 only).
CAN/46(25)	MOD	167	Only classes A1, <u>A7J</u> or F1, A4 or F4 emissions are authorized in the band 90 - 160 kc/s for stations of the fixed and maritime mobile services.

Reasons :

Frequencies in the bands where these footnotes apply are used by stations in Canada for A7J emission. It is considered the multichannel systems using A7J make efficient use of the spectrum and there is no technical reason why this class of emission should be prohibited.

USA/25	MOD	158	Limited to coast telegraph stations (A1, <u>A7J</u> , and F1 only).
USA/25	MOD	167	Only classes A1 or F1, A4 or F4 emissions are authorized in the band 90 - 160 kc/s for stations of the fixed and maritime mobile services. <u>Exceptionally, A7J emission is also authorized in the band 90 - 160 kc/s for stations of the maritime mobile service.</u>

Reasons :

To provide for use of A7J emission for stations of the maritime mobile service in maritime mobile bands between 14 and 160 kc/s.

Background :

A requirement has developed to use single sideband, suppressed carrier, multichannel voice-frequency telegraph emission (A7J) in the maritime mobile service between 14 and 160 kc/s.

Number 158 concerning 14 - 110 kc/s, and number 167, concerning 90 - 160 kc/s, do not presently provide for use of A7J emission in the maritime mobile service.

The Radio Regulations have been amended in the past to recognize use of additional emissions in the maritime mobile service below 160 kc/s. Number 158, Geneva, 1959, recognized F1 emission not previously provided for in number 233, Atlantic City, 1947.

It is proposed that this Conference, following past precedents, provide for use of the telegraph emission A7J in the maritime mobile service between 14 and 160 kc/s, by making necessary revisions to numbers 158 and 167.

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Proposals relating to  
Article 5

Nos. 171, 172 and 196

- 171 The frequency 143 kc/s is the calling frequency for stations in the maritime mobile service using the band 90-160 kc/s. The conditions for its use are prescribed in Article 32.
- 172 Limited to ship stations.
  
- 196 In Japan, the band 1 605-1 800 kc/s is allocated on a permitted basis to the maritime radionavigation service using continuous wave systems with a mean power of not more than 50 watts.



Ref.

USA/26 SUP 171

Reasons :

Use of 143 kc/s by ships for calling is no longer sufficient to justify its retention.

G/61 SUP 171-172

Reasons :

In view of the declining use of the band 90 to 160 kc/s by ships, it is no longer considered necessary to retain 143 kc/s as a calling frequency for stations in the maritime mobile service using this band, nor to give preference to ships in the band 130-150 kc/s.

J/90 MOD 196

In Japan, the band 1605 - 1800 kc/s is also allocated on a permitted basis to the maritime radionavigation service using continuous wave systems with a mean power of not more than 50 watts.

Reasons :

At the Ordinary Administrative Radio Conference, Geneva, 1959, Japan made a proposal that the frequency band 1605 - 1800 kc/s should be usable also for the maritime radionavigation service pursuant to the footnote in addition to the fixed service and mobile service. Further, as a result of the deliberation at the Conference, our proposal for the addition of this footnote submitted with the intent of the additional allocation to the services contained in the List on the condition (that it shall be a permissible service with power limitation); namely, with such words which should have been expressed as "is also allocated", was agreed at the Conference. Nevertheless, in the footnote of the Final Acts, it was laid down as follows without the word "also"; "In Japan, the band 1605 - 1800 kc/s is allocated on a permitted basis to the maritime radionavigation service using continuous wave system with a mean power of not more than 50 watts".

In consequence, it has come to be usable only for the maritime radionavigation service in lieu of the fixed service and mobile service.

As the result, it has caused unexpected serious consequences that all of the frequency assignments to the stations for fixed service and mobile service, which are essential to Japan in this band, have been obliged to treat as out-of-band assignments.

Therefore, with a view to rectifying the above-mentioned expression contained in the provisions, the amendment to No. 196 is proposed.

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Proposals relating to

Article 5

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N° 197 and 199

- 197 In Australia, North Borneo, Brunei, Sarawak, Singapore, China, Indonesia, Malaya, New Zealand and the Philippines, the band 1 605-1 800 kc/s is allocated on a permitted basis to the aeronautical radionavigation service, the stations of which shall use a mean power not exceeding 2 kW.
- 199 In India, the band 1 800-2 000 kc/s is allocated on a permitted basis to the aeronautical mobile service.

Ref.

AUS/54(3)      MOD      197.      In Australia, North Borneo, Brunei, Sarawak, Singapore, China, Indonesia, Malaya, New Zealand and the Philippines, the band 1605 - 1800 kc/s is also allocated on a permitted basis to the aeronautical radionavigation service, the stations of which shall use a mean power not exceeding 2 kW.

Reasons :

In Australia, it has been necessary to utilise the 1605 - 1800 kc/s band for the aeronautical radionavigation service in addition to the Fixed and Mobile Services. This sharing arrangement is still required.

IND/99(4)      MOD      199      In India, the band 1800-2000 kc/s is also allocated on a permitted basis to the aeronautical mobile service.

Reasons :

In India this band is to be allocated to other services including Maritime Mobile Service.

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Proposals relating to  
Article 5

Table of Frequency Allocations

Band 2000 to 2194 kc/s

and No. 201

ART 5

kc/s  
2 000—2 194

Allocation to Services		
Region 1	Region 2	Region 3
<b>2 000—2 045</b> FIXED MOBILE except aeronautical mobile 193	<b>2 000—2 065</b>     FIXED  MOBILE	
<b>2 045—2 065</b> METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile 193		
<b>2 065—2 170</b> FIXED MOBILE except aeronautical mobile (R)  193	<b>2 065—2 107</b> MARITIME MOBILE 200	
	<b>2 107—2 170</b> FIXED MOBILE	
<b>2 170—2 194</b>	MOBILE (distress and calling)  201	

200 In Region 2, limited to ship stations using radiotelegraphy.

201 The frequency 2 182 kc/s is the international distress and calling frequency for radiotelephony. The conditions for the use of this frequency are prescribed in Article 35.



Réf.

Proposals

J/84(1)

MOD

Amend Article 5, Section IV. Table of Frequency Allocations as follows :

kc/s

2000 - 2194

Allocation to services		
Region 1	Region 2	Region 3
2000 - 2045 (NOC)	2000 - 2065 (NOC)	
2045 - 2065 (NOC)		
2065 - 2170 (NOC)	2065 - 2107 (NOC)	
	2107 - 2170 (NOC)	
2170 - <u>2173.5</u>		
<u>Maritime mobile</u>		
<u>2173.5 - 2190.5</u>		
Mobile (distress and calling)		
201		
<u>2190.5 - 2194</u>		
<u>Maritime mobile</u>		

Reasons :

With many years' development of technical characteristics of radio equipment and wide use of SSB communication system, the guard band of 2182 kc/s should be reduced from 24 kc/s to 17 kc/s for effective use of frequencies. In connection with this proposal, it will be necessary to amend Nos. 442 to 444 and 1341 to 1345.

USA/16(13)

MOD

201

The frequency 2182 kc/s is the international distress and calling frequency for radiotelephony. The conditions for the use of ~~this frequency~~ the band 2170-2194 kc/s are prescribed in Article 35.

Reasons :

Consequential to the proposed amendment of Article 35 (USA/16(1) - (11)).

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Proposals relating to  
Article 5

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Table of Frequency Allocations

Band 3155 to 3200 kc/s

ART 5

kc/s  
2 850—3 500

Allocation to Services		
Region 1	Region 2	Region 3
2 850—3 025	AERONAUTICAL MOBILE (R)	
3 025—3 155	AERONAUTICAL MOBILE (OR)	
3 155—3 200	FIXED  MOBILE except aeronautical mobile (R)	
3 200—3 230	FIXED  MOBILE except aeronautical mobile (R)  BROADCASTING 202	
3 230—3 400	FIXED  MOBILE except aeronautical mobile  BROADCASTING 202	
3 400—3 500	AERONAUTICAL MOBILE (R)	

Ref.

USSR/49(3)

Item 2.2 :

It is recommended that the possibility be considered of improving the safety service by allocating for radiotelephone traffic between ships engaged in search and rescue operations an additional frequency in the 3155 - 3200 kc/s band, for example 3158  $\pm$  3 kc/s, used exclusively by the Maritime Mobile Service; this would be at the expense of the mobile and fixed stations. It is also recommended that the right to use frequency 6204 kc/s for this service (see No. 1353 of the Radio Regulations) be extended to all regions of the world.

Comments

Since the sea-going fleet has been greatly improved in the last 10 - 15 years by more up-to-date ships capable of high speeds, it really has become possible for ships in distress to be effectively helped by other ships situated a long way from the area concerned (1000 - 1500 km). The Radio Regulations do not provide, on a world-wide basis, special frequencies in the 3 and 6 Mc/s bands for intership radiotelephone traffic in emergencies. The Soviet Administration therefore proposes that the possibility be considered of allocating a frequency in the 3155 - 3200 kc/s range on a world-wide basis and that the right to use frequency 6204 kc/s for this service be extended to all regions of the world.

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Proposals relating to

article 5

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Table of Frequency Allocations

Band 4063 to 4438 kc/s

and N° 209

ART 5

kc/s  
4 000—4 850

Allocation to Services		
Region 1	Region 2	Region 3
4 000—4 063 FIXED		
4 063—4 438 MARITIME MOBILE 208 209		
4 438—4 650 FIXED MOBILE except aeronautical mobile (R)		4 438—4 650 FIXED MOBILE except aeronautical mobile
4 650—4 700 AERONAUTICAL MOBILE (R)		
4 700—4 750 AERONAUTICAL MOBILE (OR)		
4 750—4 850 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 202	4 750—4 850 FIXED BROADCASTING 202	

208 In the U.S.S.R., in the bands 4 063-4 133 kc/s and 4 408-4 438 kc/s, fixed stations of limited power may operate provided that, in order to minimize the possibility of causing harmful interference to the maritime mobile service, they are situated at least 600 km from the coast. A limited power station is one whose power and antenna characteristics are so adjusted that the field strength established at any point in any direction does not exceed that obtainable with a non-directive antenna and a peak envelope power of 1 kW.

209 On condition that harmful interference is not caused to the maritime mobile service, the frequencies between 4 063 and 4 438 kc/s may be used exceptionally by fixed stations communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts; however, in Regions 2 and 3, between 4 238 and 4 368 kc/s, a mean power not exceeding 500 watts may be used by such fixed stations.



Ref.

CAN/40(4)

MOD

4063 - 4438 kc/s band

4063 - <u>4136.5</u>	MARITIME MOBILE
	208 209
<u>4136.5 - 4140</u>	<u>OCEAN DATA</u>
	<u>209</u>
<u>4140 - 4438</u>	MARITIME MOBILE
	208 209

CAN/40(10)

MOD

209

On condition that harmful interference is not caused to the maritime mobile service, or the ocean data service, the frequencies between 4063 and 4438 kc/s may be used exceptionally by fixed stations communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts; however, in Regions 2 and 3, between 4238 and 4368 kc/s, a mean power not exceeding 500 watts may be used by such fixed stations.

Reasons :

To provide for the exclusive allocation of frequencies to the ocean data service.

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Proposals relating to

article 5

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Table of Frequency Allocations

6200 to 6525 kc/s band

and N° 211

ART 5

kc/s  
5 480—7 100

Allocation to Services		
Region 1	Region 2	Region 3
5 480—5 680	AERONAUTICAL MOBILE (R)	
5 680—5 730	AERONAUTICAL MOBILE (OR)	
5 730—5 950	FIXED	
5 950—6 200	BROADCASTING	
6 200—6 525	MARITIME MOBILE	
	211	
6 525—6 685	AERONAUTICAL MOBILE (R)	
6 685—6 765	AERONAUTICAL MOBILE (OR)	
6 765—7 000	FIXED	
7 000—7 100	AMATEUR	

- 211 On condition that harmful interference is not caused to the maritime mobile service, the frequencies between 6 200 and 6 525 kc/s may be used exceptionally by fixed stations, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts. At the time of notification of these frequencies, the attention of the International Frequency Registration Board will be drawn to the above conditions.

Réf.

CAN/40(5)

MOD

6200 - 6525 kc/s band

6200 - <u>6207.5</u>	MARITIME MOBILE
	211
<u>6207.5</u> - 6211	<u>OCEAN DATA</u>
	<u>211</u>
<u>6211</u> - 6525	MARITIME MOBILE
	211

CAN/40(11)

MOD

211

On condition that harmful interference is not caused to the maritime mobile service, or the ocean data service, the frequencies between 6200 and 6525 kc/s may be used exceptionally by fixed stations, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 watts. At the time of **notification** of these frequencies, the attention of the International Frequency Registration Board will be drawn to the above conditions.

Reasons :

To provide for the exclusive allocation of frequencies to the ocean data service.

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Proposals relating to

article 5

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Table of Frequency Allocations :

Bands :	8195 - 8815	kc/s
	12330 - 13200	"
	16460 - 17360	"
	22000 - 22720	"

ART 5

kc/s

Allocation to Services		
Region 1	Region 2	Region 3
7 300—8 195	FIXED	
8 195—8 815	MARITIME MOBILE 213	
8 815—8 965	AERONAUTICAL MOBILE (R)	

11 975—12 330	FIXED	
12 330—13 200	MARITIME MOBILE 213	
13 200—13 260	AERONAUTICAL MOBILE (OR)	

MOD by Space  
Conference

15 768—16 460	FIXED	
16 460—17 360	MARITIME MOBILE 213	
17 360—17 700	FIXED	

21 850—22 000	AERONAUTICAL FIXED AERONAUTICAL MOBILE (R)	
22 000—22 720	MARITIME MOBILE	
22 720—23 200	FIXED	



Ref.

CAN/40(6)

MOD

8195 - 8815 kc/s band

8195 - <u>8276.5</u>	MARITIME MOBILE
<u>8276.5</u> - 8280	<u>OCEAN DATA</u>
<u>8280</u> - 8815	MARITIME MOBILE
	213

CAN/40(7)

MOD

12 330 - 13 200 kc/s band

12 330 - <u>12 417.5</u>	MARITIME MOBILE
<u>12 417.5</u> - 12 421	<u>OCEAN DATA</u>
12 421 - 13 200	MARITIME MOBILE
	213

CAN/40(8)

MOD

16 460 - 17 360 kc/s band

16 460 - <u>16 558.5</u>	MARITIME MOBILE
<u>16 558.5</u> - 16 562	<u>OCEAN DATA</u>
<u>16 562</u> - 17 360	MARITIME MOBILE
	213

CAN/40(9)

MOD

22 000 - 22 720 kc/s band

22 000 - <u>22 096.5</u>	MARITIME MOBILE
<u>22 096.5</u> - 22 100	<u>OCEAN DATA</u>
<u>22 100</u> - 22 720	MARITIME MOBILE

Reasons :

To provide for the exclusive allocation of frequencies  
to the ocean data service.

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Proposals relating to

article 5

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N° 287

**287** The frequency 156.8 Mc/s is the international safety and calling frequency for the maritime mobile VHF radiotelephone service. Administrations shall ensure that a guard-band of 75 kc/s on each side of the frequency 156.8 Mc/s is provided. The conditions for the use of this frequency are contained in Article 35.

In the bands 156.025-157.425 Mc/s, 160.625-160.975 Mc/s and 161.475-162.025 Mc/s, 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 radiotelephone service.

Réf.

F/14(89)

MOD

287

Add the following to the third paragraph of this number :

However, the frequency bands in which priority is given to the maritime mobile service may be used for shipping on inland waterways, subject to agreement between the administrations concerned and those whose services, having had the band assigned to them, are likely to be affected.

Reasons :

To permit the regular use of the frequencies appearing in Appendix 18 for shipping on inland waterways.

HOL/75(26)

MOD

287

The frequency 156.8 Mc/s is the international safety and calling frequency for the maritime mobile VHF radiotelephone service. Administrations shall ensure that a guard-band of 75 kc/s on each side of the frequency 156.8 Mc/s is provided. The conditions for the use of this frequency are contained in Article 35.

In the bands 156.025-157.425 Mc/s, 160.625-160.975 Mc/s and 161.475-162.025 Mc/s, 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 radiotelephone service.

However, the frequency bands in which priority is given to the maritime mobile service, may be used for mobile radio-telephone communications on inland waterways, subject to agreement between administrations concerned and those having services operating in accordance with the Table, which may be affected.

Reasons :

To permit the use of the frequencies listed in Appendix 18 for mobile radiotelephone communications on inland waterways.

Ref.

USA/55(50)

MOD 287

The frequency 156.80 Mc/s is the international Safety and calling frequency for the maritime mobile VHF radiotelephone service. Administrations shall ensure that a guard-band of ~~75~~ 37.5 kc/s on each side of the frequency 156.80 Mc/s is provided. The conditions for the use of this frequency are contained in Article 35.

In the bands 156.025-157.425 Mc/s, 160.625-160.975 Mc/s and 161.475-162.025 Mc/s, 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 the 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 radiotelephone service.

Reasons :

To provide for the reduction of the guard band on each side of 156.80 Mc/s.

Proposals relating to  
article 7

Special Rules Relating to Particular Services

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Section IV. Maritime Mobile Service

N<sup>os</sup> 438 - 442

Section IV. Maritime Mobile Service

438 § 8. (1) Except as provided in No. 418, ship stations authorized to work in the bands between 415 and 535 kc/s shall transmit on the frequencies indicated in Article 32 (see No. 1123).

439 § 9. In the band 405 - 415 kc/s in Region 1, no frequency is assigned to coast stations, in order to protect the frequency 410 kc/s which is designated for the maritime radionavigation service (radio direction-finding).

440 § 10. (1) In the African Area of Region 1, in the bands 415 - 490 kc/s and 510 - 525 kc/s, the separation between adjacent frequencies assigned to coast stations is, as a general rule, 3 kc/s. However, in order that the frequencies may coincide with those used in the European Area in these bands, this spacing is reduced in certain cases.

441 (2) The separation between adjacent frequencies used respectively by coast stations and by ship stations is 4 kc/s.

442 § 11. (1) In Region 1, frequencies assigned to stations of the maritime mobile service, operating in the bands between 1 605 and 3 800 kc/s (see Article 5) should, whenever possible, be in accordance with the following subdivision :

- 1 605 - 1 625 kc/s : Radiotelegraphy exclusively.
- 1 625 - 1 670 kc/s : Low power radiotelephony.
- 1 670 - 1 950 kc/s : Coast stations.
- 1 950 - 2 053 kc/s : Ship stations working to coast stations.
- 2 053 - 2 065 kc/s : Intership working.
- 2 065 - 2 170 kc/s : Ship stations working to coast stations.
- 2 170 - 2 194 kc/s : *Guard-band for the distress frequency 2 182 kc/s.*
- 2 194 - 2 440 kc/s : Intership working.
- 2 440 - 2 578 kc/s : Ship stations working to coast stations.
- 2 578 - 2 850 kc/s : Coast stations.
- 3 155 - 3 340 kc/s : Ship stations working to coast stations.
- 3 340 - 3 400 kc/s : Intership working.
- 3 500 - 3 600 kc/s : Intership working.
- 3 600 - 3 800 kc/s : Coast stations.



Réf.

Before 438 add the following new paragraphs :

- CAN/40(12)      ADD      437A      Para. 7(bis)(1). Administrations are urged to discontinue in the maritime mobile service, the use of double sideband radiotelegraph transmissions, if possible by 1 January 1973.
- ADD      437B      (2). Stations of the maritime mobile service employing single sideband radiotelegraph transmissions shall use upper sideband emissions. Stations using single sideband radiotelegraph emissions on the designated frequencies 410, 425, 448, 454, 468, 480, 500, 512 and 8364 kc/s shall use carrier (reference) frequencies of the same value.

G/78      SUP      438

Reasons :

Covered by No. 1123.

G/78      SUP      439

Reasons :

Covered by No. 182.

F/8(1)      No. 442 Replace :

- 2065 - 2170 kc/s by 2065 - 2173.5 kc/s
- 2170 - 2194 kc/s: Guard-band for the distress frequency 2182 kc/s by - 2173.5 - 2190.5 kc/s: Guard-band for the distress and calling frequency 2182 kc/s.

Add in the appropriate place :

- 2190.5 - 2194 kc/s: Selective calling of ship stations by coast stations

Reasons :

The improvement in the technical characteristics of the equipment may enable the guard-band of the frequency 2182 kc/s to be reduced to 17 kc/s. The gaining of two traffic channels does not allow for world-wide distribution. It is proposed that one of these channels should be assigned to ship-coast traffic (adjacent band) and the other to selective calling. See also proposal relating to No. 1344 (F/8(38)).

Réf.

G/79

MOD

442

Replace :

- 2170-2194 kc/s : Guard-band for the distress frequency 2182 kc/s.  
by
- 2170-2173.5 kc/s : Selective calling of ship stations by coast stations.
- 2173.5-2190.5 kc/s: Guard-band for the distress frequency 2182 kc/s.
- 2190.5-2194 kc/s : Ship stations calling and working to coast stations (see Nos. 1339A and 1344B).

Reasons :

To take advantage of the improvement of transmitter and receiver design to reduce the guard-band for 2182 kc/s to  $\pm 8.5$  kc/s.

Proposals relating to

Article 7

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N<sup>o</sup> 443 and 444

ART 7

**443** (2) In these bands, the frequencies assigned to the maritime mobile service are spaced, as far as possible by :

- 7 kc/s when two adjacent frequencies are used for radiotelephony ;
- 3 kc/s when two adjacent frequencies are used for radiotelegraphy ;
- 5 kc/s when one frequency is used for radiotelephony and the adjacent frequency is used for radiotelegraphy.

**444** (3) However, in the case of intership bands, the spacing is reduced to 5 kc/s for adjacent frequencies used for radiotelephony.

Réf.

I/31(9)      MOD    443      (2) In these bands, the frequencies assigned to the maritime mobile service are spaced, as far as possible, by :

- 7 kc/s when two adjacent frequencies are used for radiotelephony (class A3 emissions);
- 3 kc/s when two adjacent frequencies are used for radiotelegraphy;
- 5 kc/s when one frequency is used for radiotelephony (class A3 emissions) and the adjacent frequency is used for radiotelegraphy.

ADD    443 A      (2 bis) For spacing between assigned frequencies to the maritime mobile service for radiotelephony class A3H, A3A, A3J emissions, see Article 35, Nos. 1339-BW and 1339-BY (Proposal No. I/31(4)).

Reasons :

Such modifications are a consequence of the conversion to single sideband technique of maritime mobile stations operating in the band between 1605 and 4000 kc/s.

F/8(2)      No. 443    Delete this number

Reasons :

As a result of SSB operation and the sub-division of the bands, the frequency separations become irregular and the recommendation in No. 443 is no longer of practical value. See draft Resolution No. 1A (F/8(52)) attached and Diagram No. I relating to the transfer of frequencies assigned to stations in the maritime mobile service in the 1605 - 3800 kc/s band.

F/8(3)      No. 444    Delete this number

Reasons :

See proposal relating to No. 443 (F/8(2)).

G/76(26)      SUP      443 and 444

Reasons :

No longer applicable with the introduction of single sideband operation.

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Proposals relating to

Article 7

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N° 445

- 445** (4) In Regions 2 and 3, the frequency 2 638 kc/s is used as an intership radiotelephony working frequency in addition to the specific frequencies prescribed for common use in certain services. In Region 3, this frequency is protected by a guard-band between 2 634 and 2 642 kc/s.



Réf.

F/8(4) MOD 445

(4) In Regions 2 and 3, the frequencies 2636.35 kc/s (carrier frequency 2635 kc/s) and 2639.65 kc/s (carrier frequency 2638.3 kc/s) are used, in addition to the frequencies prescribed for common use in certain services, as ship-ship working frequencies by ship radiotelephone stations. In Region 3 these frequencies are protected by a guard-band between 2634 and 2642 kc/s.

Reasons :

See draft Resolution 1A (F/8(52)) relating to the transfer of frequencies assigned to maritime mobile service stations in the 1605 - 3800 kc/s band (Corrigendum to Doc. N° 8).

Réf.

J/84(2)

MOD

445

(4) In regions 2 and 3, the ~~frequency 2638 kc/s~~ is frequencies 2636 and 2639.5 kc/s are used as intership radiotelephony working frequencies in addition to the specific frequencies prescribed for common use in certain services. In Region 3, these frequencies are protected by a guard-band between 2634 and 2642 kc/s.

Reasons :

To convert DSB system to SSB system. These frequencies are so much used between ships that the separation between frequencies was made 3.5 kc/s within the range of the guard-band in order to minimize interference between adjacent channels. As for the technical standards for frequency assignment, refer to Agenda Item 3 (amendment to Appendix 17, Document No. 86).

Proposals relating to

Article 7

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N<sup>os</sup> 447 - 455

446 § 12. (1) The bands exclusively allocated to the maritime mobile service between 4 000 and 27 500 kc/s (see Articles 5, 32 and 35) are subdivided into the following categories :

447 (a) *Ship stations, telephony*

4 063 - 4 133 kc/s  
8 195 - 8 265 kc/s  
12 330 - 12 400 kc/s  
16 460 - 16 530 kc/s  
22 000 - 22 070 kc/s

448 (b) *Coast stations, telephony*

4 368 - 4 438 kc/s  
8 745 - 8 815 kc/s  
13 130 - 13 200 kc/s  
17 290 - 17 360 kc/s  
22 650 - 22 720 kc/s

449 (c) *Ship stations, telephony (single sideband only)*

4 133 - 4 140 kc/s  
6 200 - 6 211 kc/s  
8 273 - 8 280 kc/s  
12 407 - 12 421 kc/s  
16 537 - 16 562 kc/s  
22 078 - 22 100 kc/s

450 (d) *Ship stations, telephony (double sideband calling channel)*

8 265 - 8 273 kc/s  
12 400 - 12 407 kc/s  
16 530 - 16 537 kc/s  
22 070 - 22 078 kc/s

451 (e) *Ship stations, wideband telegraphy, facsimile, and special transmission systems*

4 140 - 4 160 kc/s  
6 211 - 6 240 kc/s  
8 280 - 8 320 kc/s  
12 421 - 12 471 kc/s  
16 562 - 16 622 kc/s  
22 100 - 22 148 kc/s

452 (f) *Ship stations, telegraphy*

4 160 - 4 238 kc/s  
6 240 - 6 357 kc/s  
8 320 - 8 476 kc/s  
12 471 - 12 714 kc/s  
16 622 - 16 952 kc/s  
22 148 - 22 400 kc/s  
25 070 - 25 110 kc/s<sup>1</sup>

453 (g) *Coast stations, telegraphy and facsimile*

4 238 - 4 368 kc/s  
6 357 - 6 525 kc/s  
8 476 - 8 745 kc/s  
12 714 - 13 130 kc/s  
16 952 - 17 290 kc/s  
22 400 - 22 650 kc/s<sup>1</sup>

454 (2) Within the bands listed in No. 452, the following bands are reserved exclusively for calling :

4 177 - 4 187 kc/s  
6 265.5 - 6 280.5 kc/s  
8 354 - 8 374 kc/s  
12 531 - 12 561 kc/s  
16 708 - 16 748 kc/s  
22 220 - 22 270 kc/s

455 (3) In Regions 2 and 3 the band 2 088.5 - 2 093.5 kc/s is reserved exclusively for calling (telegraphy only).

452-1<sup>1</sup> The frequencies in the band 25 070 - 25 110 kc/s shall be used as working frequencies in addition to frequencies in the band 22 148 - 22 400 kc/s.

453.1<sup>1</sup> Frequencies in the bands 25 010 - 25 070 kc/s, 25 110 - 25 600 kc/s, and 26 100 - 27 500 kc/s may be assigned to coast stations. They are then considered as frequency additional to those in the band 22 400 - 22 650 kc/s.

AUS/54(4)      MOD      455 (3)      In Regions 2 and-3 the band 2088.5 - 2093.5 kc/s is reserved exclusively for calling (telegraphy only).

F/8(5)      No. 447 Replace the present text by the following :

a) Ship stations, telephony

4063 - 4140 kc/s  
6200 - 6211 kc/s  
8195 - 8280 kc/s  
12330 - 12421 kc/s  
16460 - 16558 kc/s  
22000 - 22100 kc/s

Reasons :

Since all ship stations are eventually due to work on SSB, the "working frequencies" part of Appendix 15B no longer seems to be necessary and the channels shown there can be assimilated to the other radiotelephone channels in Appendix 17. Subject to the availability of associated frequencies for the direction land-ship (see Proposal No. F/8(6) relating to No. 448), an additional number of channels can be set up to meet the new maritime radio service requirements.

No. 449 RR is correspondingly deleted.

In the same way, the calling frequencies set out in No. 450 RR can be deleted because selective calling will be used.

These channels can also be incorporated in Appendix 17 as indicated above. No. 450 is correspondingly deleted (see diagram, Annex II).

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F/8(6)      No. 448 Replace the present text by the following :

b) Coast stations, telephony

4361 - 4438 kc/s  
6514 - 6525 kc/s  
8731 - 8815 kc/s  
13109 - 13200 kc/s  
17262 - 17360 kc/s  
22620 - 22720 kc/s

Ref.

- 58 -

F/8(6)  
(cont.)

Reasons :

The frequency bandwidths reserved for coast radiotelephone stations are increased, in line with the amendments proposed for the frequency bandwidths for ship radiotelephone stations, thus providing pairs of associated frequencies.

The supplementary bandwidths are taken from the bands provided in No. 452 RR and Appendix 15 Section A for low-traffic ship radiotelegraph station transmissions. The frequencies reserved for coast-station radiotelegraph and facsimile traffic are all displaced by the same quantity to lower frequencies, without altering the separation between them and by transferring the assignment.

The number of working frequencies to be assigned to low-traffic ships is in general reduced from 98 to 84. This proposal is justified by the traffic-density in this band, which is at present tolerable, the increase in the number of large ships compared with small, and the expansion of radiotelephony (see diagram, Annex II).

F/8(7)

No. 449 Delete this number

Reasons :

See Proposal No. F/8(5) relating to No. 447.

F/8(8)

No. 450 Delete this number

Reasons :

See Proposal No. F/8(5) relating to No. 447.

F/8(9)

No. 451 Replace

- 16 562 - 16 622 kc/s by  
- 16 558 - 16 622 kc/s

Reasons :

See Proposal No. F/8(5) relating to No. 447.

Réf.

F/8(10) No. 452 Replace the present text by the following :

Ship stations, telegraphy

4160	-	4231	kc/s
6240	-	6346	kc/s
8320	-	8462	kc/s
12471	-	12693	kc/s
16622	-	16924	kc/s
22148	-	22370	kc/s
25070	-	25110	kc/s (1)

Reasons :

The frequency bands used for radiotelegraphy by low-traffic ship stations are reduced because of the increases in the frequency bands proposed in No. 448. This reduction entails a reduction in the number of working frequencies assigned in both Group A and Group B. See Proposal No. F/8(6) relating to No. 448 and diagram, Annex II.

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F/8(11) No. 453 Replace the present text by the following :

Coast stations, wide-band radiotelegraph systems, facsimile, special transmission systems, teleprinters, data transmission and manual telegraphy.

4231	-	4361	ko/s
6346	-	6514	ko/s
8462	-	8731	ko/s
12693	-	13109	kc/s
16924	-	17262	kc/s
22370	-	22620	kc/s

Reasons :

The result of the changes (F/8(6) and F/8(10)) proposed to Nos. 448 and 452. It is proposed that the frequency bands in No. 453 be shifted to lower frequencies. See the reason for the proposal relating to No. 448, and attached draft Resolution No. IB (Proposal No. F/8(53)) relating to the transfer of frequency assignments.

The title is, moreover, worded in the same way as the title of No. 451 so that ship stations and coast stations can use their respective bands for the same purposes. See also proposal relating to Point 7.1 of the agenda (Document No. 14).

Ref.

- 60 -

G/77(39)

MOD

447

(a) Ship stations, telephony

4 363 - 4 140 kc/s

6 200 - 6 211 kc/s

8 195 - 8 280 kc/s

12 330 - 12 421 kc/s

16 460 - 16 562 kc/s

22 000 - 22 100 kc/s

Reasons :

To include the frequency bands listed in Nos. 449 and 450 consequential upon the inclusion of these frequencies in a revised Appendix 17, Section B.

MOD

448

(b) Coast Stations, telephony

4 361 - 4 438 kc/s

6 514.5 - 6 525 kc/s

8 731 - 8 815 kc/s

13 109 - 13 200 kc/s

17 262 - 17 360 kc/s

22 620 - 22 720 kc/s

Reasons :

To provide additional channels associated with the corresponding ship station frequencies formerly in Appendix 15, Section B.

SUP

449 and 450

Reasons :

Included in No. 447.

MOD

452

(d) Ships stations, telegraphy

4 160- 4 231 kc/s 16 622-16 924 kc/s

6 240- 6 346.5 kc/s 22 148-22 370 kc/s

8 320- 8 462 kc/s 25 070-25 110 kc/s<sup>1</sup>

12 471-12 693 kc/s

Reasons :

To provide for coast station radiotelephone channels. Consequential upon amendment of No. 448.

MOD

452.1

<sup>1</sup> The frequencies in the band 25 070 - 25 110 kc/s shall be used as working frequencies in addition to frequencies in the band 22 148 - 22 370 kc/s.

Reasons :

Consequential upon amendment of No. 452.



Ref.

G/77(39)  
(contd.)

MOD

453

(e) Coast stations, telegraphv. facsimile  
and special transmisssion systems

4 231 - 4 361 kc/s

6 346.5- 6 514.5 kc/s

8 462 - 8 731 kc/s

12 693 - 13 109 kc/s

16 924 - 17 262 kc/s

22 370 - 22 620 kc/s<sup>1</sup>

Reasons :

Heading amended (see Agenda Item 2.5, G/56(3), Document  
No. 56. Frequency band amended consequential upon amendment  
of No. 448.

MOD

453.1

<sup>1</sup> Frequencies in the bands 25,010 -  
25 070 kc/s, 25 110 - 25 600 kc/s, and 26 100 -  
27 500 kc/s may be assigned to coast stations.  
They are then considered as frequencies addi-  
tional to those in the band 22 370-22 620 kc/s.

Reasons:

Consequential upon amendment to No. 453.

G/78

SUP

455

Reasons :

Covered by No. 1139.

Ref.

HOL/72(9)	MOD	447	a) Ship stations, telephony ( <u>duplex</u> )	
			4063----4133	<u>4063 - 4140</u> kc/s <sub>1</sub>
				<u>6200 - 6211</u> kc/s
			8195----8265	<u>8195 - 8280</u> kc/s
			12330----12400	<u>12330 - 12421</u> kc/s
			16460----16530	<u>16460 - 16558</u> kc/s
			22000----22070	<u>22000 - 22092</u> kc/s

Reasons :

In order to meet the increasing requirements of the maritime mobile radiotelephone service, the greater part of the frequencies listed in the present Appendix 15, Section B, is transferred to the ship station telephony bands.

ADD 447.1<sup>1</sup> (footnote)

For particular conditions concerning the use of 6204 kc/s see No. 1353.

Reasons :

Consequential upon the inclusion of the frequencies listed in the present Appendix 15, Section B, in the revised bands allocated to the radiotelephone service.

MOD	448	b) Coast Stations, telephony ( <u>duplex</u> )	
		4368----4438	<u>4361 - 4438</u> kc/s
			<u>6514 - 6525</u> kc/s
		8745----8815	<u>8730 - 8815</u> kc/s
		13130----13200	<u>13109 - 13200</u> kc/s
		17290----17360	<u>17262 - 17360</u> kc/s
		22650----22720	<u>22628 - 22720</u> kc/s

Reasons :

To provide for corresponding coast station telephone channels, a similar portion of the coast station telegraphy bands, at present adjacent to the lower end of the coast station telephony bands, is transferred to the latter bands.

Ref.

HOL/72(9) MOD 449 c) Ship stations, telephony (~~single-sideband~~  
(contd.) only) (simplex/duplex)

4133----	4140		
6200----	6211	6211 - 6215	kc/s
8273----	8280	8280 - 8284.5	kc/s
12407----	12421	12421 - 12429	kc/s
16537----	16562	16558 - 16573	kc/s
22078----	22100	22092 - 22096	kc/s

Reasons :

1. By reducing the frequency spacing in the existing high traffic bands so as :

- a) to obtain the same number of frequencies within a smaller band, and
- b) to reserve a portion of the remaining part of the high traffic bands for teleprinter and data transmission systems,

it is possible to move up the present bands for wide-band telegraphy etc., in order to provide frequency space for the purposes indicated in Nos. 449 and 450.

2. To obtain additional radiotelephone channels for general use of all maritime mobile stations. These frequencies could be used for the following purposes :

- a) as ship-shore working frequencies for ships wishing to communicate with a coast station of a nationality other than their own and which are not provided with a working frequency associated with that of the coast station in accordance with Appendix 17.
- b) in case of poor receiving conditions on the working frequency associated with that of the coast station in accordance with Appendix 17, the coast station may request a ship to change to transmission on one of these frequencies.
- c) for single channel simplex operation between ship and coast stations with limited power, when traffic density is high on the duplex working frequencies.
- d) for inter-ship communication.

See also proposal relating to Agenda Item 3, No. 1357 (HOL/72(11)).

Ref.

HOL/72(9)  
(contd.)

MOD

450

- 64 -

d) Ship stations, telephony (~~double-sideband~~ calling channel)

	<u>4140 - 4144</u> kc/s
<u>8265---8273</u>	<u>8284.5 - 8288</u> kc/s
<u>12400---12407</u>	<u>12429 - 12434</u> kc/s
<u>16530---16537</u>	<u>16573 - 16578</u> kc/s
<u>22070---22078</u>	<u>22096 - 22100</u> kc/s

Reasons :

The Netherlands Administration is of the opinion that calling frequencies for radiotelephony are essential. When no calling frequencies are provided a ship station calling a coast station should use the working frequency associated with that of the coast station in accordance with Appendix 17.

It will be impractical for a ship, calling coast stations of other nationalities, to be equipped with numerous crystals.

See also proposal relating to No. 449.

MOD

451

e) Ship stations, ~~wideband~~ telegraphy, facsimile, and special transmission systems

<u>4140---4160</u>	<u>4144 - 4164</u> kc/s
<u>6211---6240</u>	<u>6215 - 6244</u> kc/s
<u>8280---8320</u>	<u>8288 - 8327.5</u> kc/s
<u>12421---12471</u>	<u>12434 - 12484</u> kc/s
<u>16562---16622</u>	<u>16578 - 16638</u> kc/s
<u>22100---22148</u>	<u>22100 - 22148</u> kc/s

Reasons :

See proposal relating to No. 449 (HOL/72(9)).

ADD

451 A

e) (bis) Ship stations, teleprinter and data transmission

<u>4164 - 4170.5</u> kc/s
<u>6244 - 6255.75</u> kc/s
<u>8327.5 - 8341</u> kc/s
<u>12484 - 12511.5</u> kc/s
<u>16638 - 16682</u> kc/s
<u>22148 - 22191</u> kc/s

Reasons :

See proposals relating to No. 449 (HOL/72(9)) and Agenda Item 7.1 (Document No. 75).

MOD

452

f) Ship stations, telegraphy

<u>4160---4238</u>	<u>4170.5 - 4231</u> kc/s
<u>6240---6357</u>	<u>6255.75 - 6346</u> kc/s
<u>8320---8476</u>	<u>8341 - 8461</u> kc/s
<u>12471---12714</u>	<u>12511.5 - 12693</u> kc/s
<u>16622---16952</u>	<u>16682 - 16924</u> kc/s
<u>22148---22400</u>	<u>22191 - 22378</u> kc/s
<u>25070---25110</u> ±	<u>25070 - 25110</u> kc/s ±

Reasons :

The frequency bands assigned to low traffic ships are reduced to accommodate the coast station telegraphy bands to be transferred as proposed in No. 453.

See also proposal relating to No. 449 (HOL/72(9)).

HOL/72(9)  
(contd.)

MOD 452.1 (footnote)

1

The frequencies in the band 25070 - 25110 kc/s shall be used as working frequencies in addition to frequencies in the band 22148 - ~~22400~~ 22378 kc/s.

Reasons :

To be consistent with the proposal relating to No. 452.

MOD 453 g) Coast stations, telegraphy, wideband telegraphy and, facsimile and special transmission systems.

4238----	4368	<u>4231 - 4361</u>	kc/s
6357----	6525	<u>6346 - 6514</u>	kc/s
8476----	8745	<u>8461 - 8730</u>	kc/s
12714----	13130	<u>12693 - 13109</u>	kc/s
16952----	17290	<u>16924 - 17262</u>	kc/s
22400----	22650 ±	<u>22378 - 22628</u>	kc/s <sup>1</sup>

Reasons :

Consequential upon the proposals relating to Nos. 448 and 452, the coast station telegraphy bands to be transferred are accommodated in a part of the low traffic ship telegraphy bands cleared for that purpose.

HOL/71(8)

In No. 1188 working frequencies are assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems.

However, the Radio Regulations do not explicitly indicate the frequencies on which coast stations should employ these types of emission. The proposed amendment will bring the relevant provisions into line with one another.

MOD 453.1 (footnote)

1

Frequencies in the bands 25010 - 25070 kc/s, 25110 - 25600 kc/s, and 26100 - 27500 kc/s may be assigned to coast stations. They are then considered as frequencies additional to those in the band ~~22400~~ 22378 - 22628 kc/s.

Reasons :

To be consistent with the proposal relating to No. 453.

Ref.

I/33(18)

MOD

447

a) Ship stations, telephony :

4063 - 4136.5 kc/s

6200 - 6207 kc/s

8195 - 8276.5 kc/s

12 330 - 12 417.5 kc/s

16 460 - 16 558.5 kc/s

22 000 - 22 096.5 kc/s

MOD

448

b) Coast stations, telephony :

4364.5 - 4438 kc/s

6518 - 6525 kc/s

8735 - 8815 kc/s

13 112.4 - 13 200 kc/s

17 261.9 - 17 360 kc/s

22 625.4 - 22 720 kc/s

ADD

449 AA

c) Ship stations, ocean data transmission :

4136.5 - 4140 kc/s

6207.5 - 6211 kc/s

8276.5 - 8280 kc/s

12 417.5 - 12 421 kc/s

16 558.5 - 16 562 kc/s

22 096.5 - 22 100 kc/s

ADD

449 AB

The frequency bands listed under No. 449 AA may also be used by buoy stations for ocean data transmission and by stations telecommanding these buoys.

SUP

449

SUP

450

Ref.

I/33(18)  
(contd.)

MOD 452

f) Ship stations, telegraphy :

4160 - 4231 kc/s  
6240 - 6346 kc/s  
8320 - 8461 kc/s  
12 471 - 12 692 kc/s  
16 622 - 16 922 kc/s  
22 148 - 22 368 kc/s  
25 070 - 25 110 kc/s 1)

MOD 453

g) Coast stations, wideband telegraphy, telegraphy, facsimile and special transmission systems:

4231 - 4364.5 kc/s  
6346 - 6518 kc/s  
8461 - 8735 kc/s  
12 692 - 13 112.4 kc/s  
16 922 - 17 261.9 kc/s  
22 368 - 22 625.4 kc/s

Reasons :

The above-listed modifications are a consequence of the new sub-division of frequency bands resulting from the tables in Appendices 15 and 17.

The modification of the title of No. 453 aims to fill a gap in the present text of the Radio Regulations. As a matter of fact, while for ship stations the text indicates frequency bands to be used for special transmission systems and for wideband telegraphy, such an indication does not exist for coast stations. Since for radiotelegraph coast stations no frequency bands other than those listed under No. 453 exist, it is necessary to include in the title of this number the systems not mentioned therein.

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IND/97(2)

Nos. 447 &amp; 448

Include two double sideband radiotelephone channels for use each by ship and coast stations in Region 3, in the 6 Mc/s band exclusively allocated for the Maritime Mobile Service.

Reasons :

The Radio Regulations, Geneva, 1959, do not provide for double sideband radiotelephone communication between ship and coast stations in the 6 Mc/s band. The need for radiotelephone communication facility between coast and ship stations on 6 Mc/s band is being felt for long, since under certain conditions frequencies in 4 Mc/s band are found to be too low while those in 8 Mc/s band too high to provide reliable R/T communication.

IND/98(3)

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Recognising the utility and importance of oceanographic data and the desirability of accommodating oceanographic communications in the exclusive HF maritime mobile bands it is proposed that allocation of frequencies required for oceanographic communications may be made from the exclusive HF bands reserved for

451

(e) Ship stations wideband telegraphy, facsimile, and special transmission systems  
and

453

(g) Coast stations, telegraphy and facsimile.

Reasons :

It may not be desirable to meet the requirement from the exclusive HF maritime mobile bands for radio telegraphy or radio telephony, as a number of countries are likely to continue the use of radio telegraphy and double sideband radio telephony technique for Maritime Mobile Service for a considerable length of time to come.

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Réf.

CAN/40(13)      MOD      449      (c). Ship stations, telephony (single sideband only).

4133 - 4136.5 kc/s

6200 - 6207.5 kc/s

8273 - 8276.5 kc/s

12 407 - 12 417.5 kc/s

16 537 - 16 558.5 kc/s

22 078 - 22 096.5 kc/s

Reasons :

Consequential to the Canadian proposal to allocate the upper channels of Appendix 15, Section B to the ocean data service.

J/84(3) MOD 449 (c) Coast stations and ship stations, telephony  
(~~single sideband~~ simplex channelling only)

4133 - 4140 kc/s

6200 - 6211 kc/s

8265 ~~8273~~ - 8280 kc/s

12 400 ~~12 407~~ - 12 421 kc/s

16 530 ~~16 537~~ - 16 562 kc/s

22 070 ~~22 078~~ - 22 100 kc/s

---

J/84(4) SUP 450

Reasons :

In conversion to SSB of DSB calling frequency bands for the maritime mobile radiotelephony mentioned in Section B of Appendix 15, it is proposed to use the frequency bands in No. 449 for simplex operation by coast and ship stations and to expand them up to the frequency bands in the double sideband calling channel allocated in No. 450, in order to make effective use of frequencies.

J/90

MOD 455 (3) In Regions 2 and 3 the band 2088.5 - 2093.5 kc/s is reserved exclusively for calling and safety (telegraphy only).

Reasons :

It is requested that in Regions 2 and 3, in the bands between 1605 - 2850 kc/s, frequencies in the band between 2088.5 - 2093.5 kc/s should be designated as a safety frequency band in the radiotelegraphy maritime mobile service. (See Agenda Item 1, Document No. 84 and 7.2, Document No. 89).

Ref.

USA/17(20) MOD 449 (c) Ship stations and coast stations operating in accordance with No. 1357, telephony (single side-band only)

	4133 - 4140	<u>4136.5</u> kc/s
	6200 - 6211	<u>6207.5</u> kc/s
<u>8265</u>	<u>8273</u> - <u>8280</u>	<u>8276.5</u> kc/s
<u>12400</u>	<u>12407</u> - <u>12421</u>	<u>12417.5</u> kc/s
<u>16530</u>	<u>16537</u> - <u>16562</u>	<u>16558.5</u> kc/s
<u>22070</u>	<u>22078</u> - <u>22100</u>	<u>22096.5</u> kc/s

USA/17(21) SUP 450

USA/17(22) ADD 450A (d) Ocean data and ocean data telecommand stations, telegraphy

<u>4136.5</u>	-	<u>4140</u> kc/s
<u>6207.5</u>	-	<u>6211</u> kc/s
<u>8276.5</u>	-	<u>8280</u> kc/s
<u>12417.5</u>	-	<u>12421</u> kc/s
<u>16558.5</u>	-	<u>16562</u> kc/s
<u>22096.5</u>	-	<u>22100</u> kc/s

USA/17(25) MOD 453 (g) Coast stations, telegraphy, and facsimile, including wideband telegraphy and special transmission systems

4238	-	4368 kc/s
6357	-	6525 kc/s
8476	-	8745 kc/s
12714	-	13130 kc/s
16952	-	17290 kc/s <sup>1</sup>
22400	-	22650 kc/s <sup>1</sup>

NOC 453.1

Reasons :

While No. 453 already provides bands in which wideband telegraphy and special transmission systems may be accommodated, it is desirable to change the title to make this more clear.

Background :

No. 1188 provides working frequencies in the 4 to 27.5 Mc/s range for ship stations using wideband telegraphy, facsimile and special transmission systems. However, the Radio Regulations do not specify the frequencies on which coast stations should employ these emissions.

No. 453 provides for the use of telegraphy and facsimile in the coast telegraph bands between 4 and 27.5 Mc/s. No. 1147 prohibits coast telegraph stations from using Type 2 emission. Thus, such stations may use Types 1, 4, 6, 7, and, in some cases, Type 9 emissions and the U.S. proposal is intended to clarify this use.

Ref.

USSR/49(2)

Proposal

It is proposed to consider the possibility of taking channels for ship and coast radiotelephone stations away from the AF portion of the 6123 - 6237 kc/s band, allocated to wideband telegraphy, facsimile and special transmissions (see also the proposal concerning Agenda Item 3).

Comments

Since the sea-going fleet has been greatly improved in the last 10 - 15 years by more up-to-date ships capable of high speeds, it really has become possible for ships in distress to be effectively helped by other ships situated a long way from the area concerned (1000 - 1500 km). The Radio Regulations do not provide, on a world-wide basis, special frequencies in the 3 and 6 Mc/s bands for intership radiotelephone traffic in emergencies. The Soviet Administration therefore proposes that the possibility be considered of allocating a frequency in the 3155 - 3200 kc/s range on a world-wide basis and that the right to use frequency 6204 kc/s for this service be extended to all regions of the world.

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Agenda Item 2.5 : Frequencies to be used by coast stations for wideband telegraphy, facsimile, and special transmission systems.

Proposal

USSR/49(5)

It is proposed that existing arrangements for the registration and use of frequencies in these services be maintained.

Proposals relating to

Article 7

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N<sup>os</sup> 456 and 457

456 § 13. (1) Appendix 17 shows the two-way radiotelephone channels  
of the maritime mobile service in the frequency bands listed in  
Nos. 447 and 448.

457 (2) Appendix 25 contains the allotment plan for radio-  
telephone coast stations in the bands listed in No. 448. If necessary,  
an Extraordinary Administrative Radio Conference to which all the  
Members and Associate Members of the Union would be invited  
could be convened in accordance with the provisions of Article 7  
of the Convention for the purpose of revising Appendix 25 and if  
required, Appendix 17, as well as other relevant provisions of these  
Regulations.

ARTICLE 7

Ref.

Special Rules relating to particular services

Add a new section following Section IV to read :

CAN/39(1)

ADD

Section IV-A. Technical provisions relating to the use of single sideband radiotelephone emissions in the Maritime Mobile Service.

ADD

457A

Para. 13(bis)(1). Modes of operation :

ADD

457B

(2). Stations fitted only with single sideband equipment and requiring communication with double sideband stations shall be capable of operation in the full carrier (A3H) mode.

ADD

457C

(3). Single sideband transmitters shall have a carrier level below peak envelope power in accordance with the following :

A3H -  $8 \pm 2$  db

A3A -  $16 \pm 2$  db

A3J - at least 40 db

ADD

457D

(4). The carrier (reference) frequencies of the transmitters shall be maintained within the following tolerances :

Coast stations  $\pm 20$  c/s

Ship stations  $\pm 50$  c/s

ADD

457E

(5). In a single sideband A3H, A3A or A3J transmission, the mean power of any emission supplied to the antenna transmission line of a station on a discrete frequency, shall be less than the mean power ( $P_m$ ) of the transmitter in accordance with the following table :

ADD

457F

<u>(6). Frequency separation <math>\Delta</math></u>	<u>Minimum attenuation</u>
<u>from the assigned</u>	<u>below mean power</u>
<u>frequency kc/s</u>	<u>(<math>P_m</math>) db</u>

$1.50 < \Delta \leq 5.25$

25

$5.25 < \Delta \leq 8.75$

35

$8.75 < \Delta$

$43 + 10 \log 10 P_m$  (Watts)

ADD

457G

Para. 13(ter).(1). Channel utilization

A station using single sideband emissions shall be considered to be operating in accordance with these Regulations if the necessary bandwidth is confined within either the upper or lower half of a channel provided for double sideband emissions.

CAN/39(1)  
(contd.)

ADD 457H (2). When operating in the upper half of a double sideband channel the station shall use upper sideband emissions with the carrier (reference) frequency at the centre of the double sideband channel.

ADD 457I (3). When operating in the lower half of a double sideband channel the station shall use upper sideband emissions with the carrier (reference) frequency in accordance with the following :

<u>Band</u>	<u>Carrier (reference) frequency below the centre of the double sideband channel</u>
<u>Below 4 Mc/s</u>	<u>3000 c/s</u>
<u>4 and 8 Mc/s</u>	<u>3100 c/s</u>
<u>above 8 Mc/s</u>	<u>3300 c/s</u>

ADD 457J (4). Stations employing single sideband emissions on 2182 kc/s shall be restricted to the upper half of the double sideband channel with the carrier (reference) frequency of 2182 kc/s.

ADD 457K (5). A station using single sideband emissions shall have an assigned frequency 1400 cycles per second higher than the carrier (reference) frequency.

ADD 457L (6). The single sideband working frequencies given in Section B of Appendix 15 may be assigned for ship to shore, shore to ship, and intership simplex operations.

ADD 457M (7). Administrations are urged to discontinue, in the maritime mobile service, the use of double sideband radiotelephone transmissions if possible by 1 January 1973. As from 1 January 1970 new double sideband installations shall no longer be permitted. As from 1 January 1974 double sideband emissions shall be prohibited except on 2182 kc/s.

#### Reasons :

The advantages of single sideband have been recognized as a means of alleviating the congestion in the frequency bands allocated to the maritime mobile service. It is also recognized that there are disadvantages from an economic viewpoint and it will require a number of years before full implementation of SSB is possible. It is considered that the foregoing technical principles which are generally in accordance with those adopted by the C.C.I.R. would provide for an orderly transition to SSB.



Ref.

F/8(12) No. 457 Delete the second sentence

Reasons :

This provision is met by the convening of the present Conference.

G/77(39) SUP 457

Reasons :

Appendix 25 replaced by procedure outlined in Annex V.

J/84(5) SUP 457

Reasons :

Consequential to the abrogation of Appendix 25. This provision is met by the convening of the present Conference (see Agenda Item 3, J/86(44), Document No. 86).

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Proposals relating to

Article 7

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New Section V-A

Ocean Data Service

- 464 (7) In Region 1, for maritime radiobeacons, the depth of modulation should be at least 70%.

**Section VI. Fixed Service**

*General*

- 465 § 15. (1) Administrations are urged to discontinue, in the fixed service, the use of double sideband radiotelephone transmissions in the bands below 30 Mc/s, if possible as from January 1, 1970.

Ref.

After 464 add the following new section :

CAN/40(14)

ADD

Section V-A. Ocean Data Service

ADD

464A

Para. 14(bis)(1). The bands exclusively allocated to the ocean data service between 4000 and 27 500 kc/s are as follows :

4136.5 - 4140 kc/s

6207.5 - 6211 kc/s

8276.5 - 8280 kc/s

12 417.5 - 12 421 kc/s

16 558.5 - 16 562 kc/s

22 096.5 - 22 100 kc/s

ADD

464B

(2). These channels shall be used for multi-channel telegraphy systems only.

Reasons :

It is considered that the requirement of the ocean data service is justified and in view of the benefits which may be derived from it by the maritime mobile service it is appropriate that the above frequencies be allocated for ocean data purposes.

Proposal

USSR/49(4)

It is proposed that the question of allocating frequency bands for the oceanographic service be examined after the competent organizations, (I.O.C., W.M.O.), have drawn up a legal code for the system, a plan showing the location of oceanographic stations, their system of operation, the systems for collecting and transmitting oceanographic information, and other technical questions. It will then be possible to make a proper assessment of its radio frequency requirements.

Comments

In view of the importance of creating a world system for the transmission of oceanographic data, the need for radio frequencies for this system could be met at the expense of the bands allotted at present to the Maritime Mobile Service. However, specific frequencies cannot be allocated until certain organizational and technical questions have been settled and an international legal code governing a world system for the transmission of oceanographic data has been established. In this connection, we consider it advisable to recommend to the Inter-Governmental Oceanographical Commission (I.O.C.), and the World Meteorological Organization (W.M.O.) to prepare, for the next Administrative Conference of the I.T.U., a definite plan for the creation of a network of oceanographic stations to collect and transmit information, an international legal code for the system, and other essential data so that a sound technical assessment and examination can be made of the system's working frequency requirements.

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Proposals relating to

Article 9

Notification and Recording of Frequencies  
in the Master International Frequency Register

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N° 488 and 500

**Section I. Notification of Frequency Assignments**

- 488 (3) Specific frequencies prescribed by these Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2 182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board.

**Section II. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register**

- 500 § 9. (1) Except for notices referred to in Nos. 541, 547, 552, 561 and 568, the Board shall examine each notice with respect to
- 501 a) its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the probability of harmful interference);
- 502 b) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register :
- 1) bears a date in Column 2a (see No. 607) ; or
- 2) is in conformity with the provisions of No. 501 and bears a date in Column 2b (see No. 608), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 501 with an earlier date in Column 2b ; or
- 503 c) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register :
- 1) is in conformity with the provisions of No. 501 and either bears a symbol<sup>1</sup> in Column 2d (see No. 610), or was recorded in the Master Register with a date in this column as a result of a favourable finding with respect to No. 503 ; or
- 2) is in conformity with the provisions of No. 501 and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to No. 503, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 501.

503-1 <sup>1</sup> This symbol indicates an assignment notified pursuant to No. 272 of the Agreement of the Extraordinary Administrative Radio Conference, Geneva, 1951, or, in the frequency bands above 27 500 kc/s, an assignment for which the notice was received by the Board before 1 April 1952.



Ref.

J/86(46)	MOD	488	(3) Specific frequencies prescribed by these Regulations for common use by stations of a given service (for example, international distress frequencies, 500 kc/s and 2182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands and frequencies contained in Section B of Appendix 17, etc.), shall not be notified to the Board.
J/86(47)	MOD	500	§9(1) Except for notices referred to in Nos. <del>541, 547</del> , 552, 561 and 568, the Board shall examine each notice with respect to
USA/18(27)	MOD	488	Paragraph (3) Specific frequencies prescribed by these Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, <u>frequencies of ship and coast stations used for single sideband single channel simplex operation in accordance with No. 1357 etc.</u> ), shall not be notified to the Board.

Reasons

To provide that stations assigned the frequencies of Section B of Appendix 15 are not to be notified to the I.F.R.B.

USA/18(29)	MOD	500	§ 9.(1) Except for notices referred to in Nos. <del>541, 547</del> , 552, 561 and 568, the Board shall examine each notice with respect to
TOL/80(29)	MOD	500	Paragraph 9 (1) Except for notices referred to in Nos. <del>541, 547</del> , 552, 561 and 568, the Board shall examine each notice with respect to
I/33(19)			As a consequence of the revision of Appendices 15 and 17 and of the withdrawal of Appendix 25, <u>amend Article 9 as follows :</u>
	MOD	500	Para. 9 (1) Except for notices referred to in Nos. 552, 561 and 568, the Board shall examine each notice with respect to

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Proposals relating to

Article 9

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Nº 540

**537** (2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. **501** and **502** or **503**, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.

**538** (3) If, within the period of thirty days (see No. **491**) after the projected date of bringing into use, the Board receives confirmation from the notifying administration of the date of putting into use, the special symbol shall be deleted from the Remarks Column. In the case where the Board, in the light of a request from the notifying administration received before the end of the thirty-day period, finds that exceptional circumstances warrant an extension of this period, the extension shall in no case exceed ninety days.

**539** (4) If the Board does not receive this confirmation within the period referred to in No. **538**, the entry concerned shall be cancelled.

\* (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, 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

\* Modified by the E.A.R.C. Aeronautical.

Ref.

HOL/80(29)      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, 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

I/33(19)      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 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

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\*) As amended by the E.A.R.C. Aeronautical (R) (Geneva, 1966)

J/86(48)      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, 26 and 27 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

USA/18(30)      MOD 540\*) Paragraph      (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.

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\*) As amended by the E.A.R.C. Aeronautical Mobile (R) (1966)

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Proposals relating to

Article 9

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N° 541 - 551

541 § 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 kc/s 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
- c) 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.



N° 541 - 551 (continuation)

**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 kc/s 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.

F/10(63) MOD 541

Paragraph 19 (1) Examination of frequency notices concerning frequency assignments to coast radiotelephone stations operating in accordance with numbers 1351a or 1355a (see Proposals F/8(42) and F/8(46) respectively, Document No. 8), in the bands allocated exclusively to the maritime mobile service between 4000 kc/s and 23 000 kc/s for coast radiotelephone stations (see No. 500).

Reasons :

To keep the procedure now in force relative to the examination by the I.F.R.B. and entry in the Master Registry of assignments to coast stations only for SSB emissions with a necessary bandwidth of not more than 2.7 kc/s. The effect of the proposed amendment is to make the general procedure mentioned in Nos. 501 et seq. applicable to DSB assignment notices. In particular, the provisions of Nos. 530 or 531 apply in most cases. Moreover, the entry of a date in column 2 b), coupled with an unfavourable finding under Nos. 523 to 531, will not allow such an entry to enjoy the protection referred to in No. 608 since the notification will not be in accordance with sub-paragraph 2) of No. 502, i.e. it will definitively not be in accordance with No. 501 (conflict with a clause of the Regulations - in this case No. 1351a, which states that A3A and A3J emissions are to be used in the maritime mobile service). No. 541 would apply as soon as the Final Acts come into force, subject to exceptions relative to transitional arrangements specified in draft resolutions.

F/10(64) MOD 544

- Replace the words :

"... (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 ....".

By the following :

"... (without a change in the carrier 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 single sideband emissions in accordance with Appendices 17 and 17bis (see proposal F/8(51), Document No. 8, the original assignment ....".

Reasons :

To align the provisions of Article 9 with the rules for using SSB. In particular, to specify that the shift of a carrier within the emission spectrum is a change requiring the application of No. 545.

Ref.

F/10(65) MOD 547 - Replace the present text by the following :

Paragraph 20 (1) Examination of notices concerning frequencies used by radiotelephone coast stations for reception of emissions in accordance with No. 1351a or 1355a in the bands allocated exclusively to the maritime mobile service between 4000 and 23 000 kc/s for radiotelephone ship stations (see Nos. 487 and 500).

Reasons :

The reasons given under No. 541 (F/10(63)) are valid for the reception frequencies of coast stations.

HOL/80(29) SUP 541, 542, 543, 544, 545, 546, 547, 548, 549, 550 and 551.

I/33(19) SUP 541  
through  
SUP 551

J/86(49) SUP 541 - 551

USA/18(31) SUP 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551

Proposals relating to

Article 9

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N° 573

ART 9

Section III. Recording of Dates and Findings in the Master Register

- 571 § 24. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.
- MOD 572 § 25. The procedure for recording dates in the appropriate part of Column 2 of the Master Register which shall be applied according to the frequency bands and services concerned is described in the following Nos. 573 to 604 for frequency assignments referred to in Sub-Section IIA.
- 573 § 26. (1) *Frequency Bands:*
- 10 - 2 850 *kcls*
  - 3 155 - 3 400 *kcls*
  - 3 500 - 3 900 *kcls in Region 1*
  - 3 500 - 4 000 *kcls in Region 2*
  - 3 500 - 3 950 *kcls in Region 3*
  - 4 238 - 4 368 *kcls*
  - 6 357 - 6 525 *kcls*
  - 8 476 - 8 745 *kcls*
  - 12 714 - 13 130 *kcls*
  - 16 952 - 17 290 *kcls*
  - 22 400 - 22 650 *kcls*
- 574 (2) For any assignment to which the provisions of Nos. 510, 511 or 514 apply, the relevant date shall be entered in Column 2a of the Master Register.
- 575 (3) For any assignment to which the provisions of Nos. 515, 518, 520, 522, 525, 526, 530 or 531 apply, the relevant date shall be entered in Column 2b of the Master Register.
- 576 (4) However, no date shall be entered in Column 2a or Column 2b in respect of frequency assignments to broadcasting stations in Region 2 in the band 535-1 605 kc/s. The date entered in Column 2c is given for information only.

\* Modified by the E.A.R.C. For Space.

HOL/80(29)

MOD

573

§ 26.(1) Frequency Bands :

10	-	2850	kc/s
3155	-	3400	kc/s
3500	-	3900	kc/s in Region 1
3500	-	4000	kc/s in Region 2
3500	-	3950	kc/s in Region 3
<u>4063</u>	-	<u>4140</u>	kc/s
<u>4231</u>	-	<u>4438</u>	kc/s
<u>6200</u>	-	<u>6215</u>	kc/s
<u>6346</u>	-	<u>6525</u>	kc/s
<u>8195</u>	-	<u>8284.5</u>	kc/s
<u>8461</u>	-	<u>8815</u>	kc/s
<u>12 330</u>	-	<u>12 429</u>	kc/s
<u>12 693</u>	-	<u>13 200</u>	kc/s
<u>16 460</u>	-	<u>16 573</u>	kc/s
<u>16 924</u>	-	<u>17 360</u>	kc/s
<u>22 000</u>	-	<u>22 096</u>	kc/s
<u>22 378</u>	-	<u>22 720</u>	kc/s

I/33(19)

MOD

573

Para. 26 (1) Frequency bands

10	-	2850	kc/s
3155	-	3400	kc/s
3500	-	3900	kc/s in Region 1
3500	-	4000	kc/s in Region 2
3500	-	3950	kc/s in Region 3
4063	-	4136.5	kc/s
4231	-	4364.5	kc/s
4364.5	-	4438	kc/s
6200	-	6207.5	kc/s
6346	-	6518	kc/s
6518	-	6525	kc/s
8195	-	8276.5	kc/s
8461	-	8735	kc/s
8735	-	8815	kc/s
12 330	-	12 417.5	kc/s
12 692	-	13 112.4	kc/s
13 112.4	-	13 200	kc/s
16 460	-	16 558.5	kc/s
16 922	-	17 261.9	kc/s
17 261.9	-	17 360	kc/s
22 000	-	22 096.5	kc/s
22 368	-	22 625.4	kc/s
22 625.4	-	22 720	kc/s

Ref.

J/86(50)

MOD

573

§26(1) Frequency bands :

10 -	2850 kc/s
3155 -	3400 kc/s
3500 -	3900 kc/s in Region 1
3500 -	4000 kc/s in Region 2
3500 -	3950 kc/s in Region 3
<u>4063</u> -	<u>4133</u> kc/s
4238 -	4368 kc/s
<u>4368</u> -	<u>4438</u> kc/s
6357 -	6525 kc/s
<u>8195</u> -	<u>8265</u> kc/s
8476 -	8745 kc/s
<u>8745</u> -	<u>8815</u> kc/s
<u>12 330</u> -	<u>12 400</u> kc/s
12 714 -	13 130 kc/s
<u>13 130</u> -	<u>13 200</u> kc/s
<u>16 460</u> -	<u>16 530</u> kc/s
16 952 -	17 290 kc/s
<u>17 290</u> -	<u>17 360</u> kc/s
<u>22 000</u> -	<u>22 070</u> kc/s
22 400 -	22 650 kc/s
<u>22 650</u> -	<u>22 720</u> kc/s



Ref.

USA/18(31a) MOD 573 Paragraph 26 (1) Frequency Bands :

10	-	2850 kc/s
3155	-	3400 kc/s
3500	-	3900 kc/s in Region 1
3500	-	4000 kc/s in Region 2
3500	-	3950 kc/s in Region 3
<u>4063</u>	-	<u>4133</u> kc/s
<u>4238</u>	-	<u>4368</u> kc/s
<u>4368</u>	-	<u>4438</u> kc/s
6357	-	6525 kc/s
<u>8195</u>	-	<u>8265</u> kc/s
<u>8476</u>	-	<u>8745</u> kc/s
<u>8745</u>	-	<u>8815</u> kc/s
<u>12330</u>	-	<u>12400</u> kc/s
<u>12714</u>	-	<u>13130</u> kc/s
<u>13130</u>	-	<u>13200</u> kc/s
<u>16460</u>	-	<u>16530</u> kc/s
<u>16952</u>	-	<u>17290</u> kc/s
<u>17290</u>	-	<u>17360</u> kc/s
<u>22000</u>	-	<u>22070</u> kc/s
<u>22400</u>	-	<u>22650</u> kc/s
<u>22650</u>	-	<u>22720</u> kc/s

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Proposals relating to

Article 9

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N° 577 - 586

ART 9

577 § 27. (1) *Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kc/s 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).

582 § 28. (1) *Frequency Bands allocated exclusively to the Maritime Mobile Service between 4 000 and 23 000 kc/s for Radiotelephone Ship Stations.*

583 (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 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).

Ref.

HOL/80(29) SUP 577, 578, 579, 580, 581, 582, 583, 584, 585 and 586.

I/33(19) SUP 577

through

SUP 586

J/86(51) SUP 577 - 586

USA/18(32) SUP 577, 578, 579, 580, 581, 582, 583, 584, 585, 586

F/10(66) No. 581 - Replace the present text by the following

(5) For assignments to radiotelephone coast stations which do not meet the conditions mentioned in No. 541 and assignments to stations other than radiotelephone coast stations, the relevant date shall be entered in column 2 b) (see Nos. 525, 526, 530 and 531).

Reasons :

To provide for stations not in accordance with No. 541 the same status as that provided by No. 581 of the **Radio Regulations (1959)** for stations not in accordance with the **Regulations**.

F/10(67) No. 586 - Replace the present text by the following

(5) For assignments other than assignments of frequencies for reception meeting the conditions specified in No. 547, the relevant date shall be entered in Column 2 b) (see Nos. 525, 526, 530 and 531).

Reasons :

The reasons given under No. 581 are valid for the frequencies for reception by coast stations.

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Proposals relating to  
Article 9

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N° 635

**Section VIII. Miscellaneous Provisions**

MOD

Aeronautical Conference

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, ~~and~~ 26 to these Regulations.

and 27



Ref.

HOL/80(29)      MOD      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.

I/33(19)      MOD      635\*)      Para. 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 26 and 27 to these Regulations.

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\*) As amended by the E.A.R.C. Aeronautical (R) (Geneva, 1966).

J/86(52)      MOD      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.

USA/18(32a)      MOD      635\*)      Paragraph 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.

Reasons :

Consequential to the abrogation of Appendix 25. Since the special provisions of Article 9 applicable to the maritime mobile coast telephone allotment plan would no longer be relevant, they should be replaced by the basic provisions of the Article governing technical examination and the assignment of 2a or 2b dates for the engineered portions of the International Frequency List.

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\*) As amended by the E.A.R.C. Aeronautical Mobile (R) (1966)

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Proposals relating to

Article 12

Technical Characteristics of Equipment  
and Emissions

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N° 677

**677 § 8.** The use of class B emissions is forbidden in all stations, except that such emissions by existing stations may be allowed, for distress calls and distress traffic only, until 1 January 1966.

Ref.

F/111(131) MOD 677 Delete second sentence of this number.

Reasons:

Text out of date.

G/63(71) MOD 677 28. The use of Class B emissions is forbidden in all stations.

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Proposals relating to

Article 19

Identification of Stations

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Nº 736, 737 and 750

**Section I. General Provisions**

**735** § 1. (1) Transmissions without identification or with false identification are prohibited.<sup>1</sup>

**736** (2) However, the requirements of identification need not apply to survival craft stations when transmitting distress signals automatically.

**737** § 2. A station shall be identified either 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, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

\* MOD **735.1** <sup>1</sup> In the present state of the technique, it is recognized nevertheless that the transmission of identifying signals for certain radio systems (e.g. radio-determination, radio relay systems and space systems) is not always possible.

**750** § 11. (1) Each country shall choose the call signs of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary General the call signs which it has assigned together with the information which is to appear in Lists I to VI inclusive. These notifications do not include call signs assigned to amateur and experimental stations.

\* Modified by the E.A.R.C. For Space.



Ref.

G/60(19)      MOD      736      (2) However, the requirements of identification need not apply to :

- survival craft stations when transmitting distress signals automatically, or
- emergency position-indicating radio-beacons

Reasons :

To cover the introduction of emergency position-indicating radio-beacons.

G/91(48)      MOD      737      § 2. A station shall be identified either 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, ship's selective call number, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

Reasons :

To provide for the use of selective call numbers in the maritime service.

G/91(48)      MOD      750      § 11. (1) Each country shall choose the call signs and the selective call number of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary General the call signs which it has assigned together with the information which is to appear in Lists I to VI inclusive. These notifications do not include call signs assigned to amateur and experimental stations.

Reasons :

To provide for the inclusion of selective call numbers of stations in the maritime mobile service.

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Proposals relating to  
Article 19

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N° 760

### Section III. Formation of Call Signs

**756** § 13. (1) The twenty-six letters of the alphabet, as well as digits in the cases specified below, may be used to form call signs. Accented letters are excluded.

**757** (2) However, the following combinations shall not be used as call signs :

**758** a) combinations which might be confused with distress signals or with other signals of a similar nature ;

**759** b) combinations reserved for the abbreviations to be used in the radiocommunication services (see Appendix 13);

**760** c) those four-letter combinations commencing with the letter A which are used for the geographical portion of the International Code of Signals, in cases where confusion is likely to arise ;

**761** d) for amateur stations, combinations commencing with a digit when the second character is the letter O or the letter I.

Ref.

HOL/74(17) SUP 760

Reasons :

In the revised International Code of Signals the geographical section is deleted.

J/88(56) SUP 760

Reasons :

Because the geographical portion was deleted in the Revised International Code of Signals.

USA/21(40) SUP 760

Section III - Formation of call signs

G/60(20)

Insert sub-heading :

ADD Emergency position-indicating radio-beacons

ADD 768A - the morse letter B and/or the call-sign of the ship to which the beacon belongs.

Reasons :

To provide for the use of emergency position-indicating radio-beacons.

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Proposals relating to

Article 19

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N° 776 and

New Section IV A :

Selective call numbers in the

Maritime mobile service

**Section IV. Identification of Stations using Radiotelephony**

**774** § 22. Stations using radiotelephony shall be identified as indicated in Nos. 775 to 783.

**775** § 23. (1) *Coast stations*

- a call sign (see Nos. 763 and 764); *or*
- the geographical name of the place as it appears in the List of Coast Stations, followed preferably by the word RADIO or by any other appropriate indication.

**776** (2) *Ship stations*

- a call sign (see Nos. 765 and 766); *or*
- the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no possible confusion with distress, urgency and safety signals.



Ref.

G/91(48)

MOD

776

(2) Ship stations

- a call sign (see Nos. 765 and 766); or
- the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no possible confusion with distress, urgency and safety signals;  
or
- the selective call numbers

Reasons :

To provide for the selective call numbers.

G/60(20)

ADD 777A

(4) Emergency position-indicating radio-beacons

- the morse letter B and/or the call sign of the ship to which the beacon belongs.

Reasons :

To provide for the use of emergency position-indicating radio-beacons.

G/78(90)

ADD

777B

(5) Ship's On-board Portable Stations

- the official name of the ship followed by a single letter or appropriate indicator.

Reasons :

To provide for the use of portable "on-board" equipment. The name of the ship followed by a single letter (with the use of the analogy given in Appendix 16 ALFA, BRAVO, CHARLIE, etc.) would avoid confusion with simultaneous operations on any other adjacent ship.

Ref.

G/91(49)

ADD

New Section IVA.

ADD

Heading :

Selective call numbers in the  
maritime mobile service

ADD

Sub-heading :

Formation of ships' selective call numbers  
and coast station identification numbers

ADD

783A

§ 25 (bis) (1) The ten digits from 0 to 9 inclusive shall be used to form selective call numbers.

ADD

783B

(2) However, combinations of numbers commencing with the digits 00 (zero, zero) shall not be used when forming the identification numbers for coast stations.

ADD

783C

(3) Ships' selective call numbers and coast station identification numbers in the international series are formed as indicated in Nos. 783D, 783E and 783F.

ADD

783D

(4) Coast station identification numbers

- four figures (see No. 2)

ADD

783E

(5) Ship stations selective call numbers

- five figures

ADD

783F

(6) Predetermined groups of ship stations

- five figures, as listed in No. 783L

ADD

Sub-heading :

Allocation of international series and  
assignment of ships' selective call  
numbers and coast station identification  
numbers

ADD

783G

§ 25 (ter) (1) Coast stations open to the international public correspondence service shall be given selective call numbers from the international series allocated to each country as indicated in No. 783H.

Ref.

- 127 -

G/91(49)  
(cont.)

ADD

783H

(2) Table of allocation to coast stations of identification numbers.

Identification number	Allocated to (country)
To be completed by Conference	

ADD

783I

§ 25 (quater) (1) Ship stations open to the international public correspondence service shall be allocated selective call numbers as indicated in Nos. 783J, 783K and 783L.

ADD

783J

(2) Table of allocation to ship stations of selective call numbers for use in all Regions.

Selective call number	Allocated to
To be completed by Conference	

ADD

783K

(3) Table of allocation to ship stations of selective call numbers for use in a Region.

Selective call number	Allocated to
To be completed by Conference	

ADD

783L

(4) Table of allocation of selective call numbers for predetermined groups of ships.

Selective call number	Allocated to
To be completed by Conference	

Reasons :

To provide for the use of selective calling devices.

Ref.

Article 19

Add the following Section VI :

Section VI - Selective call numbers in the mobile service

F/109(92)

ADD

788A

§ 1. When stations of the maritime mobile service use selective calling devices, their call numbers shall be assigned by the responsible administrations in accordance with the provisions below.

A - Ship stations

ADD

788B

§ 2. Numbers assigned to groups of ships : these numbers shall have 5 digits,

- consisting either of the same digit repeated 5 times;

- or of 2 different digits repeated alternately.

They shall be allocated as follows :

Number series	Allocated to :
	(name of country)

ADD

788C

§ 3. (1) Numbers assigned to individual ship stations : except for the numbers mentioned in No. 788B, all these numbers shall consist of 5 digits.

ADD

788D

(2) When the ship's itinerary and calling frequencies would indicate that it is not essential to assign a number exclusively, the number shall be chosen from the following list; if confusion is possible with the ships of other administrations using the same calling frequencies, the assignment shall be subject to coordination with these administrations.

Series of numbers which may be assigned on a shared basis

ADD

788E

(3) When application of No. 788D proves impossible in practice, a number shall be assigned to the ship exclusively on the basis of the following allocation table :

Number series	Allocated to :
	(name of country)

Ref.

F/109(92) ADD 788F  
(cont.)

B - Coast stations

§ 4. Numbers assigned for identification purposes to calling coast stations : except for numbers in which the thousands digit and the hundreds digit are zero, all these numbers shall consist of 4 digits. They shall be chosen on the basis of the following allocation table :

Number series	Allocated to :
	(name of country)

ADD 788G

§ 5. Each administration shall notify to the Secretary-General :

- the call numbers assigned to ship stations which can pick up the selective call signals transmitted by coast stations of another nationality;
- the identification numbers assigned to coast stations.

In all cases, the frequencies used shall be specified.

Reasons :

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

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Proposals relating to

Article 20

Service Documents

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N° 793, 805, 815, 824 and 825

## ARTICLE 20

### Service Documents

789 § 1. The following documents shall be published by the Secretary General.

790 (I) *List I. The International Frequency List.*

This list shall contain :

791 a) particulars of frequency assignments recorded in the Master International Frequency Register. These particulars shall include the data enumerated in Appendix 9 ;

792 b) the frequencies (e.g. 500 kc/s or 2 182 kc/s) prescribed by these Regulations for common use by certain services, including frequencies specified in Appendices 15, 17 and 18 ;

\* (MOD) 793 c) the allotments in the Allotment Plans included in Appendices 25, 26 and 27.

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

There are annexed to this list a table and a chart showing the zones and hours of service of ships of the second category (see Appendix 12) and a table of inland telegraph rates, limitrophic rates, etc.

\*\* MOD 815 § 2. (1) The Secretary-General shall publish the amendments to be made in the documents listed in Nos. 790 to 814 inclusive. Once a month administrations shall inform him, in the form shown for the lists themselves in Appendix 9, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 10. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II, III and VIIIA, he shall use the data provided by the International Frequency Registration Board, obtained from the information received in application of the provisions of Articles 9, 9A and 10. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI and VIIIA.

824 § 6. The List of Coast Stations (List IV) shall be republished every three years and kept up to date by recapitulative supplements issued every six months.

825 § 7. The List of Ship Stations (List V) shall be republished each year without supplements.

\* Modified by the E.A.R.C. Aeronautical.

\*\* Modified by the E.A.R.C. For Space.



Ref.

- |             |     |          |   |
|-------------|-----|----------|---|
| J/86(53)    | MOD | 793      | c) the allotments in the Allotment Plans included in Appendices 25, 26 and 27.  |
| CAN/108(26) | MOD | 805 (IV) | List IV. List of Coast Stations<br><br><u>This list shall contain particulars of the coast stations operating in the Maritime Mobile Service, the frequencies of which appear in List I. There are annexed to this List a table and a chart showing the zones and hours of service of ships of the second category (see Appendix 12) and a table of inland telegraph rates, limitrophic rates, etc.</u>   |
| CAN/108(27) | MOD | 815      | §2. (1) The Secretary-General shall publish the amendments to be made in the documents listed in Nos. 790 and 814 inclusive. Once a month administrations shall inform him, in the form shown for the lists themselves in Appendix 9, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 10. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II, III and VIIIA, he shall use the data provided by the International Frequency Registration Board, obtained from the information received in application of the provisions of Articles 9, 9A and 10. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI and VIIIA. <u>Lists IV and VI shall be coordinated with the information appearing in List I. The Secretary-General shall refer any discrepancies to the administration concerned.</u> |

Reasons :

To outline the contents of the List of Coast stations thereby making List IV consistent with the other Lists as mentioned in Article 20 and to provide for coordination, by Union Headquarters, between the International Frequency List, the List of Coast Stations and the List of Radiodetermination and Special Service Stations.

USA/28(63)    ADD    806A    (V)bis    List V bis, Manual for use by the maritime mobile service

This Manual shall contain those Radio Regulations, Additional Radio Regulations, and portions of the Convention necessary and useful to stations of the maritime mobile service.

List VII bis - List of selective call numbers used in the maritime mobile service

F/109(93)    ADD    810A    This list comprises two parts :

Part 1 - List of call numbers assigned to ships.

The list shall be confined to ship stations which can receive the selective call signals transmitted by coast stations of another nationality on one or more of the international frequencies provided for this purpose in the Radio Regulations.

Part 2 - List of identification numbers assigned to coast stations.

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Reasons :

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

F/111(132)    MOD    824    Replace first sentence of this number by the following :

The List of Coast Stations (List IV) shall be republished every two years.

Reasons:

The List of Coast Stations is in constant use by ship stations and it gets quickly worn out. The number of supplements issued to bring it up to date does not make reference any easier. If it were re-issued more often (e.g. every two years), these drawbacks would be largely eliminated. The extra cost would be partly offset by savings on the recapitulative supplements now issued every six months.

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Ref.

F/111(133)      MOD      825      Replace the present text by the following :

The List of Ship Stations (List V) shall be republished each year. It shall be kept up to date by means of a half-yearly supplement.

Reasons:

One half-yearly supplement would be enough to keep the List up to date.

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Proposals relating to

Article 23

Operators' Certificates for  
Ship and Aircraft Stations

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N° 848 - 866

Section II. Classes and Categories of Certificates

- 859 § 5. (1) There are two classes of certificates, as well as a special certificate, for radiotelegraph operators.<sup>1</sup>
- 860 (2) There are two categories of radiotelephone operators' certificates, general and restricted.<sup>1</sup>
- 861 § 6 (1) The holder of a first or second class radiotelegraph operator's certificate may carry out the service of any ship or aircraft radiotelephone station.
- 862 (2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any ship or aircraft station.
- 863 (3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship or aircraft station, when working on frequencies of the maritime mobile service, provided that :
- the carrier power of the transmitter does not exceed 50 watts, or
  - the operation of the transmitter requires only the use of simple external switching devices, excluding 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 carrier power of the transmitter does not exceed 250 watts.
- 864 (4) Nevertheless, the holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any aircraft station operating on frequencies allocated exclusively to the aeronautical mobile service, provided that :
- the operation of the transmitter requires only the use of simple external switching devices, excluding all manual adjustment of frequency determining elements, and that the stability of the frequencies is maintained by the transmitter itself within the limits of tolerance specified by Appendix 3.
- 865 (5) The radiotelegraph service of ships for which a radiotelegraph installation is not made compulsory by international agreements, as well as the radiotelephone service of ship stations and aircraft stations for which only a restricted radiotelephone operator's certificate is required, may be carried out by an operator holding a radiotelegraph operator's special certificate.
- 866 § 7. Exceptionally, the second class radiotelegraph operator's certificate as well as the radiotelegraph operator's special certificate may be limited exclusively to the radiotelegraph service. In such cases the certificate shall be suitably endorsed.

859.1 <sup>1</sup> As regards the employment of operators holding the different certificates, see Article 24.

Ref.

Article 23

Section I

G/68(100)

NOC

848-858

Section II

Insert sub-title :

ADD

A - Aircraft Stations

Reasons :

To segregate maritime and aeronautical requirements, arising from the proposed 866A-866H and 888A-888J.

G/68(84)

NOC

859-860

MOD

861

§ 6. (1) The holder of a first or second class radiotelegraph operator's certificate may carry out the service of any aircraft radiotelephone station.

MOD

862

(2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any aircraft station.

Reasons :

Consequent on segregation of maritime and aeronautical requirements.

G/76(27)

MOD

863

(3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship or aircraft station, when working on frequencies of the maritime mobile service, provided that :

- the operation of the transmitter requires only the use of simple external controls, and excludes all manual adjustments 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 power of the transmitter does not exceed the following :

250 watts (Pc) for emission A3

1000 watts (Pp) for emissions A3A, A3H and A3J.

Reasons :

To take account of conversion to single sideband operation, and to minimize the risk of harmful interference at long range in view of the increasing use of HF for radiotelephony.

Ref.

G/68(34)  
(cont.)

NOC	864
MOD	865

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

Reasons :

Consequent on the segregation of maritime and aeronautical requirements.

NOC	866
NOC	859.1

AUS/54(5)

MOD	861 86
-----	--------

(1) The holder of a first or second class radiotelegraph operator's certificate may carry out the radiotelegraph or radiotelephone service of any ship or aircraft ~~radiotelephone~~ station.

Reasons :

To clarify that the holder of a first or second class radiotelegraph operator's certificate is not debarred from carrying out the service of radiotelegraph stations.

F/8(13)

Article 23 - Section II

No. 863 Replace (at the beginning) :

- the carrier power of the transmitter does not exceed 50 watts;

by

- the peak envelope power of the transmitter does not exceed 200 watts;

Replace (near the end) :

- the carrier power of the transmitter does not exceed 250 watts.

by

- the peak envelope power of the transmitter does not exceed 1 kilowatt.

Add the following footnote :

(This applies to the French text only).

Reasons :

To replace the magnitudes of the carrier power of DSB transmitters by the corresponding magnitudes of the peak envelope power of SSB transmitters.



Ref.

J/84(6)

MOD

863

(3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship or aircraft station, when working on frequencies of the maritime mobile service, provided that :

- the ~~carrier~~ peak envelope power of the transmitter does not exceed 50 200 watts, or
- the operation of the transmitter requires only the use of simple external switching devices, excluding 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 ~~carrier~~ peak envelope power of the transmitter does not exceed ~~250-watts~~ 1000 watts.

Reasons :

Consequence of conversion to SSB system; it is desirable to indicate the value of carrier power of a DSB transmitter by that of peak envelope power of a SSB transmitter in accord therewith.

USA/29(66)

MOD

863

(3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship or aircraft station, when working on frequencies of the maritime mobile service, provided that:

- the ~~carrier~~ power of the transmitter does not exceed ~~50-watts~~ the following:

50 watts ( $P_c$ ) for emission A3,

200 watts ( $P_p$ ) for emissions A3A, A3H and A3J;

or

- the operation of the transmitter requires only the use of simple external switching devices, excluding 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 ~~carrier~~ power of the transmitter does not exceed ~~250-watts~~ the following:

250 watts ( $P_c$ ) for emission A3,

1000 watts ( $P_p$ ) for emissions A3A, A3H and A3J.

USA/29(66) Reasons:

(cont.)

To provide in the Radio Regulations for equal use of double sideband and single sideband emissions under the restricted radiotelephone operator's certificate, and to bring more closely into accord the provisions of Nos. 863 and 903 with those of Appendix 27.

Background:

The revised Radio Regulations should not impose upon the licensee of aircraft or ship stations need for a plurality of radio operator certificates, arising out of a situation where, in radiotelephone operation, the radiated power of the different SSB modes in a single installation is both above and below the power level applicable to the restricted radiotelephone operator's certificate. Thus, the power level selected and included in the Radio Regulations should be above the transmitter power level routinely encountered in the maritime mobile service.

The relationships between the peak envelope power, the mean power and the carrier power of a radio transmitter have been studied in depth by the C.C.I.R. The most recent result of these studies is contained in C.C.I.R. Oslo, 1966 (Document I/1017).

Customarily, the output power rating of AM transmitters has been specified in terms of "carrier" power - the average output under conditions of no modulation. However, this method of rating is not conveniently applicable to single sideband transmitters where reduced carrier power is employed. Single sideband transmitters are usually rated in terms of "Peak Envelope Power" which is a term defined in No. 95 of the Radio Regulations.

When searching for some criterion of equivalence with respect to DSB and SSB emissions, we first must decide whether we are concerned with (a) equivalent interfering effects of the emissions, (b) equivalent communication ranges or (c) equivalent circuit capacities. These each depend to some extent upon the power of the emission, but also upon other factors, so that there is no simple equivalence which satisfies all of these aspects simultaneously. That is, transmitter powers which may provide equivalent communication ranges as between SSB and DSB do not necessarily provide equivalent interference effects or equivalent circuit capacities.

It appears that, from the standpoint of I.T.U., the matter of equivalence should be determined by the interference potential of the emission. The new SSB facilities should cause no more interference to other services, either on the same channel or on adjacent frequencies, than do the existing DSB facilities.

Although there is no rigid relationship between power and interference potential, experience indicates that the most meaningful index of interference potential is provided by the mean power of the emission. It would seem then, that if Nos. 863 and 903 are to be amended to include a comparable power level (to the 100 and 250 watts now appearing therein) for single sideband emission, this can best be done on the basis of mean power. Single sideband transmitters, however, are usually rated in terms of peak envelope power ( $P_p$ ). Although certain relationships can be derived between peak and mean powers, these relationships do not give us fully satisfactory answers to the two questions set forth above.

Ref.

USA/29(66)  
(cont.)

The power level of 250 watts carrier power ( $P_c$ ) appearing in No. 863 was selected on the basis of airborne equipment then available and planned future equipment which would be available aboard scheduled air transport aircraft, which would have a capability of 1000 watts peak envelope power. Aviation interests have developed airborne SSB equipment specifications which call for a minimum power output with suppressed carrier of 400 watts ( $P_p$ ) and a maximum power output with suppressed carrier of 650 watts ( $P_p$ ). Nonetheless, earlier models of airborne SSB equipment continue in use with 1000 watts ( $P_p$ ).

National regulations within the United States provide for the licensing of ship and aircraft SSB stations on the basis of peak envelope power.

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G/68(84) ADD

B - Ship Stations

ADD

866A

§ 7 bis. (1) There are two categories of radio-communication operator's certificate, general and special.<sup>1</sup>

ADD

866B

(2) First and second class radiotelegraph operators' certificates issued prior to the date of implementation of these Regulations [or some later date to be specified] shall, for the purpose of these Regulations, continue to be accepted for the conduct of the radiocommunication service.<sup>1</sup>

ADD

866C

(3) There are two categories of radio-telephone operators' certificates, general and restricted.<sup>1</sup>

ADD

866D

§ 7 ter. (1) The holder of a radiocommunication operator's general certificate may, subject to the provisions of Nos. 907-909, carry out the service of any ship radiotelegraph or radiotelephone station.

ADD

866E

(2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any ship station.

ADD

866F

(3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any ship station, provided that :

- the operation of the transmitter requires only the use of simple external controls, and excludes all manual adjustment of frequency determining elements, with the stability of the frequencies maintained by the transmitter itself within the limits of tolerance specified by Appendix 3 and the power of the transmitter does not exceed the following :

250 watts (Pc) for emission A3  
1000 watts (Pp) for emissions A3, A3H and A3J.

ADD

866G

(4) The radiotelegraph service of ships for which a radiotelegraph installation is not made compulsory by international agreements, as well as the radiotelephone service of ship stations for which only a radiotelephone operator's restricted certificate is required, may be carried out by an operator holding a radiocommunication operator's special certificate.

ADD

866A.1

<sup>1</sup> As regards the employment of operators holding the different certificates, see Article 24.

Ref.

G/68(84) ADD 866H  
(cont.)

Exceptionally, the radiocommunication operator's general or special certificates may be limited exclusively to the radiotelegraph service. In such cases the certificate shall be suitably endorsed.

Reasons :

Consequential upon the segregation of aeronautical and maritime requirements, to enable the latter to be amended to include the service of radiotelegraph stations and use of the radiocommunication operator's general certificate referred to in 888A-888J.

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Proposals relating to

Article 23

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Section III. Conditions for the Issue  
of Operators' Certificates

N° 867 - 896

**Section III. Conditions for the Issue of Operators' Certificates**

- 870 (2) Administrations should take whatever steps they consider necessary to ensure the continued proficiency of operators after prolonged absences from operational duties.

*A. First Class Radiotelegraph Operator's Certificate*

- 871 § 10. The first class certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

*B. Second Class Radiotelegraph Operator's Certificate*

- 880 § 11. The second class certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

*D. Radiotelephone Operator's Certificate*

- 894 § 13. The general radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below (see also No. 861) :

- 895 a) A knowledge of the elementary principles of radiotelephony.
- 896 b) Detailed knowledge of the practical operation and adjustment of radiotelephone apparatus.
- 897 c) Ability to send correctly and to receive correctly by telephone.
- 898 d) Detailed knowledge of the Regulations applying to radiotelephone communications and specifically of that part of those Regulations relating to the safety of life.



Ref.

G/68(86)

Section III

NOC 867-870

MOD A - First Class Radiotelegraph Operator's Certificate -  
Aeronautical

Reasons :

Consequential upon the proposed 888A-888J.

NOC 871-879

MOD B - Second Class Radiotelegraph Operator's Certificate -  
Aeronautical

Reasons :

As above.

NOC 880-888

ADD New section :

BA - Radiocommunication Operator's General Certificate-  
Maritime

ADD 888A § 11 bis. (1) The radiocommunication general certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below :

ADD 888B (a) Knowledge of the principles of electricity, the theory of radio and marine aerial systems, sufficient to meet the requirements of Nos. 888C, 888D and 888E.

ADD 888C (b) Theoretical knowledge of marine radiotelegraph and radiotelephone transmitters and receivers; automatic alarm devices; radio equipment for lifeboats and other survival craft; direction-finding equipment; together with all auxiliary items, including power supply auxiliaries (such as motors, alternators, generators, inverters, rectifiers and accumulators) with particular reference to maintaining the equipment in service.

ADD 888D (c) Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in 888C; including the taking of direction-finding bearings and the calibration of radio direction-finding apparatus.

ADD 888E (d) Practical knowledge necessary for the location and remedying (with the means available on board), of faults which may occur during a voyage, in the apparatus mentioned in No. 888C.

Ref.

G/68(86)  
(cont.)

- |     |      |   |
|-----|------|---|
| ADD | 888F | (e) Ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks), at a speed of sixteen groups a minute, and a plain language text at the speed of twenty words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and receiving shall be, as a rule, five minutes. |
| ADD | 888G | (f) Ability to send correctly and to receive correctly by telephone.  |
| ADD | 888H | (g) Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.  |
| ADD | 888I | (h) A sufficient knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.  |
| ADD | 888J | (i) Knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.  |

Reasons :

To replace the present maritime first and second class radio-telegraph operators' certificates by one category of certificate more closely related to present-day needs.

G/68(86)

NOC 889-893

MOD 894

§ 13. The general radiotelephone operator's certificate is issued to candidates who have given proof of the knowledge and professional qualifications enumerated below (see also Nos 861 and 866E) :

Reasons :

Consequential upon 866E.

Ref.

G/68(86)	NOC	895	
(cont.)	MOD	896	(b) For aircraft radiotelephone stations, detailed knowledge of the practical operation and adjustment of radiotelephone apparatus.

Reasons :

Consequential upon 896A.

ADD	896A (b)	For ship radiotelephone stations a
	bis	practical knowledge of the operation and adjustment of radiotelephone apparatus and ability to remedy minor faults which may occur during a voyage.

Reasons :

To meet present-day needs and in the interests of safety of life at sea and efficient service.

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Proposals relating to

Article 23

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Nº 903

- 903** (2) For ship radiotelephone stations where the carrier power of the transmitter does not exceed 100 watts and for aircraft radiotelephone stations operating on frequencies allocated exclusively to the aeronautical mobile service, each administration may itself fix the conditions for obtaining a restricted radiotelephone operator's certificate, 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 in Appendix 3. However, in fixing the conditions, administrations shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 906.
- 904** (3) Administrations in Region 1 do not issue certificates under No. 903.

G/68(86) NOC 897-904

G/76(28) MOD 903 (2) For ship radiotelephone stations where the carrier power of the transmitter does not exceed 400 watts (Pp) and for aircraft radiotelephone stations operating on frequencies allocated exclusively to the aeronautical mobile service, each administration may itself fix the conditions for obtaining a restricted radiotelephone operator's certificate, 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 in Appendix 3. However, in fixing the conditions, administrations shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 906.

Reasons :

To take account of conversion to single sideband operation.

G/68(86) ADD 904A § 14 bis. Each administration shall ensure that a radiotelephone operator controlling automatic devices installed in a ship has adequate knowledge of the practical operation and adjustment of the apparatus.

Reasons :

To ensure effective and efficient operation and to avoid interference with other services.

NOC 905-906

F/8(14) No. 903 Replace the present text by the following :

(2) For ship radiotelephone stations where the peak envelope power of the transmitter does not exceed 400 watts and for aircraft radiotelephone stations operating on frequencies allocated exclusively to the aeronautical mobile service.... (the rest unchanged).

**ADD** Add the following footnote : (French text only)

Reasons :

See Proposal No. F/8(13) relating to No. 863.

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The relationships between the peak envelope power, the mean power and the carrier power of a radio transmitter have been studied in depth by the C.C.I.R. The most recent result of these studies is contained in C.C.I.R. Oslo, 1966 (Document I/1017).

Customarily, the output power rating of AM transmitters has been specified in terms of "carrier" power -the average output under conditions of no modulation. However, this method of rating is not conveniently applicable to single sideband transmitters where reduced carrier power is employed. Single sideband transmitters are usually rated in terms of "Peak Envelope Power" which is a term defined in No. 95 of the Radio Regulations.

When searching for some criterion of equivalence with respect to DSB and SSB emissions, we first must decidewhether we are concerned with (a) equivalent interfrerring effects of the emissions, (b) equivalent communication ranges or (c) equivalent circuit capacities. These each depend to some extent upon the power of the emission, but also upon other factors, so that there is no simple equivalence which satisfies all of these aspects simultaneously. That is, transmitter powers which may provide equivalent communication ranges as between SSB and DSB do not necessarily provide equivalent interference effects or equivalent circuit capacities.

It appears that, from the standpoint of I.T.U., the matter of equivalence should be determined by the interference potential of the emission. The new SSB facilities should cause no more interference to other services, either on the same channel or on adjacent frequencies, than do the existing DSB facilities.

Although there is no rigid relationship between power and interference potential, experience indicates that the most meaningful index of interference potential is provided by the mean power of the emission. It would seem then, that if Nos. 863 and 903 are to be amended to include a comparable power level (to the 100 and 250 watts now appearing therein) for single sideband emission, this can best be done on the basis of mean power. Single sideband transmitters, however, are usually rated in terms of peak envelope power ( $P_p$ ). Although certain relationships can be derived between peak and mean powers, these relationships do not give us fully satisfactory answers to the two questions set forth above.

The power level of 250 watts carrier power ( $P_c$ ) appearing in No. 863 was selected on the basis of airborne equipment then available and planned future equipment which would be available aboard scheduled air transport aircraft, which would have a capability of 1000 watts peak envelope power. Aviation interests have developed airborne SSB equipment specifications which call for a minimum power output with suppressed carrier of 400 watts ( $P_p$ ) and a maximum power output with suppressed carrier of 650 watts ( $P_p$ ). Nonetheless, earlier models of airborne SSB equipment continue in use with 1000 watts ( $P_p$ ).

National regulations within the United States provide for the licensing of ship and aircraft SSB stations on the basis of peak envelope power.

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Proposals relating to

Article 23

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Section IV. Qualifying Service

N° 907 - 911

**Section IV. Qualifying Service**

- 907** § 17. (1) An operator holding a first class radiotelegraph certificate is authorized to embark as chief operator of a ship station of the third category (see No. 932).
- 908** (2) Before becoming chief operator of a ship station of the second category (see No. 931), an operator holding a first class radiotelegraph operator's certificate shall have had at least six months' experience as operator on board ship or in a coast station.
- 909** (3) Before becoming chief operator of a ship station of the first category (see No. 930), an operator holding a first class radiotelegraph operator's certificate shall have had at least one year's experience as operator on board ship or in a coast station.
- 910** § 18. (1) An operator holding a second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the third category (see No. 932).
- 911** (2) Before becoming chief operator of a ship station of the second category (see No. 931), an operator holding a second class radiotelegraph operator's certificate shall have had at least six months' experience as an operator on board ship.

Ref.

Section IV

G/68(87) MOD

Requirements for Chief Operator

Reasons :

Consequential upon the revision of Nos. 908 and 909.

- MOD 907 § 17. (1) An operator holding a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932).
- MOD 908 (2) Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A), an operator shall hold a radiocommunication operator's general certificate or a first or second class radiotelegraph operator's certificate and shall have had at least six months' experience as operator on board ship or in a coast station.
- MOD 909 (3) Before becoming chief operator of a ship station of the first category (see No. 930) an operator shall hold either :
- ADD 909A (a) a radiocommunication operator's general certificate, and shall have had at least two years' experience as operator on board ship or in a coast station; or
- ADD 909B (b) a first class radiotelegraph operator's certificate and shall have had at least one year's experience as operator on board ship or in a coast station.

Reasons :

For clarification of the requirements to become chief operator of a Category 1 ship; consequential upon Nos. 888A-888J, and to provide for additional experience for the holder of a radiocommunication operator's general certificate.

SUP 910

Reasons :

Consequential upon the revision of No. 907.

SUP 911

Reasons :

Consequential upon the revision of No. 908.

Ref.

ISR/102(1)	MOD	911	(2) Before becoming chief operator of a ship station of the second category (see No. 931), an operator holding a second class radiotelegraph operator's certificate shall have had at least six months' experience as an operator on board ship, <u>or at least three months' experience as an operator in a coast station and at least three months' experience as an operator on board ship.</u>
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Reasons :

In the case of a first class radiotelegraph operator, experience in a coast station is accepted vis-à-vis experience on board ship (No. 908).

Intensive operating experience is acquired in a coast station and it is believed that such experience should be taken partly into account also in the case of a second class radio-telegraph operator.

Proposals relating to

Article 24

Class and Minimum Number of Operators  
for Ship and Aircraft Stations

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N° 912 - 920

## ARTICLE 24

### Class and Minimum Number of Operators for Ship and Aircraft Stations

- 912** § 1. In the public correspondence service, each government shall take the necessary steps to ensure that ship and aircraft stations of its own nationality have personnel adequate to perform efficient service.
- 913** § 2. The personnel of these stations shall, having regard to the provisions of Article 23, include at least :
- 914** a) ship stations of the first category : one operator holding a first class radiotelegraph operator's certificate ;
- 915** b) ship stations of the second category : one operator holding a first or second class radiotelegraph operator's certificate ;
- 916** c) ship stations of the third category, except in the case provided for in No. 917 : one operator holding a first or a second class radiotelegraph operator's certificate ;
- 917** d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements : one operator holding a radiotelegraph operator's special certificate or a first or second class radiotelegraph operator's certificate ;
- 918** e) ship stations equipped with a radiotelephone installation : one operator holding either a radiotelephone operator's certificate or a radiotelegraph operator's certificate ;
- 919** f) aircraft stations except in the cases provided for in No. 920 : one operator holding a first or second class radiotelegraph operator's certificate, according to the internal regulations of the governments to which the stations are subject ;
- 920** g) aircraft stations equipped with a radiotelephone installation but not equipped for telegraphy : one operator holding, as the case may be, a radiotelephone operator's certificate or a radiotelegraph operator's certificate according to the internal regulations of the governments to which the stations are subject <sup>1</sup>.

**920.1** <sup>1</sup> See also Nos. 899 to 904 inclusive.



Ref.

G/68 (88) NOC 912-913

MOD 914

(a) ship stations of the first category; a chief operator holding a radiocommunication operator's general certificate, or a first class radiotelegraph operator's certificate.

Reasons :

For clarification and consequential upon 888A-888J, and the revision of No. 909.

MOD 915

(b) ship stations of the second and third categories: one operator holding a radiocommunication operator's general certificate or a first or a second class radiotelegraph operator's certificate.

Reasons :

Consequential upon Nos. 888A-888J and the revision of Nos. 931 and 931A.

MOD 916

(c) ship stations of the fourth category, except in the case provided for in No. 917: one operator holding a radiocommunication operator's general certificate or a first or a second class radiotelegraph operator's certificate.

Reasons :

Consequential upon Nos. 888A-888J and the revision of No. 932.

MOD 917

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

Reasons :

Consequential upon Nos. 888A-888J.

NOC 918

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Proposals relating to

Article 25

Working Hours of Stations in the Maritime  
and Aeronautical Mobile Services

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Section IV. Ship Stations

N° 929 - 938

#### Section IV. Ship Stations

929 § 6. (1) For the international public correspondence service, ship radiotelegraph stations are divided into three categories :

930 — Stations of the first category : these stations maintain a continuous service.

931 — Stations of the second category : these stations maintain a service of limited duration as indicated in Nos. 934 and 935.

932 — Stations of the third category : these stations maintain a service the duration of which is either shorter than that of stations of the second category, or is not fixed by these Regulations.

933 (2) Each administration shall itself determine the rules under which ship radiotelegraph stations subject to it are to be placed in one or the other of the above three categories.

934 § 7. (1) Ship stations of the second category shall provide service at least during the hours fixed by Appendix 12. These hours shall be mentioned in the licence.

935 (2) In case of short voyages, these stations shall provide service during the hours fixed by the administrations to which they are subject.

936 § 8. When practicable, the hours of service of ship stations of the third category should be mentioned in the List of Ship Stations.

937 § 9. As a general rule, when a coast station has traffic on hand for a ship station of the third category not having fixed hours of service and assumed to be within the service area of the coast station, the latter shall call the ship station during the first half-hour of the first and third periods of service for ships of the second category performing an eight-hour service, in accordance with the provisions of Appendix 12.

Ref.

G/64(74)MOD 929 § 6 (1) For the international public correspondence service, ship stations are divided into four categories :

Reasons :

To include ships fitted with radiotelephony and to introduce a fourth category.

MOD 931 - Stations of the second category : these stations maintain a service for 16 hours a day.

Reasons :

To provide a separate category for ships maintaining a service for 16 hours a day.

ADD 931A - Stations of the third category : these stations maintain a service for 8 hours a day.

Reasons :

To provide a separate category for ships maintaining a service for 8 hours a day.

MOD 932 - Stations of the fourth category : these stations maintain a service the duration of which is either shorter than that of stations of the third category, or is not fixed by these Regulations.

Reasons :

Consequent upon the introduction of a fourth category.

MOD 933 (2) Each administration shall itself determine the rules under which ship stations subject to it are to be placed in one or other of the above four categories.

Reasons :

To include ships fitted with radiotelephony and to take account of the introduction of a fourth category.

G/64(74)  
(cont.)

MOD 934

§ 7 (1) Ship stations of the second and third categories shall provide service at least during the hours fixed by Appendix 12. These hours shall be mentioned in the licence.

Reasons :

Consequent upon the introduction of a fourth category.

NOC 935

SUP 936

Reasons :

Unnecessary. Not observed in practice.

SUP 937

Reasons :

Not observed in practice, and **satisfied** by No. 1065 and No. 1067.

SUP 938

Reasons :

Consequential upon the preceding proposals, and covered by Nos. 929-933 as amended.

AUS/54(6)

ADD 937.1

However ship stations of the third category operating within Zone C shall provide service at least during the first half-hour of the second period of service for ships of the second category performing an eight hour service in accordance with the provisions of Appendix 12.

Reasons :

There have been many instances in the Australian area where ships of the third category, known to be within the service range of a coast station, have failed to reply to calls directed to them and repeated at the times specified in No. 937. Messages for these ships have therefore been delayed, and in several cases, some anxiety has arisen for the safety of the ships concerned.

Proposals relating to  
Article 28

Conditions to be Observed by Mobile Stations

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Section I. General Provisions

N° 956

**Section I. General Provisions**

- 955 § 1. (1) Mobile stations shall be established in such a way as to conform to the provisions of Chapter II as regards frequencies and classes of emission.
- 956 (2) For the use of class B emissions by mobile stations see No. 677.
- 957 § 2. The frequencies of emission of mobile stations shall be checked as often as possible by the inspection service to which these stations are subject.
- 958 § 3. The energy radiated by receiving apparatus shall be reduced to the lowest possible value and shall not cause harmful interference to other stations.
- 959 § 4. Administrations shall take all practicable steps necessary to ensure that the operation of any electrical or electronic apparatus installed in mobile stations does not cause harmful interference to the essential radio services of stations which are operating in accordance with the provisions of these Regulations.
- 960 § 5. (1) Changes of frequency in the sending and receiving apparatus of any mobile station shall be capable of being made as rapidly as possible.
- 961 (2) Installations of any mobile station shall be capable, once communication is established, of changing from transmission to reception and vice versa in as short a time as possible.
- 962 § 6. The operation of a broadcasting service (see No. 28) by mobile stations at sea and over the sea is prohibited.
- 963 § 7. Mobile stations other than survival craft stations shall be provided with the documents enumerated in the appropriate section of Appendix 11.
- 964 § 8. When any ship station transmitter itself cannot be controlled in such a way that its frequency satisfies the tolerance specified in Appendix 3, the ship station shall be provided with a device, having a precision equal to at least one-half of this tolerance, for measuring the frequency of the emission.



Ref.

G/63 (73) SUP 956

Reasons :

Consequential upon amendment of No. 677.

G/60(12) ADD 964A Equipment intended for use on narrow-band direct-printing telegraph systems should conform to the Recommendations of the C.C.I.R. and other technical standards in Appendix 20B.

Reasons :

To provide for direct-printing telegraph systems.

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Proposals relating to

Article 28

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Section III. Ship Stations using Radiotelegraphy

N° 971, 974, 975, 976, 978 and 981

**Section III. Ship Stations using Radiotelegraphy**

- 970** § 12. Ship stations equipped with radiotelegraph apparatus intended to be used for normal traffic shall be provided with devices permitting change-over from transmission to reception and vice versa without manual switching. In addition these stations should be able to listen on the reception frequency during the course of periods of transmission.

*Bands between 110 and 160 kc/s*

- 971** § 13. In ship stations all apparatus installed for the use of class A1 emissions on frequencies in the authorized bands between 110 and 160 kc/s shall provide, in addition to the frequency 143 kc/s, at least two frequencies selected within these bands.

*Bands between 405 and 535 kc/s*

- 972** § 14. Transmitters used in ship stations working in the authorized bands between 405 and 535 kc/s shall be provided with devices readily permitting a material reduction of power.

- 973** § 15. All ship stations equipped with radiotelegraph apparatus to work in the authorized bands between 405 and 535 kc/s shall be able to :

- 974** a) send and receive class A2 emissions on 500 kc/s ;
- 975** b) send, in addition, class A1 and A2 emissions on at least two working frequencies ;
- 976** c) receive, in addition, class A1 and A2 emissions on all the other frequencies necessary for their service.

- 977** § 16. The provisions of Nos. 975 and 976 do not apply to apparatus provided solely for distress, urgency and safety purposes.

*Bands between 1 605 and 2 850 kc/s*

- 978** § 17. In Regions 2 and 3, any radiotelegraph station installed on board a ship which uses frequencies in the band 2088.5-2093.5 kc/s for call and reply shall be provided with at least one other frequency in the authorized bands between 1 605 and 2 850 kc/s.

*Bands between 4 000 and 27 500 kc/s*

- 979** § 18. In ship stations, all apparatus using class A1 emissions on frequencies in the authorized bands between 4 000 and 27 500 kc/s shall satisfy the following conditions :

- 980** a) in each of the bands necessary to carry on the station's service, it shall have at least two working frequencies in addition to one in the calling band (see Nos. 1193 and 1198) ;
- 981** b) changes of frequency in transmitting apparatus shall be effected within five seconds if the frequencies are in the same band and within fifteen seconds if the frequencies are in different bands ;
- 982** c) in the matter of frequency changing, receiving apparatus shall be capable of a performance equal to that of the transmitting apparatus.

Ref.

G/61(67)

SUP 971

Reasons :

Consequential upon proposed deletion of Nos. 171-172 and 1095-1105.

G/58(5)

MOD 974

a) Send Class A2 or A2H emissions on 500 kc/s;<sup>1</sup>

ADD 974A

aa) Receive Class A2 and A2H emissions on 500 kc/s;<sup>1</sup>

Reasons :

To provide for the use of Class A2H emissions on 500 kc/s.

ADD 974.1

<sup>1</sup>The type of A2 and A2H used shall be by the on-off keying of the modulated emission.

Reasons :

To ensure the correct operation of all types of radio-telegraph automatic devices for the reception of the radiotelegraph auto alarm signal.

CAN/43(16)

MOD 974

a) send and receive class A2 or A2H emissions on 500 kc/s;

Reasons :

To provide for the use of single sideband emissions on 500 kc/s.

F/12(71)

No. 974 - Replace the present text by the following :

a) send and receive class A2 or A2H emissions on 500 kHz;

Reasons :

To allow the optional use of class A2H emissions on 500 kHz.

I/35(24)

MOD 974

a) send and receive class A2 or A2H emissions with carrier frequency on 500 kc/s;

Reasons :

To provide, on distress and calling frequencies, permissive use of single sideband emissions compatible with class A2 and A3 double sideband emissions.

Ref.

USA/20(33)

MOD 974

a) send and receive class A2 or A2H emissions with carrier frequency\*) on 500 kc/s.

Reasons :

To provide for the permissive use of full carrier single sideband (SSB) emissions on the distress and calling frequencies for stations using SSB transmitting equipment. The C.C.I.R. has determined that the emissions A2H and A3H are as effective as A2 or A3 emissions for use as alarm, distress, urgency and safety signals.

F/12(72)

No. 975 - Replace the present text by the following :

b) send, in addition, class A1 and A2 (or A2H) emissions on at least two working frequencies.

Reasons :

To permit the optional use of class A2H emissions even on frequencies other than the international calling and distress frequency.

F/12(73)

No. 976 - Replace the present text by the following :

c) receive, in addition, class A1, A2 and A2H emissions on all the other frequencies necessary for their service.

Reasons :

See proposal No. F/12(72) relative to No. 975.

G/66(80)

MOD

975

b) send, in addition, class A1 and either A2 or A2H emissions on at least two working frequencies;

MOD

976

c) receive, in addition, class A1, A2 and A2H emissions on all other frequencies necessary to their service.

Reasons :

To provide for the use of class A2H emission.

G/58(5)

ADD

976A

g15(bis) Only class A2 and A2H emissions shall be used in the band between 490-510 kc/s.

Reasons :

To protect auto-alarm equipment designed for A2 reception from strong A1 signals which can render reception inoperative.

HOL/73(14)

MOD

974

a) send class A2 or A2H and receive class A2 and A2H emissions on 500 kc/s;

MOD

975

b) send, in addition, class A1 and A2 (or A2H) emissions on at least two working frequencies;

MOD

976

c) receive, in addition, class A1, A2 and A2H emissions on all the other frequencies necessary for their service.

Ref.

- AUS/54(7)      MOD      978 817. In Regions 2 and 3, any radiotelegraph station installed on board a ship which uses frequencies in the band 2088.5 - 2093.5 kc/s for call and reply shall be provided with at least one other frequency in the authorized bands between 1605 and 2850 kc/s.
- USA/24 (58)      MOD      981      b) changes of frequency in transmitting apparatus shall be effected as quickly as practicable, but within fifteen seconds in any event; ~~within five seconds if the frequencies are in the same and within fifteen seconds if the frequencies are in different bands.~~

Reasons :

To provide a time period for changes of frequency in ship station transmitters which takes into account characteristics of equipment employing automatic tuning.

Background :

The requirement for rapid frequency shift of ship telegraph transmitters (5 seconds within the same band and 15 seconds between bands) now contained in No. 981, first appeared as a requirement in No. 592 of the Atlantic City Radio Regulations. This provision was adopted as the result of a proposal made by the U.S. based on the needs of the calling-working concept. It is applicable, however, only to the use of A1 emission. There are available today multi-purpose transmitters of high stability using automatic tuning and frequency synthesis techniques which are adaptable to A1, F1, SSB, data transmission, etc. Such transmitters can be shifted readily to any frequency in the 2 - 30 Mc/s range and tend to minimize human error in the tuning process. However, the time required for complete cycling of automatic tuning systems which have been evaluated, range from 6 to 12 seconds. Clearly, such devices comply with the spirit of the Radio Regulations. Their use is inhibited in that they fail to meet the precise letter of the Radio Regulations in one aspect only, i.e., the five second limitation now in the regulations. This five second limitation was chosen arbitrarily in 1947 and need not be perpetuated at the expense of improved technology.

USSR/51(7)

Agenda Item 5 : Classes of emission to be used on the international distress and calling frequencies 500 kc/s and 2182 kc/s.

Proposal

It is proposed that the classes of emission recommended by the C.C.I.R. be adopted (Recommendation 438, Oslo 1966).

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Proposals relating to

Article 28

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Section IV. Ship Stations using Radiotelephony

Nº 983 - 991

**Section IV. Ship Stations using Radiotelephony**

*Bands between 1 605 and 4 000 kc/s*

**983** § 19. All ship stations equipped with radiotelephony apparatus to work in the authorized bands between 1 605 and 2 850 kc/s shall be able to :

**984**           a) send and receive class A3 emissions on 2 182 kc/s ;

**985**           b) send, in addition, class A3 emissions on at least two working frequencies ; <sup>1</sup>

**986**           c) receive, in addition, class A3 emissions on all the other frequencies necessary for their service.

**987** § 20. The provisions of Nos. 985 and 986 do not apply to apparatus provided solely for distress, urgency and safety purposes.

*Bands between 156 and 174 Mc/s*

**988** § 21. All ship stations equipped with radiotelephony to work in the authorized bands between 156 and 174 Mc/s (see No. 287 and Appendix 18) shall be able to send and receive Class F3 emissions on :

**989**           a) the calling and safety frequency 156-80 Mc/s ;

**990**           b) the primary intership frequency 156-30 Mc/s ; and

**991**           c) all the frequencies necessary for their service.

**985.1** <sup>1</sup> In certain areas, administrations may reduce this requirement to one working frequency.

G/76(29)

MOD

983

§ 19. All ship stations equipped with radio-telephony apparatus operating in the double sideband mode to work in the authorized bands between 1605 and 2850 kc/s shall be able to :

Reasons :

To cover double sideband operation only.

see also Agenda Item 5, G/58(5),  
Document No. 58)

CAN/43(17)

MOD

984

a) send and receive class A2 or A3H emissions on 2182 kc/s;

F/8(15)

No. 984 Replace the present text by the following :

a) send class A3H emissions and receive class A3 and A3H emissions on the carrier frequency 2182 kc/s;

Reasons :

To enable class A3H SSB emissions to be received on the DSB receivers of stations not compelled to convert to SSB operation (see No. 996).

F/8(16)

No. 985 Replace the present text by the following :

b) send, in addition, Class A3A and A3J emissions on at least two working frequencies; (1)

Reasons :

Consequence of using SSB.

F/8(17)

No. 986 Replace the present text by the following :

c) receive, in addition, class A3A, A3H and A3J emissions on all other frequencies necessary for their service.

Reasons :

Consequence of using SSB. Furthermore, coast stations must send class A3H emissions for the equipment provided solely for distress, urgency and safety traffic (Nos. 987 and 996) to be able to receive general messages (notices to mariners, meteorological bulletins). To avoid repetition of these messages with A3A or A3J, all ship stations must be able to receive with A3H.

F/8(18)

No. 987 Replace the present text by the following :

The provisions of Nos. 984, 985 and 986 do not apply to apparatus provided solely for distress, urgency and safety purposes, which need only be able to :

- send class A3 or A3H emissions on 2182 kc/s;
- receive class A3 and A3H emissions on the frequencies used for distress, urgency and safety purposes. Reasons :

Ref.

F/8(18) Reasons :

(cont.)

These provisions relate to simple apparatus installed on board small ships and intended solely for distress and safety traffic, for which conversion to SSB should not be compulsory.

HOL/70(2) MOD 984 a) send class A3H and receive class A3 and A3H emissions on 2182 kc/s;

Reasons :

To be consistent with the proposal for the introduction of single sideband emissions and to permit communication with survival craft stations. See also proposal relating to Agenda Item 5 (HOL/73(14)).

MOD 985 b) send, in addition class A3A and class A3J emissions on at least two working frequencies;

MOD 986 c) receive, in addition, class A3A and class A3J emissions on all the other frequencies necessary for their service.

I/35(24) MOD 984 a) send and receive class A3 or A3H emissions with carrier frequency on 2182 kc/s;

I/31(10) MOD 985 b) send in addition class A3 or A3H and A3A emissions on at least two working frequencies; 1, 2)

MOD 986 c) receive in addition class A3 or A3H and A3A emissions on all the other frequencies necessary for their service. 2)

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ADD 985.2 2) After 1 January 1980, class A3 and A3H emissions are no longer required.

Reasons :

Proposed modifications are a direct consequence of the conversion to single sideband technique.

As to classes of emission on the distress frequency 2182 kc/s, see Proposal No. I/35(25) under Agenda Item 5 (Document No. 35).

Ref.

J/84(8)      MOD      984      a) ~~send and receive~~ class A3 or A3H emissions  
and receive class A3 and A3H emissions on  
2182 kc/s;

Reasons :

Consequence of conversion to SSB system; and in view of the C.C.I.R. Recommendation (No. 438) relating to the use of classes of emission on the frequency 2182 kc/s, amendment is in need.

In consideration of the advantage for the use of apparatus provided for distress purposes as mentioned in No. 987, and in view of the recognition of 17 kc/s as the guard band of 2182 kc/s, the use of class A3 emissions remains as it is.

J/84(9)      MOD      985      b) send, in addition, class A3J and A3A  
emissions if required for the public  
correspondence service, on at least two working  
frequencies; 1

Reasons :

As regards classification of emissions, in consideration of the possibility of reducing the effect of conversion to SSB because the carrier frequency of class A3H emissions, and even that of class A3A emissions decreased by 16 db would cause interference due to beat notes between carriers and interference due to cross-modulation between adjacent channel transmissions; of the fact that in Japan some 7000 ship stations are already carrying on communications with class A3J emissions; and of the C.C.I.R. Recommendation's (No. 258-1) intention of using class A3J emissions as a desirable objective and so forth, it is proposed to use in principle class A3J emissions and class A3A emissions if required for public correspondence.

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J/84(10)      MOD      986      c) receive, in addition, class A3J and A3A  
emissions if required for the public corres-  
pondence service, on all the other frequencies  
necessary for their service.

Reasons :

This corresponds to amendment to No. 985 and proposal was made of classes of emissions of the minimum necessity.

Ref.

USA/20(34) MOD 984 a) send and receive class A3 or A3H emissions with carrier frequency\* on 2182 kc/s.

USA/16(12) NOC 983  
MOD 984 a) send and receive class A3 or A3H emissions with carrier frequency on 2182 kc/s;

MOD 985 b) send, in addition, ~~class-A3-emissions~~ on at least two working frequencies;<sup>1)</sup>

MOD 986 c) receive, in addition, ~~class-A3-emissions~~ on all the other frequencies necessary for their service.

ADD 986A § 19bis. The class of emissions employed by ship stations shall be consistent with the provisions of Nos. 1339AA through 1339AE.

NOC 985.1 1) In certain areas, administrations may reduce this requirement to one working frequency.

Reasons :

Consequential to the proposed amendment of Article 35 (USA/16(1) - (11)).

G/76(29) ADD 987A § 20 (bis) (1) All ship stations equipped with radiotelephony apparatus operating in the single sideband mode to work in the authorized bands between 1605 and 2850 kc/s shall be able to :

987B a) send class A3H emission and receive classes A3H and A3 emissions on 2182 kc/s;

987C b) send, in addition, class A3H, A3A and A3J emissions on at least two working frequencies <sup>1</sup>;

987D c) receive, in addition, class A3H, A3A and A3J emissions on all other frequencies necessary for their service;

Ref.

G/76(29)

(cont.)

987E - (2) The provisions of Nos. 987C and 987D do not apply to apparatus provided solely for distress, urgency and safety purposes.

Reasons :

To provide for the use of the single sideband mode of operation.

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ADD 987C.1<sup>1</sup> In certain areas, administrations may reduce this requirement to one working frequency.

Reasons :

Consequential upon new No. 987C.

USSR/51(7)

Agenda Item 5 : Classes of emission to be used on the international distress and calling frequencies 500 kc/s and 2182 kc/s.

Proposal

It is proposed that the classes of emission recommended by the C.C.I.R. be adopted (Recommendation 438, Oslo 1966).

It is proposed that the transfer to single sideband operation be effected in the following order and by the following dates :

USSR/48(1)

- from 1 January 1972 onwards : no further installation of double sideband equipment in ships and coast stations;
- from 1 January 1977 onwards : the use of double sideband equipment by ships and coast stations must cease.

It is proposed to reduce the interference guard band for frequency 2182 kc/s to  $\pm 5$  kc/s, keeping the bands 2170 - 2177 and 2187 - 2194 kc/s for the exclusive use of radio-telephone stations of the Maritime Mobile Service.

Comments

In view of the progress made with single sideband equipment and the need to increase the possibilities of using the radio frequencies allocated to the Maritime Mobile Service the Soviet Administration considers that ship and coast radio-telephone stations should be converted to single sideband operation over the next few years. 1 January 1972 is proposed as the date after which double sideband radio equipment should no longer be installed, and 1 January 1977 as the deadline for complete cessation of the use of double sideband radio equipment.

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Proposals relating to

Article 28

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Section V. Aircraft Stations

N° 992

**Section V. Aircraft Stations**

- 992** § 22. (1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting and receiving on the frequency 500 kc/s, preferably class A2 emissions, or, on the frequency 2 182 kc/s, class A3 emissions.
- 993** (2) Aircraft stations, when communicating with stations of the maritime mobile service on frequencies allocated to that service, shall comply as far as possible with the provisions of this Article.

Ref.

CAN/43(18)      MOD      992 § 22.(1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting and receiving on the frequency 500 kc/s, preferably class A2 or A2H emissions or on the frequency 2182 kc/s class A3 or A3H emissions,

Reasons :

To provide for the use of single sideband emissions on 500 and 2182 kc/s.

F/8(19)      No. 992 Replace the last two lines of this number by the following::

"of transmitting and receiving on the frequency 500 kc/s, preferably class A2 or A2H emissions, or, on the frequency 2182 kc/s, class A3 or A3H emissions."

Reasons :

Consequence of using SSB. See also Proposal F/12(71) relating to No. 974 concerning radiotelegraphy (Item 5 of the agenda), Document No. 12.

G/58(5)      MOD      992      §22(1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting and receiving on the frequency 500 kc/s, class A2 or A2H emissions, or on the frequency 2182 kc/s, class A3 or A3H emissions.

Reasons :

To provide for the use of class A2H and A3H emissions.

I/35(24)      MOD      992      § 22. (1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting class A2 or A2H and receiving class A2 and A2H emissions on the frequency 500 kc/s, or, on the frequency 2182 kc/s, transmitting class A3 or A3H and receiving class A3 and A3H emissions.

J/84(11)      MOD      992      §22. (1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting class A2 or A2H

Ref.

J/84(11)  
(cont.)

and receiving class A2 and A2H emissions on the frequency 500 kc/s ~~preferably class A2 emissions~~, or, on the frequency 2182 kc/s, transmitting class A3 or A3H and receiving class A3 and A3H emissions.

Reasons :

See proposal relating to No. 984 (J/84(8)).

USA/20(35)

MOD 992

22.(1) Any aircraft following a maritime course and required by national or international regulations to communicate, for safety purposes, with stations of the maritime mobile service shall be capable of transmitting class A2 or A2H and receiving class A2 and A2H emissions on the frequency 500 kc/s ~~preferably class A2 emissions~~, or, on the frequency 2182 kc/s, transmitting class A3 or A3H and receiving class A3 and A3H emissions.

Proposals relating to

Article 28

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Section VI. Survival Craft Stations

N° 995, 996

Section VI. Survival Craft Stations

- 994 § 23. Equipment provided for use in survival craft stations shall, if capable of operating on any frequency :
- 995 — *in the bands between 405 and 535 kc/s*, be able to transmit on 500 kc/s using class A2 emissions, but see No. 677. If a receiver is provided for any of these bands, it shall be able to receive class A2 emissions on 500 kc/s ;
- 996 — *in the bands between 1 605 and 2 850 kc/s*, be able to transmit on 2 182 kc/s using class A3 emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 emissions on 2 182 kc/s ;
- 997 — *in the bands between 4 000 and 27 500 kc/s*, be able to transmit on 8 364 kc/s using class A2 emissions. If a receiver is provided for any of these bands, it shall be able to receive class A1 and A2 emissions throughout the band 8 320 to 8 745 kc/s ;
- 998 — *in the bands between 118 and 132 Mc/s*, be able to transmit on 121.5 Mc/s, preferably using amplitude modulated emission. If a receiver is provided for any of these bands, it shall be able to receive class A3 emissions on 121.5 Mc/s ;
- 999 — *in the bands between 235 and 328.6 Mc/s*, be able to transmit on the frequency 243 Mc/s.

Ref.

- CAN/43(19)      MOD      995      in the bands between 405 and 535 kc/s, be able to transmit on 500 kc/s using class A2 or A2H emissions, but see No.677. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kc/s;
- CAN/43(20)      MOD      996      in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s;

Reasons:

To provide for the use of single sideband emissions on 500 and 2182 kc/s.

F/12(74)      No. 995 - Replace the present text by the following :

- in the bands between 405 and 535 kHz, be able to transmit on 500 kHz using class A2 or A2H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kHz.

Reasons :

See proposal No. F/12(71) relative to No. 974.

F/8(20)      No. 996 Replace the present text by the following :

- in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s;

Reasons :

Consequence of using SSB, not compulsory for survival craft stations.

Ref.

G/66(80) MOD

- 995 - in the bands between 405 and 535 kc/s, be able to transmit on 500 kc/s using Class A2 or A2H emissions. If a receiver is provided for any of these bands, it shall be able to receive Class A2 and A2H emissions on 500 kc/s.

Reasons :

To provide for the use of Class A2H emission and consequent on amendment of No. 677 (see under Article 12, Additional Agenda Item UK4, Document No. 63).

G/76(29)

MOD

996

- in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s.

Reasons :

To provide for the use of class A3H emissions.

BOL/73(14)

MOD

995

- in the bands between 405 and 535 kc/s, be able to transmit on 500 kc/s using class A2 or A2H emissions, but see No. 677. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kc/s.

MOD

996

- in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions.

If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s.

Reasons :

To permit the use of the classes of emission A2H and A3H on the distress and calling frequencies 500 kc/s and 2182 kc/s respectively.

The C.C.I.R. considers the emissions A2H and A3H to be as effective as A2 and A3 emissions for use as alarm, distress, urgency and safety signals.



Ref.

I/35(24)

MOD 995

- in the bands between 405 and 535 kc/s, be able to transmit on 500 kc/s using class A2 or A2H emissions, but see No. 677. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kc/s;

MOD 996

- in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s.

Reasons :

To provide, on distress and calling frequencies 500 kc/s and 2182 kc/s, permissive use of single sideband emissions compatible with class A2 and A3 double sideband emissions.

USA/20(36)

MOD 995

- in the bands between 405 and 535 kc/s, be able to transmit on 500 kc/s using class A2 or A2H emissions, but see No. 677. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kc/s;

USA/20(37)

MOD 996

- in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s;

Reasons :

To provide for the permissive use of full carrier single sideband (SSB) emissions on the distress and calling frequencies 500 kc/s and 2182 kc/s for stations using SSB transmitting equipment. The C.C.I.R. has determined that the emissions A2H and A3H are as effective as A2 or A3 emissions for use as alarm, distress, urgency and safety signals.

Ref.

J/84(12)      MOD      996      - in the ~~bands~~ between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on 2182 kc/s; 1

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J/84(13)      ADD      996.1      1 In Regions 2 and 3, the frequencies in the band between 2088.5 and 2093.5 kc/s using class A1 emissions may be used.

Reasons :

See Agenda Item 7.2 (Document No. 89).

Note : Proposals J/89(74) and J/89(75), as those shown in Document N° 90 about points 996 and 996.1 are equal to proposals J/84(12) and J/84(13) above.

Ref.

Section VI. Survival Craft Stations

DNK/ISL/NOR/30(1)	ADD	999A	§ 24. However, survival craft stations intended primarily as beacons to indicate the positions of survivors or the location of a mobile station in distress shall be capable of transmitting :
	ADD	999B	a) with the carrier on 2182 kc/s using the following types of emission depending upon the power of the beacon:
	ADD	999C	1) beacons producing a field strength equal to or less than 10 microvolts per metre at a distance of 30 nautical miles at sea level (Type L) the emission specified in 1476B*) transmitted continuously.
	ADD	999D	ii) beacons producing a field strength greater than 10 microvolts per metre at a distance of 30 nautical miles at sea level (Type H) the emission specified in 1476B*) or 1476C*) with a keying cycle consisting alternatively of the keying signal having a duration between 30 and 50 seconds and a period of silence having a duration between 30 and 60 seconds.
	ADD	999E	Class A3 or A3H emissions may also be transmitted. If a receiver is provided, it shall be able to receive class A3 and A3H emissions.
			or,
	ADD	999F	b) with carriers on 121.5 and/or 243 Mc/s using the emission specified in 1476D*). Class A3 emissions may also be transmitted. If a receiver is provided, it shall be able to receive class A3 emissions.

\*) Proposal DNK/ISL/NOR/30(2)

Ref.

F/14(81)

Article 28 - Section VI

Add the following number :

- 999a - No. 24 - Survival craft stations used in the maritime mobile service and intended primarily as beacons for locating an emergency or the position of survivors shall be able to transmit on 2182 kHz the signals defined in Nos. 1476 b or 1476 c (see F/14(84) and (85)). If the transmitter is such that the field produced at sea-level at a distance of 30 nautical miles exceeds 10 microvolts per metre, its operating cycle shall consist of a transmission lasting from 30 to 50 seconds followed by a silence lasting from 30 to 60 seconds.

HOL/75(23)

Article 28

Section VI - Survival craft stations

- ADD 999 A § 24. However, survival craft stations intended primarily as beacons to indicate the positions of survivors or the location of a mobile station in distress shall be capable of transmitting :
- ADD 999 B a) on 2182 kc/s using the following types of emission depending upon the power of the beacon :
- 1) the emission specified in No. 1476 B for beacons producing a field strength equal to or less than 10 microvolts per metre at a distance of 30 nautical miles at sea level;
- ii) the emission specified in No. 1476 C for beacons producing a field strength greater than 10 microvolts per metre at a distance of 30 nautical miles at sea level.
- Class A3 or A3H emissions may also be used. If a receiver is provided, it shall be able to receive class A3 and A3H emissions.
- or,
- ADD 999 C b) on 121.5 and/or 243 Mc/s using the emission specified in No. 1476 D. Class A3 emission may also be used. If a receiver is provided, it shall be able to receive class A3 emissions.

Ref.

I/36(27)

Amend Article 28 of the Radio Regulations as follows :

ADD 999 AA

§ 24. However, survival craft stations intended primarily for use as beacons to indicate the position of survivors or the location of a mobile station in distress shall be capable of transmitting :

ADD 999 AB

a) with the carrier on 2182 kc/s using the emissions specified in No. 1476 AB\*), if the beacon is provided for producing at sea a field intensity minor or equal to 10  $\mu$ V/m at the distance of 30 nautical miles, or in No. 1476 AC\*), if the beacon is provided for producing at sea a field intensity higher than 10  $\mu$ V/m at the distance of 30 nautical miles. If the receiver is provided, it shall be able to receive A3 and A3H emissions;

ADD 999 AC

b) with carriers on 121.5 and/or 243 Mc/s using the emissions specified in No. 1476 AD\*). Class A3 emission may also be transmitted. If a receiver is provided, it shall be capable to receive class A3 emissions.

Background :

The distinction between emissions in respect of field intensity produced at the distance of 30 nautical miles results from C.C.I.R. Recommendation (Doc. XIII/1008 - Oslo, 1966).

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\*) Proposal No. I/36(28)

Ref.

J/89(76)      ADD      999A      §24. Equipment provided for use in survival craft stations shall, if emergency position-indicating radio beacons are included, be able to transmit on 2182 kc/s the signals defined in Nos. 1476B or 1476C. If a receiver is provided, it shall be able to receive class A3 and A3H emissions on 2182 kc/s;<sup>1</sup>

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J/89(77)      ADD      999A.1      <sup>1</sup> In Japan, there exist emergency position-indicating radio beacons which transmit the distress signal and identification on frequencies between 2088.5 and 2093.5 kc/s using class A1 emissions.

Reasons :

To lay down conditions for the use of the emergency position-indicating radio beacon. In Japan there is already in wide use the automatic apparatus for distress information using class A1 emissions on 2091 kc/s. Therefore, it is requested that in Regions 2 and 3, where the band 2088.5 - 2093.5 kc/s is reserved exclusively for calling, the band between 2088.5 and 2093.5 should be designated as a safety frequency band in the radiotelegraph maritime mobile service and be added to frequencies with which survival craft stations shall be provided (see No. 455).

Section VI. Survival Craft Stations

USA/22(51)      ADD 999A      Paragraph 24. Exceptionally, however, survival craft stations intended primarily as beacons to indicate the positions of survivors or the location of a mobile station in distress shall be capable of transmitting:

ADD 999B      a) with the carrier on 2182 kc/s using the emission specified in 1476B (Proposal No. USA/22(52)). Class A3 or A3H emission may also be transmitted. If a receiver is provided, it shall be able to receive class A3 and A3H emissions, or

ADD 999C      b) with carriers on 121.5 and/or 243 Mc/s using the emission specified in 1476C (Proposal No. USA/22(52)). Class A3 emission may also be transmitted. If a receiver is provided it shall be able to receive class A3 emissions.

Reasons :

To provide for world-wide conditions of use, definitions and frequencies for emergency position-indicating beacons.

Ref.

Article 28

RFA/94(21)

ADD

Section VII

ADD

999A

Floatable emergency position-indicating radio beacon on 2182 kc/s. Floatable emergency position-indicating radio beacons working on 2182 kc/s shall be able to use class A2 emissions. Additionally, class A3 or A3H emissions may be used.

- See also Article 36 Section VIII A (RFA/94(27)).

Reasons :

Insertion in the Regulations of provisions relating to emergency position-indicating beacons (see C.C.I.R. Recommendation N° 439).

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Proposals relating to  
the introduction of an  
Article 28A

Selective calling in the maritime mobile service

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G/91(50)

ADD

Article 28A

Selective calling in the maritime mobile service

G/113(58)

ADD

999B

§1. Amend to read : "The characteristics of the international selective calling system shall be in accordance with Appendix ..."

Reasons : Consequential upon proposals for new Appendix 20C.

Method of calling

G/91(50)

ADD

999C

§ 2. (1) The call shall consist of :

- the selective call number of the ship station called;
- the identification number of the coast station calling;
- the whole repeated twice.

ADD

999D

(2) When a station called does not reply, the call should not 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 30 minutes.

Reply to calls

ADD

999E

§ 3. The reply to calls should be made in accordance with :

Nos. 1022-1023 when using radiotelegraphy

Nos. 1241-1253 when using radiotelephony

Frequencies and classes of emission to be used

G/113(58)

ADD

999F

§ 4. Calls shall be radiated on one or more of the following frequencies as appropriate :

Frequency

Class of emission

500 kc/s

A2H

2182 kc/s

A2H

\*) 2170.5 kc/s

A2H

4361.7 kc/s )

8732.4 kc/s )

13 109.2 kc/s )

A2H

17 262.2 kc/s )

22 622.3 kc/s )

156.8 Mc/s

F2

Reasons :

To provide for the use of selective calling devices.

(any working frequency listed for this purpose in the List of Coast Stations)

A2H (MF and HF)  
F2 (VHF)

\*) When brought into use.

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Proposals relating to  
Article 29

General Radiotelegraph Procedure  
in the Maritime Mobile and Aeronautical Mobile Services

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N° 1004, 1005 and 1006

### **Section I. General Provisions**

**1004 § 3.** (1) In order to facilitate radiocommunications, stations of the mobile service shall use the service abbreviations given in Appendix 13.

**1005** (2) In the maritime mobile service, only the service abbreviations given in Appendix 13 are to be used.

### **Section II. Preliminary Operations**

**1006 § 4.** In areas where traffic is congested, ship stations shall take into account the provisions of No. 1115.

Ref.

J/88(57) MOD 1004

23. (1) In order to facilitate radiocommunications, stations of the mobile service shall use the service abbreviations given in Appendix 13 and the abbreviations in the International Code of Signals.

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J/88(58) MOD 1005

(2) In the maritime mobile service, only the service abbreviations given in Appendix 13 are to be used. However, the use of abbreviations in the International Code of Signals is not precluded.

g/78(91) SUP 1006

Reasons :

Superfluous.

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Proposals relating to

Article 29

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Section III. Calls, Reply to Calls and  
Signals Preparatory to Traffic.

N° 1013, 1015, 1023, 1024, 1025 and 1026

### Section III. Calls, Reply to Calls and Signals Preparatory to Traffic

#### *Method of Calling*

**1012 § 6.** (1) The call consists of :

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

**1013** (2) However, in the bands between 4 000 and 27 500 kc/s, when the conditions of establishing contact are difficult, the call signs may be transmitted more than three times, but not more than ten times each. In this case, the call signs of the called and the calling station shall be transmitted in alternate sequence up to a total of twenty call signs altogether (e.g. ABC ABC de WXYZ WXYZ . . . or ABC ABC ABC de WXYZ WXYZ WXYZ . . .). This call may be sent three times at intervals of two minutes ; thereafter it shall not be repeated until an interval of fifteen minutes has elapsed.

#### *Frequency to be used for Calling and for Preparatory Signals*

**1014 § 7.** (1) For making the call and for transmitting preparatory signals, the calling station shall use a frequency on which the station called keeps watch.

**1015** (2) A ship station calling a coast station in any of the frequency bands allocated to the maritime mobile service between 4 000 and 27 500 kc/s shall use a frequency in the calling band specially reserved for this purpose.

#### *Frequency for Reply*

**1023 § 11.** (1) For transmitting the reply to calls and to preparatory signals, the station called shall use the frequency on which the calling station keeps watch, unless the calling station has specified a frequency for the reply.

**1024** (2) As an exception to this rule :

**1025** a) When a mobile station calls a coast station on 143 kc/s, the coast station shall transmit the reply to the call on its normal working frequency in the bands between 90 and 160 kc/s, as indicated in heavy type in the List of Coast Stations.

**1026** b) When a mobile station calls a coast station in one of the bands authorized for radiotelegraphy between 4 000 and 27 500 kc/s, the coast station shall transmit the reply to the call on one of its working frequencies in the same band, these frequencies being indicated in the List of Coast Stations.

Ref.

F/111(134)

MOD

1013

Replace by the following :

(2) However, in the bands between 4000 and 27 500 kc/s, when the conditions of establishing contact are difficult, the call sign may be transmitted not more than ten times in succession. The call shall consist of :

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

If necessary, this call may be repeated once immediately afterwards. Each group of two consecutive calls may be repeated three times at intervals of two minutes; thereafter it shall not be repeated until an interval of 15 minutes has elapsed.

Reasons:

The present number 1013 is rather unclear. The important thing is that the station called should know that it is being called by another station. The calling station should therefore be able to repeat the call sign of the called station for a fairly long period. On the other hand, it is not necessary that it should repeat its own call sign so often. The proposed procedure would facilitate the work of ship stations.

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F/111(135)

MOD

1023

Replace by the following :

§ 11. (1) For transmitting the reply to calls and to preparatory signals, the station called shall use the frequency specified by the calling station. If this is not possible, it shall use the frequency on which the calling station keeps watch.

Reasons:

See proposal relating to No. 1115A to limit the use of frequency 500 kc/s by giving priority for replies to the working frequency of the called station.

Ref.

J/90(85)

MOD

1013

(2) However, in the bands between 4000 and 27 500 kc/s, when the conditions of establishing contact are difficult, the call signals may be transmitted more than three times, but not more than ten times each. ~~In this case, the call signs of the called and the calling station shall be transmitted in alternate sequence up to a total of twenty call signs altogether (e.g. ABC ABC de WXYZ WXYZ ... or ABC ABC ABC de WXYZ WXYZ WXYZ ...). This call may be sent three times at intervals of two minutes; thereafter it shall not be repeated until an interval of fifteen minutes has elapsed. (e.g. ABC de WXYZ ABC de WXYZ ... (at intervals of two minutes) or ABC (six times) de WXYZ (four times) ABC (four times) de WXYZ (six times) (at intervals of two minutes) or ABC (ten times) de WXYZ (ten times) (at intervals of two minutes), etc.) (see Nos. 1077 to 1080.)~~

Reasons :

In order to facilitate the establishment of contact in the bands between 4000 and 27 500 kc/s, the call signs of the called and the calling stations are to be transmitted not more than ten times each according to the traffic condition and the call is to be made in such methods as shown by example.

Ref.

SUI/101(1) 1013 MOD (2) However, in the bands between 4000 and 27 500 kc/s when the conditions of establishing contact are difficult, the call signs may be transmitted more than three times. In this case, the call signs of the called and the calling station shall be transmitted in alternate sequence up to a total of 20 call signs altogether. This call may be sent three times at intervals of two minutes; thereafter it shall not be repeated until an interval of ten minutes has elapsed.

Reasons :

Following numerous reports of infringements, it is suggested that this number of the Radio Regulations be amended to take account of actual requirements.

To increase the probability of contact when a call is made, the call sign of the called station should be transmitted for a much longer period than the call sign of the calling station.

G/65 (76) ADD 1012A (1) bis. However, in the maritime mobile service in the bands between 4000 and 27,500 kc/s the call consists of :

- the call sign of the station called, not more than three times;
- the word DE;
- the call sign of the calling station, not more than three times;
- the signal AR;
- the call sign of the station called, once only;
- the letter K.

Reasons :

Experience has shown that the addition of the call sign of the called station sent once after that of the calling station materially speeds up replies to incompletely received calls.

G/65 (76) ADD 1013A (3) However, in the maritime mobile service in the bands between 4000 and 27,500 kc/s when the requirements of No. 1162 have been met, the call may be repeated at intervals of not less than one minute for a period not exceeding five minutes and shall not be renewed until after an interval of ten minutes.

Reasons :

To allow for more frequent calling in the HF bands.

Ref.

G/91(51)      ADD      1013B      (4) When selective calling is used the provisions of Article 28A shall be observed.

Reasons :

To provide for the use of selective calling devices - see new Article 28A.

G/60(13)      ADD      1015A      (3) However, when using direct printing telegraphy or similar systems, the call may, by prior arrangement, be made on a working frequency in the bands reserved for such systems.

Reasons :

To permit calls and preparatory signals on working frequencies when direct printing telegraphy or similar systems are being used.

G/65 (76)      MOD      1017      (2) When, in the aeronautical mobile service, as an exception to this rule, the call is not followed by an indication of the frequency to be used for the traffic, this indicates :

Reasons :

Consequential upon new No. 1019A.

ADD      1019A      (3) When, in the maritime mobile service, as an exception to No. 1016 the call is not followed by an indication of the frequency to be used for the traffic, this indicates that the calling station is a coast station and that it proposes to use for traffic its normal working frequency shown in the appropriate list of stations.

Reasons :

To make it obligatory for ship stations to indicate the working frequency to be used and so reduce signalling.

MOD      1023      811. (1) Except as otherwise provided for in these regulations, for transmitting the reply to calls and to preparatory signals, the station called shall use the frequency on which the calling station keeps watch, unless the calling station has specified a frequency for the reply.

Reasons :

Consequential upon deletion of No. 1024. (See Additional Agenda Item UK2, Document No. 61).

Ref.

G/61(69) SUP 1024 and 1025

Reasons :

No longer necessary.

G/65(76) SUP 1026

Reasons :

To avoid needless repetition - already covered in No. 1165-1167.

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Proposals relating to

Article 30

Calls by Radiotelegraphy

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N° 1069, 1070, 1071, 1072,  
1077, 1078 and 1080

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

**1068** (2) Continuous or frequently repeated emissions of its call sign or of the enquiry signal CQ by a coast station should be avoided (see No. 693).

**1069** (3) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands.

**1070** (4) They may, however, announce this transmission by the following brief preamble sent on a calling frequency :

- CQ, not more than three times ;
- the word DE ;
- the call sign of the calling station, not more than three times ;
- QSW followed by the indication of the working frequency or frequencies on which the traffic list is about to be sent.

In no case may this preamble be repeated.

**1071** (5) The provisions of No. 1070 are obligatory when 500 kc/s is used.

**1072** (6) They do not apply when frequencies in the bands between 4 000 and 27 500 kc/s are used.

**1077** § 5. (1) When a station called does not reply to a call sent three times at intervals of two minutes, the calling shall cease and shall not be renewed until after an interval of fifteen minutes.

**1078** (2) However, in the case of a communication between a station of the maritime mobile service and an aircraft station, calling may be renewed after an interval of five minutes.

**1079** (3) Before renewing the call, the calling station shall ascertain that the station called is not in communication with another station.

**1080** (4) If there is no reason to believe that harmful interference will be caused to other communications in progress, the provisions of Nos. 1077 and 1078 are not applicable. In such cases the call, sent three times at intervals of two minutes, may be repeated after an interval of less than fifteen minutes but not less than three minutes.

Ref.

F/111(136)      MOD      1069      Add following sentence :

This transmission shall be preceded by a call to all stations (CQ).

Reasons:

See proposals relating to numbers 1070 and 1071.

---

F/111(137)      MOD      1070      Replace by the following :

(4) The call to all stations preceding the traffic list may be sent on a calling frequency in the following form :

- CQ (remainder unchanged).

Reasons:

See proposal relating to number 1071.

---

F/111(138)      MOD      1071      Replace by the following :

(5) The provisions of number 1070 are obligatory for traffic lists which are not transmitted at fixed times.

Reasons:

Ship stations must listen to lists transmitted at fixed times directly on the working frequency of the coast station (see number 1073).

---

G/65(77) ADD 1068A (2) bis. However, in the bands between 4000 and 27,500 kc/s a coast station may transmit its call sign at intervals of not less than one minute to enable mobile stations to select the calling band with the most favourable propagational characteristics for effecting reliable communication (see No. 1162).

Reasons :

To improve efficiency of communications and to obviate the existing contradiction between the requirements of No. 1068 and No. 1162.

MOD 1071 (5) The provisions of No. 1070 :  
ADD 1071A a) are obligatory when 500 kc/s is used;  
(MOD) 1072 b) do not apply when frequencies in the bands between 4000 and 27,500 kc/s are used.

Reasons :

Clarification.

MOD 1077 §5.(1) When a station called does not reply, the call may be repeated at three-minute intervals.

Reasons :

To expedite communications by reducing the interval between calls.

ADD 1077A (1) bis. However, in the bands between 4000 and 27,500 kc/s when the requirements of No. 1162 have been met, the call may be repeated at intervals of not less than one minute for a period not exceeding five minutes and shall not be renewed until after an interval of ten minutes.

Reasons :

To allow for more frequent calling in the HF bands.

SUP 1078

Reasons :

Consequential upon revision of No. 1077.

SUP 1080

Reasons :

Unnecessary in view of revision of No. 1077.

Proposals relating to

Article 32

Use of Frequencies for Radiotelegraphy in the Maritime Mobile  
and Aeronautical Mobile Services

---

Section I. Bands between  
90 and 160 kc/s

N° 1095 - 1105

*A. Call and Reply*

**1095** § 1. (1) The frequency 143 kc/s (class A1 only) is the international calling frequency used by stations of the maritime mobile service in the bands between 90 and 160 kc/s.

**1096** (2) Apart from 143 kc/s, the use of any frequency between 140 and 146 kc/s is forbidden.

**1097** § 2. The frequency for replying to a call sent on 143 kc/s is :  
— for a ship station, 143 kc/s ;  
— for a coast station, its normal working frequency.

*B. Traffic*

**1098** § 3. (1) The following rules shall be observed by stations of the maritime mobile service using class A1 or F1 emissions in the bands between 90 and 160 kc/s :

**1099** (2) *a)* Each coast station shall keep watch on 143 kc/s unless the List of Coast Stations provides otherwise.

**1100** *b)* The coast station shall transmit its traffic on the working frequency or frequencies specially assigned to it.

**1101** *c)* When a ship station desires to establish communication with another station of the maritime mobile service, it shall use 143 kc/s, unless the List of Coast Stations provides otherwise.

**1102** *d)* This frequency shall be used exclusively :  
— for individual calls and replies to such calls ;  
— for the transmission of signals preparatory to traffic.

**1103** (3) A ship station after establishing communication with another station of the maritime mobile service on the general calling frequency 143 kc/s shall, so far as practicable, transmit its traffic on some other frequency in the authorized bands, taking care not to disturb the work in progress at another station.

**1104** § 4. (1) As a general rule, any ship station working in the bands between 110 and 160 kc/s, when it is not engaged in communication with other stations of the maritime mobile service, shall, during its hours of service, keep watch every hour on 143 kc/s for five minutes beginning at x h. 35, Greenwich Mean Time (G.M.T.).

**1105** (2) The frequency 143 kc/s may be used for individual calls, preferably during the period indicated in No. **1104**.

Ref.

G/61 (68) SUP 1095-1105

Reasons :

No longer necessary.

USA/26 (61) SUP

ARTICLE 32

~~Section I~~

~~Bands between 90 and 160 kc/s~~

~~A. Call and Reply~~

USA/26 (61)	SUP	1095
USA/26 (61)	SUP	1096
USA/26 (61)	SUP	1097
USA/26 (61)	SUP	1098
USA/26 (61)	SUP	1099
USA/26 (61)	SUP	1100
USA/26 (61)	SUP	1101
USA/26 (61)	SUP	1102
USA/26 (61)	SUP	1103
USA/26 (61)	SUP	1104
USA/26 (61)	SUP	1105

Reasons

Use of 143 kc/s by ships for calling is no longer sufficient to justify its retention.

Background :

The frequency 143 kc/s was at one time used as a calling frequency in the band 90 - 160 kc/s by many ships, particularly large passenger vessels. For that reason, it was designated in the Radio Regulations as an exclusive calling frequency and, in addition, was protected by a guard band of six kc/s. The use of this band by ships has gradually diminished to the vanishing point so that the need for the calling frequency no longer exists. With the present limited usage, working frequencies should be adequate for ship calling and working and this band would then be made available for the increasing requirements for other purposes.

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Proposals relating to

Article 32

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Section II. Bands between 405 and 535 kc/s

N° 1111, 1113, 1116, 1117, 1121 - 1125 and 1134.

*A. Distress*

**1107** § 6. (1) The frequency 500 kc/s is the international distress frequency for radiotelegraphy; it shall be used for this purpose by ship, aircraft and survival craft stations using frequencies in the bands between 405 and 535 kc/s when requesting assistance from the maritime services. It shall be used for the distress call and distress traffic, for the urgency signal and urgency messages, and for the safety signal and, outside regions of heavy traffic, short safety messages. When practicable, safety messages shall be transmitted on the working frequency after a preliminary announcement on 500 kc/s (see also No. 1122).

**1108** (2) However, ship and aircraft stations which cannot transmit on 500 kc/s should use any other available frequency on which attention might be attracted.

**1109** (3) In addition, 500 kc/s may be used only:

**1110** a) for call and reply (see Nos. 1114 and 1116);

**1111** b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in No. 1071.

**1112** (4) Apart from the transmissions authorized on 500 kc/s, and taking account of No. 1115, all transmissions on the frequencies included between 490 and 510 kc/s are forbidden.

**1113** (5) In order to facilitate the reception of distress calls, other transmissions on the frequency 500 kc/s shall be reduced to a minimum, and in any case shall not exceed three minutes.

*B. Call and Reply*

**1114** § 7. (1) The general calling frequency, which shall be used by any ship station or coast station engaged in radiotelegraphy in the authorized bands between 405 and 535 kc/s, 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 kc/s.

**1115** (2) However, in order to reduce interference in regions of heavy traffic, administrations may consider the requirements of No. 1114 as satisfied when the calling frequencies assigned to coast stations open to public correspondence are not separated by more than 3 kc/s from the general calling frequency 500 kc/s.

**1116** § 8. (1) The frequency for replying to a call sent on the general calling frequency (see No. 1114) is 500 kc/s, except where the calling station specifies the frequency on which it will listen for the reply (see No. 1023).

**1117** (2) However, in regions of heavy traffic, ship stations should request coast stations to answer on their normal working frequency. In these regions coast stations may answer calls made by ship stations of their own nationality in accordance with special arrangements made by the administration concerned (see No. 1023).

Proposals relating to

Article 32

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Section II (continuation)

### *C. Traffic*

**1121** (4) In regions of heavy traffic, coast stations should use class A1 emissions on their working frequencies.

**1122** § 10. As an exception to the provisions of Nos. 1107, 1109, 1110 and 1111 and on condition that signals of distress, urgency and safety, and calls and replies are not interfered with, 500 kc/s may be used<sup>1</sup> outside regions of heavy traffic for direction-finding but with discretion.

**1123** § 11. (1) Ship stations employing class A1 or A2 emissions in the authorized bands between 405 and 535 kc/s shall use working frequencies chosen from the following : 425, 454, 468 and 480 kc/s, except as permitted by No. 418. In addition, ship stations may use 512 kc/s in Regions 1 and 3, and 448 kc/s in Region 2.

### *D. Watch*

**1134** § 13. (1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 emissions.

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**1122.1**<sup>1</sup> Furthermore, subject to the conditions specified in No. 1122, the transmission of a single short radiotelegram on 500 kc/s is permitted within the service areas of certain coast stations of Australia, India, Indonesia and Pakistan. These countries shall endeavour to meet in full the provisions of this Article before the next Administrative Radio Conference.

Ref.

F/12(75) No. 1106a After No. 1106, insert the following No. 1106a :

Whenever the class of emission A2 or A2H is mentioned in the present Regulations for use in the maritime mobile service, the type of transmission shall be telegraphy by on-off keying of the modulated emission, to the exclusion of on-off keying of the modulating audio frequencies only.

Reasons :

To avoid blocking of automatic equipment for the reception of alarm signals which operate by detecting the carrier frequency.

F/111(139) MOD 1111 Change the end of the sentence to read  
..... in numbers 1070 and 1071.

Reasons:

See proposal relating to number 1071.

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F/111(140) MOD 1113 Replace end of sentence by  
..... shall not exceed one minute.

Reasons:

Transmissions authorized on 500 kc/s do not generally last more than one minute. In any case three minutes seem excessive.

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Add the following number 1113A :

F/111(141) ADD 1113A Before transmitting on 500 kc/s, stations in the mobile service must listen on this frequency for a reasonable period to make sure that no distress traffic is being sent (see number 1007).

Reasons:

This is necessary to avoid the risk of interference to distress traffic when the station has heard neither the distress call nor the message.

Ref.

Add the following number 1113B :

F/111(142)      ADD      1113B      The provisions of number 1113A do not apply to distress stations.

Reasons:

Stations in distress apply the rules specified in Article 36.

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Add the following number 1115A :

F/111(143)      ADD      1115A      A ship station calling a coast station shall, wherever possible and particularly in regions of heavy traffic, indicate to the coast station that it is ready to receive on the working frequency of that station.

Reasons:

To restrict the use of frequency 500 kc/s.

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Add the following number 1115B :

F/111(144)      ADD      1115B      The ship station should make sure beforehand that this frequency is not already being used by the coast station.

Reasons:

To avoid difficulties in establishing contact liable to arise if the coast station is unable to reply on the working frequency specified in number 1115A.

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F/111(145)      MOD      1116      Replace by the following :

The frequency for replies to calls sent on the general calling frequency (see number 1114) shall be as follows :

- either 500 kc/s,
- or the frequency specified by the calling station (see numbers 1023 and 1115A).

Reasons:

Required by number 1115A.

Ref.

F/111(146)

MOD

1117

Replace by the following :

In regions of heavy traffic, coast stations may answer calls made by ship stations of their own nationality in accordance with special arrangements made by the administration concerned (see number 1023).

Reasons:

See proposal relating to number 1115A.

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F/111(147)

MOD

1121

Replace by the following :

In regions of heavy traffic, coast stations and ship stations should use class A1 emissions on their working frequencies.

Reasons:

To prevent congestion of the frequency spectrum.  
See number 975.

AUS/54(8) MOD 1122.1 Furthermore, subject to the conditions specified in No. 1122, the transmission of a single short radiotelegram on 500 kc/s is permitted within the service areas of certain coast stations of Australia, India, Indonesia and Pakistan. These countries shall endeavour to meet in full the provisions of this Article before the next Administrative Radio Conference.

Reasons :

This provision is not now required for Australian coast stations.

G/78(92) MOD 1122 § 10. As an exception to the provisions of Nos. 1107, 1109, 1110 and 1111 and on condition that signals of distress, urgency and safety, and calls and replies are not interfered with, 500 kc/s may be used outside region of heavy traffic for direction-finding but with discretion.

Reasons:

Consequential upon deletion of No. 1122.1.

SUP 1122.1

Reasons :

The provision is now out-of-date.

G/66(81) MOD 1123 § 11. 1) Ship stations operating in the authorised bands between 405 and 535 kc/s shall use working frequencies chosen from the following : 425, 454, 468 and 480 kc/s except as permitted by No. 418. In addition, ship stations may use 512 kc/s in Regions 1 and 3, and 448 kc/s in Region 2.

Reasons :

Consequential upon provision for the use of Class A2H emission - covered in amended Nos. 975 and 976.

USA/23(57) MOD 1123 11. (1) Ship stations employing class A1 or A2 emissions in the authorized bands between 405 and 535 kc/s shall use working frequencies chosen from the following : 425, 454, 468, and 480 and 512 kc/s, except as permitted by No. 418. In addition, ship stations may use 512 kc/s in Regions 1 and 3, and 448 kc/s in Region 2.

MOD 1124 (2) Coast stations are prohibited from transmitting on the working frequencies designated for the use of ship stations on a world-wide basis ~~or on the working frequency designated for the use of ship stations in the Region in which the coast station is situated.~~



Ref.

USA/23(57) MOD 1125

(cont.)

(3) ~~In-Regions 1 and 3~~ The frequency 512 kc/s may be used by ship stations as a supplementary calling frequency when 500 kc/s is being used for distress.

Reasons :

To provide for the world-wide use of 512 kc/s as a supplementary calling frequency when 500 kc/s is being used for distress traffic. The use of 512 kc/s for this purpose at the present time is limited to Regions 1 and 3.

Background :

The Radio Regulations now provide for the use of 512 kc/s as a calling (and reply) frequency in Regions 1 and 3 when 500 kc/s is in use for distress traffic. This permissive use allows continuation of non-distress radio traffic between coast stations and ships not involved with the distress but who might cause harmful interference to 500 kc/s through its use for calling.

Region 2 was excluded from this additional provision for the calling use in 1959 because of the aeronautical mobile service operations on 512 kc/s. During the interim, the aeronautical use has been greatly reduced and should no longer be a bar to maritime mobile use of this frequency both for calling when 500 kc/s is occupied with distress traffic and for use as a ship working frequency.

This change to the Radio Regulations would make the use of 512 kc/s the same in all Regions, i.e., ship working and permissive supplementary calling uses.

The proposed revision would also delete the use of 448 kc/s as a ship working frequency in Region 2 and make it available for coast station assignment.

Increasing powers of coast stations in the band 415 - 535 kc/s have caused interference patterns not experienced when lower powers were used. Considering that ship working frequencies are adequate, the frequency 448 kc/s would provide the maximum benefit for coast station assignment.

Ref.

CAN/43(21)      MOD      1134 § 13.(1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 and A2H emissions.

Reasons :

To provide for the use of single sideband emissions on 500 kc/s.

F/12(76)

No. 1134 - Replace the present text by the following :

Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kHz shall, during their hours of service, remain on watch on 500 kHz. This watch is obligatory only for class A2 and A2H emissions.

Reasons :

See proposal No. F/12(71) relative to No. 974.

Proposed amendments concerning the classes of emission to be used on 2182 kHz have already been included in the proposals made under item 1 of the Agenda (see Document No. 8).

G/58(6)

MOD      1134      §13(1)      Stations of the maritime mobile service open to public correspondence and using frequencies in the authorised bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s.

Reasons :

Last sentence deleted consequential upon amendment to No. 974 and new No. 974A.

Ref.

HOL/73(15) MOD 1134 § 13.(1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 and A2H emissions.

Reasons :

To permit the use of the classes of emission A2H and A3H on the distress and calling frequencies 500 kc/s and 2182 kc/s respectively.

The C.C.I.R. considers the emissions A2H and A3H to be as effective as A2 and A3 emissions for use as alarm, distress, urgency and safety signals.

I/35(25) MOD 1134 § 13 (1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 and A2H emissions.

Reasons :

As a consequence of the modification introduced in No. 974 of Article No. 28 (Proposal No. I/35(24)).

USA/20(38) MOD 1134 13.(1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 and A2H emissions.

Reasons :

To provide for the permissive use of full carrier single sideband (SSB) emissions on the distress and calling frequencies 500 kc/s and 2182 kc/s for stations using SSB transmitting equipment. The C.C.I.R. has determined that the emissions A2H and A3H are as effective as A2 or A3 emissions for use as alarm, distress, urgency and safety signals.

Background :

USA/20(38)

Background :

(cont.)

Increasing use of single sideband (SSB) emission in the maritime mobile service requires that provision be made for SSB compatibility with existing double sideband (DSB) systems associated with the distress and safety uses of 500 kc/s and 2182 kc/s. The C.C.I.R. has carefully examined the technical aspects of the use of full carrier SSB emissions, A2H and A3H, and has found them to be compatible, including the use of the alarm signal. Either emission, A2 or A2H, A3 or A3H, may be used with equal effectiveness where A2 or A3 emissions are specified in the Radio Regulations for distress and safety uses.

Proposals relating to

Article 32

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Section IV. Additional Provisions Applicable  
in Region 3 only

N° 1139 - 1144

**Section IV. Additional Provisions Applicable in Region 3 only**

- 1139** § 16. (1) The band 2 088-5-2 093-5 kc/s is the calling band for the maritime mobile service of radiotelegraphy in those parts of the bands between 1 605 and 2 850 kc/s in which radiotelegraphy is authorized.
- 1140** (2) Frequencies in the band 2 088-5-2 093-5 kc/s may be used for calls and replies.
- 1141** (3) Each coast station using the calling band 2 088-5-2 093-5 kc/s shall, as far as possible, maintain watch on this band during its working hours.
- 1142** (4) Coast stations which use frequencies in the band 2 088-5-2 093-5 kc/s for calling shall be able to use at least one other frequency in those parts of the bands between 1 605 and 2 850 kc/s in which the maritime mobile service of radiotelegraphy is authorized.
- 1143** (5) One of these frequencies is printed in heavy type in the List of Coast Stations to indicate that it is the normal working frequency of the station. Supplementary frequencies, if any, are shown in ordinary type.
- 1144** (6) Working frequencies of coast stations shall be chosen in such a manner as to avoid interference with other stations.

Ref.

AUS/54(9)	SUP	<u>Section IV. Additional provisions applicable in Region 3 only</u>
	SUP	1139
	SUP	1140
	SUP	1141
	SUP	1142
	SUP	1143
	SUP	1144
(MOD)		<u>Section IV. Bands between 4000 and 27 500 kc/s</u>
(MOD)		<u>Section VI V. Aeronautical Mobile Service</u>

Reasons :

The 2 Mc/s maritime mobile radiotelegraph service is not required in Australia and since there are no assignments listed between 2088.5 and 2093.5 kc/s in the I.F.L. for coast stations in Region 3 it is believed that the service is also not required in other Region 3 countries. As the band 2065 - 2107 kc/s will still remain allocated to the maritime mobile service, the amendments proposed would not prohibit an Administration in Region 3 from utilising channels in the 2088.5 - 2093.5 kc/s band for radiotelegraph calling purposes.

J/90(89)	MOD	1139	816. (1) The band 2088.5 - 2093.5 kc/s is the calling and safety band for the maritime mobile service of radiotelegraphy in those parts of the bands between 1605 and 2850 kc/s in which radiotelegraphy is authorized.
J/90(90)	MOD	1140	(2) Frequencies in the band 2088.5 - 2093.5 kc/s may be used for calls, replies and safety. <u>These frequencies may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.</u>

Reasons :

It is requested that in Regions 2 and 3, in the bands between 1605 - 2850 kc/s, frequencies in the band between 2088.5 - 2093.5 kc/s should be designated as a safety-frequency band in the radiotelegraphy maritime mobile service. (See Agenda Item 1, Document No. 84 and 7.2, Document No. 89).

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Proposals relating to

Article 32

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Section V. Bands between 4000 and 27500 kc/s

A. General Provisions

N° 1145, 1146, 1148, 1149, 1151, 1155, 1156,  
1157, 1158.

Section V. Bands between 4 000 and 27 500 kc/s

A. General Provisions

**1145** § 17. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. **1174**, **1192** and **1196** shall employ only class A1 emission. However, other classes of emission are not precluded from the bands specified in No. **1192** provided that such emission can be contained within the normal working channels indicated in Section A of Appendix 15. Survival craft stations may use class A2 emissions in these bands (see Nos. **994** and **997**).

**1146** (2) Mobile stations equipped to operate in the frequency bands authorized to ships for wide-band telegraphy, facsimile and special transmission systems may use any class of emissions provided that such emissions can be contained within the wide-band channels indicated in Section A of Appendix 15. However, manual Morse and telephony are excluded.

**1147** (3) Coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall not use Type 2 transmissions.

**1148** (4) Coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall at no time use mean power in excess of the following :

<i>Band</i>	<i>Maximum mean power</i>
4 Mc/s	5 kW
6 Mc/s	5 kW
8 Mc/s	10 kW
12 Mc/s	15 kW
16 Mc/s	15 kW
22 Mc/s	15 kW

**1149** § 18. (1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25 070-25 110 kc/s, shall be divided into four parts, beginning at the low frequency end :

**1150** a) a band of working frequencies for ship stations using wide-band telegraphy, facsimile and special transmission systems ;

**1151** b) a band of working frequencies for the use of high traffic ship stations ;

**1152** c) a band of calling frequencies for the use of all ship and aircraft stations entering into communication with stations of the maritime mobile service ;

**1153** d) a band of working frequencies for the use of low traffic ship stations.

**1154** (2) The band 25 070-25 110 kc/s, allocated to ship radiotelegraph stations, consists solely of working frequencies which may be assigned to ships of all kinds.

**1155** § 19. For the purpose of this Section :

— a passenger ship is a vessel defined as such by the Convention for the Safety of Life at Sea ;

— a cargo ship is any ship that is not a passenger ship as defined above.

Proposals relating to

Article 32

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Section V.

A. General Provisions

(continuation)

**1156 § 20.** (1) Stations installed on passenger ships shall use the high traffic band and whaling factory vessels, tankers above 40,000 tons gross and other cargo ships above 12,500 tons gross handling a large volume of traffic may also use this band (see No. **1151**).

**1157** (2) Stations installed on ships other than those mentioned in No. **1156** shall use the low traffic band (see No. **1153**).

**1158** (3) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in Section A of Appendix 15.

**1159 § 21.** For the exchange of radiotelegraph communications with stations of the maritime mobile service, aircraft stations may utilize the frequencies of the bands allocated to that service for radiotelegraphy between 4 000 and 27 500 kc/s. When using these frequencies, aircraft stations shall comply with the provisions of this Section.

F/10(58) No. 1145, 1146 and 1158 Replace :  
and F/10(59)

... "in section A of Appendix 15 .... by .... "in Appendix 15" .....

Reasons :

A consequence of the deletion of Appendix 15, Section B.

See proposal F/8(5) relative to No. 447 (Item 1 of the Agenda) Document No. 8).

F/9(56) No. 1156 - Replace the existing text by the following :

Stations installed on passenger ships shall use the high traffic band. Stations installed on cargo ships may also use this band (see No. 1151), if the administrations responsible for them consider that this is justified by their traffic volume.

Reasons :

It is desirable to leave it to the administrations to determine the categories of ships that may use the high traffic band, depending on the volume of their traffic and not on a criterion of tonnage.

G/77(40) MOD 1145 817.(1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 1174, 1192 and 1196 shall employ only class A1 emission. However, other classes of emission are not precluded from the bands specified in No. 1192 provided that such emission can be contained within the normal working channels indicated in Appendix 15. Survival craft stations may use class A2 emissions in these bands (see Nos. 994 and 997).

Reasons :

Consequential upon the deletion of Section B, Appendix 15.

MOD 1146 (2) Mobile stations equipped to operate in the frequency bands authorized to ships for wide-band telegraphy, facsimile and special transmission systems may use any class of emissions provided that such emissions can be contained within the wide-band channels indicated in Appendix 15. However, manual Morse and telephony are excluded, except for operational signals.

Reasons :

Consequential upon the deletion of Section B of Appendix 15.

Ref.

G/78(42) MOD 1148 (4) Coast radiotelegraph stations employing single channel class A1 of F1 emission operating in the maritime mobile exclusive bands between 4000 and 27500 kc/s shall at no time use mean power in excess of the following :

<u>Band</u>	<u>Maximum mean power</u>
4 Mc/s	5 kW
6 Mc/s	5 kW
8 Mc/s	10 kW
12 Mc/s	15 kW
15 Mc/s	15 kW
22 Mc/s	15 kW

Reasons :

Consequential upon new 1148A - to differentiate between powers required for single-channel and multi-channel emissions.

G/78(92) ADD 1148A (5) Coast radiotelegraph stations employing multi-channel telegraph emissions operating in the maritime mobile exclusive bands between 4000 and 27500 kc/s shall at no time use a mean power in excess of 2.5 kW per 500 c/s bandwidth.

Reasons :

To provide for maximum powers required in respect of multi-channel telegraph emissions.

G/77(40) MOD 1149 §18.(1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25 070 - 25 110 kc/s, shall be divided into five parts, beginning at the low frequency end :

Reasons :

Consequential upon new No. 1150A - to provide for direct-printing telegraph systems (see Agenda Item 7.1, G/60(14), Document No. 60).

G/60(14) ADD 1150A (aa) a band of working frequencies for ship stations using narrow-band direct-printing telegraph systems.

Reasons :

To provide for direct-printing telegraph systems (see also Agenda Item 3, to follow).

G/78(92)

SUP 1155

Reasons :

Consequential upon the amendment to No. 1156 - see Agenda Item 2.3 (G/56(2), Document No. 56).

G/56(2)

MOD 1156

§ 20. (1) Stations installed on ships handling a large volume of traffic shall use the high traffic band at the discretion of the Administration controlling the ship station concerned (see No. 1151).

Reasons :

To permit Administrations to decide for themselves the ship stations that shall use this band.

At the Administrative Radio Conference, Atlantic City, 1947, a band of working frequencies in each of the ship telegraph bands was set aside for use by passenger ships and whaling factory vessels. The use of these bands was extended at the Administrative Radio Conference, Geneva, 1959, to include tankers above 40,000 gross tons and other cargo ships above 12,500 gross tons handling a large volume of traffic and they were renamed "high traffic" ship bands.

Since that date the amount of traffic dealt with has fallen considerably with the result that the bands are now lightly loaded. An analysis of the United Kingdom long distance service indicates that approximately five times as much traffic is handled in the "low traffic" bands as is handled in the "high traffic" bands, i.e. a ratio of 5 : 1.

In the "low traffic" bands there is a very uneven distribution of traffic between the assignable working frequencies in Group A and those in Group B. It would seem that all ships offer their frequency in Group A for the passing of traffic and only use the corresponding frequency in Group B when it is not possible to use the first choice.

Any relationship that there may have been between the gross tonnage of a ship and the traffic handled, no longer holds and it is thought that if any division between high and low traffic ships is still required it might well be left to Administrations to decide on whatever grounds they think fit. There is therefore no objection to tankers of 12,500 tons gross being included.

G/77(40)

MOD 1158

(3) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in Appendix 15.

Reasons :

Consequential upon the deletion of Section B, Appendix 15.

Ref.

USA/22(45) MOD 1145 Paragraph 17 (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 1174, 1192 and 1196 shall employ only class A1 emission. However, ~~other classes of emission are not precluded from the bands specified in No. 1192 provided that such emission can be contained within the normal working channels indicated in Section A of Appendix 15.~~ Survival craft stations may use class A2 emissions in these bands (see Nos. 994 and 997).

USA/27(62)ADD 1148A Exceptionally, and subject to the provisions of Article No. 9, powers in excess of the limits specified in number 1148 may be authorized for coast radiotelegraph stations employing multi-channel telegraph emissions, provided a level of 2.5 kW  $P_p$  effective radiated power per intelligence channel is not exceeded.

Reasons :

To provide for powers required for the use of multi-channel emissions.

Background :

Number 1148 limits the maximum mean powers which may be used by coast radiotelegraph stations in bands between 4 and 27.5 Mc/s. Those power limits are considered as reasonable in relation to A1 and single channel F1 emissions. However, certain telegraph emissions are now being used as a means of making more efficient use of the coast telegraph bands by employing bandwidths greater than that used for A1 and single channel F1. With such emissions, although the total power required may be greater than the maximum mean power limits specified in number 1148, the spectral power density expressed in watts per cycle per second may be, and normally is, less than that of A1 and single channel F1 systems operating within the power ceilings of number 1148.

Specific provisions were made in number 72 of the Final Acts of the E.A.R.C., Geneva 1951, for making exceptions to the maximum power limitations of number 70 on an individual station basis. The 1959 Geneva Conference adopted as number 1148 the maximum power limitations of the E.A.R.C. number 70, but did not bring forward the provisions for making adjustments exceeding the maximum limits. At the time most stations were using A1 or single channel F1 emission and the technology then in use did not require powers in excess of the limits shown in number 1148.

Number 1148A, as proposed, is a step forward in providing for emissions which will facilitate better utilization of the frequency bands allocated for use by coast radiotelegraph stations.



Ref.

USA/22(46)

MOD 1149 Paragraph 18 (1) Each of the bands reserved for ship radio-telegraph stations, except for the band 25 070-25 110 kHz, shall be divided into five ~~four~~ parts, beginning at the low frequency end :

NOC 1150

MOD 1151

b) a band of working frequencies for the use of high traffic ship stations for teleprinter and data transmission;

ADD 1151A

b bis) a band of working frequencies for the use of high traffic ship stations for class A1 emission manual telegraphy;

NOC 1152

NOC 1153

NOC 1154

USA/17(16)

MOD 1156

Para. 20. (1) Stations installed on ~~passenger ships shall use the high traffic band and whaling factory vessels, tankers above 40,000 tons gross and other cargo ships above 12,500 tons gross~~ handling a large volume of traffic shall may also use this band the high traffic band for class A1 emission (see No. 1151A). For teleprinter and data transmission the band designated in No. 1151 for this purpose shall be used. (See Proposal No. USA/22(46), Document No. 22)

Reasons :

To permit additional types of vessels having a large volume of message traffic to use the high traffic bands, which are not now being fully utilized.

Background :

The present provisions of No. 1156 are believed to be unduly restrictive. Many types of ships which handle a telegraphic traffic volume as high or higher than that of ships presently authorized to use the high traffic bands under No. 1156 are restricted from these bands and must use the low traffic bands. The increased traffic in the low-traffic bands, together with the decreased passenger ship traffic in the high-traffic bands, has resulted in a traffic density unbalance. Although studies indicate that 6 or more times as many messages are handled on the low traffic frequencies, there are approximately 9 times as many frequencies in the low traffic bands. Nevertheless,

USA/17(16)  
(contd.)

there is also disparity between the Group A and Group B low traffic frequencies with approximately 4 times the traffic being handled on Group A frequencies as on Group B, according to the study. As a result, more interference is experienced in the low traffic bands than in the high traffic bands and a shift of some vessels to high traffic frequencies would be desirable. In addition, equalizing the loading of the Group A and B frequencies is desirable.

Tonnage and other size criteria are no longer considered to be an accurate measure of radio traffic volume. Assignment of ships by administrations to appropriate bands based upon their actual volume of traffic is believed to be a superior way of balancing ship traffic loading.

USA/22(47)

MOD 1157 Stations installed on ships other than those mentioned in No. 1156 shall use the low traffic band when using class A1 emission (see No. 1153). For teleprinter and data transmission the band designated in No. 1151 for this purpose shall be used.

HOL/72(10)

MOD 1149 §18.(1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25070-25110 kc/s, shall be divided into five ~~four~~ parts, beginning at the low frequency end :

NOC 1150

ADD 1150 A a) (bis) a band of working frequencies for ship stations using teleprinter and data transmission systems;

NOC 1151

NOC 1152

NOC 1153

Reasons :

See proposals relating to No. 451A (HOL/72(9)) and Agenda Item 7.1 (Document No. 75).

See also proposals relating to Agenda Items 1 (Document No. 70), 2.3 (HOL/71(7), Document No. 71)

Ref.

HOL/71(7)

SUP 1155

MOD 1156

§20. (1) Ship stations shall use the high traffic band (see No. 1151) or the low traffic band (see No. 1153) according to traffic requirements.

MOD 1157

(2) Each administration shall itself determine the rules according to which ship stations under its jurisdiction are to use the high traffic band or the low traffic band.

Reasons :

To permit ships of any category having a large volume of traffic to use the high traffic bands, which are not now being fully utilized.

I/32(11)

MOD 1156

Para. 20 (1) Stations installed on passengers ships shall use the high traffic band and any other ship handling a large volume of traffic may also be authorized by Administrations to use this band.

Reasons :

The Italian Administration feels that the criterion adopted up to now to assume ship tonnage as an index of traffic volume does not correspond to reality and therefore it does not allow a rational traffic distribution between the high traffic and the low traffic bands.

It is therefore deemed more convenient to leave to individual Administrations the responsibility to appreciate which ships, other than passengers ships, may be admitted to use the high traffic band.

J/85(33)

MOD 1156

§ 20 (1) Stations installed on passenger ships shall use the high traffic band. Stations on cargo ships handling a large volume of traffic and authorized by the Administration may also use this band (see No. 1151).

Reasons :

It is considered proper to place the standard for classification of ship stations (except passenger ships) using the high traffic band, not on tonnage, but on volume traffic handled and to leave the decision of standards to the Administration.

POL/82(2)

MOD

1156

§ 20.(1) Stations installed on passenger ships shall use the high traffic band ~~and-whaling factory-vessels,-tankers-above-40,000-tons gross-and-other-earge-ships-above-12,500-tons gross-handling-a-large-volume-of-traffic.~~ Factory Vessels, fisheries depot ships and other ships handling large volume of traffic may also use this band at the Administration's discretion (see No. 1151).

Reasons :

In practice the amount of traffic handled by a ship station is not always depending on ship's tonnage. Therefore, among the high traffic ship stations should be listed :

1. Passenger ships.
2. Fisheries depot ships.
3. Factory vessels.
4. Any other ships at the Administration's discretion.

The amount of traffic handled depends on the means of ship's exploitation and individual Administrations are well aware of the amount of correspondence passed by the particular ship station so it should be left to the Administration's discretion what traffic category is to be granted to the particular station. The proposed text extends the existing flexibility concerning the cargo ships above 12,500 tons gross to all ships pending the Administration's decision.

The listing here of fisheries depot ships and factory vessels (usually acting also as depot ships) is prompted by the tendency to separate the ever growing fisheries traffic into separate bands.

The specific characteristics of this traffic are causing the long periods of frequency occupation, the fact producing difficulties to other ships in exchange of their correspondence.

Ref.

RFA/3(1) MOD 1156 § 20.(1) Each Administration shall determine for its sphere of competence which ship stations handling a large volume of traffic may use the high traffic band (see No. 1151).

Reasons:

It is considered inappropriate to classify the ship stations as in No. 1156 because many passenger ships as well as whaling factory vessels and tankers above 40,000 tons gross or cargo ships above 12,500 tons gross do not have to handle as much traffic on high frequencies as some ships which do not fall into this category.

CAN/40(30) - The possible use of the high traffic bands by tankers of 12 500 tons gross

Considering that these tankers need reliable ship-to-shore communications and taking into account the traffic loading on these bands, Canada is prepared to support the amendment of the pertinent regulations to permit the use of these bands by tankers of 12,500 tons gross.

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Proposals relating to

Article 32

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Section V.

C. Traffic

N° 1173

D. Assignment of Frequencies to Mobile Stations

1. Calling Frequencies of Ship Stations

N° 1175 and 1176

### *C. Traffic*

- 1173** (3) Working frequencies assigned to coast stations using the bands between 4 000 and 27 500 kc/s are included within the following band limits :

4 238 to 4 368 kc/s  
6 357 to 6 525 kc/s  
8 476 to 8 745 kc/s  
12 714 to 13 130 kc/s  
16 952 to 17 290 kc/s  
22 400 to 22 650 kc/s (see No. 453.1)

### *D. Assignment of Frequencies to Mobile Stations*

#### **1. Calling Frequencies of Ship Stations**

- 1174** § 29. (1) The calling frequencies assigned to ship stations are included within the following band limits :

4 177 to 4 187 kc/s  
6 265.5 to 6 280.5 kc/s  
8 354 to 8 374 kc/s  
12 531 to 12 561 kc/s  
16 708 to 16 748 kc/s  
22 220 to 22 270 kc/s

- 1175** (2) In the band 4 177 to 4 187 kc/s, the calling frequencies shall be uniformly distributed. They shall be preferably spaced 1 kc/s apart. The extreme frequencies assignable are 4 178 and 4 186 kc/s as indicated in Section A of Appendix 15.

- 1176** (3) In each of the other maritime mobile service bands between 4 000 and 18 000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4 177 to 4 187 kc/s. In the band 22 220 to 22 270 kc/s, the preferable spacing of calling frequencies is 5 kc/s.



Ref.

F/8(21)

No. 1173 Replace the table in this number by the following :

4231 - 4361 kc/s  
6346 - 6514 kc/s  
8462 - 8731 kc/s  
12693 - 13109 kc/s  
16924 - 17262 kc/s  
22370 - 22620 kc/s (see No. 453-1)

Reasons :

See Proposal No. F/8(11) relating to No. 453.

G/77(40)

SUP 1173

Reasons :

Already covered by No. 453 (G/77(39) above).

HOL/72(10)

MOD 1173

(3) Working frequencies assigned to coast stations using the bands between 4000 and 27500 kc/s are included within the following band limits :

<del>4238</del> - <del>te</del> - <del>4368</del>	4231 to 4361 kc/s
<del>6357</del> - <del>te</del> - <del>6525</del>	6346 to 6514 kc/s
<del>8476</del> - <del>te</del> - <del>8745</del>	8461 to 8730 kc/s
<del>12714</del> - <del>te</del> - <del>13130</del>	12693 to 13109 kc/s
<del>16952</del> - <del>te</del> - <del>17290</del>	16924 to 17262 kc/s
<del>22400</del> - <del>te</del> - <del>22650</del>	22378 to 22628 kc/s
	(see No. 453.1)

Reasons :

See proposal relating to No. 453 (HOL/72(9)).

I/33(20)

As a consequence of modifications introduced in the sub-division of radiotelegraphy bands between 4000 and 27 500 kc/s, modify Article 32 as follows:

MOD 1173

(3) Working frequencies assigned to coast stations using the bands between 4000 and 27 500 kc/s are included within the following band limits :

4231 - 4364.5 kc/s  
6346 - 6518 kc/s  
8461 - 8735 kc/s  
12 692 - 13 112.4 kc/s  
16 922 - 17 261.9 kc/s  
22 368 - 22 625.4 kc/s . (see No. 453.1)

Ref.

F/10(59) MOD 1175 Replace : "in section A of Appendix 15"

by

"in Appendix 15"

Reasons :

A consequence of the deletion of Appendix 15, Section B.

G/77(40) MOD 1175 (2) In the band 4177 to 4187 kc/s, the calling frequencies shall be uniformly distributed. They shall be preferably spaced 0.5 kc/s apart. The extreme frequencies assignable are 4178 and 4186 kc/s as indicated in Appendix 15.

Reasons :

a) Consequential upon the deletion of Section B of Appendix 15, and

b) to improve distribution over the band.

MOD 1176 (3) In each of the other maritime mobile service bands between 4000 and 18 000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4177 to 4187 kc/s. In the band 22 220 to 22 270 kc/s, the preferable spacing of calling frequencies is 2.5 kc/s.

Reasons :

To improve the distribution on the 22 Mc/s band.

HOL/72(10) MOD 1175 (2) In the band 4177 to 4187 kc/s, the calling frequencies shall be uniformly distributed. They shall be preferably spaced 0.5 kc/s ~~1-kc/s~~ apart. The extreme frequencies assignable are 4178 and 4186 kc/s as indicated in Section A. of Appendix 15.

MOD 1176 (3) In each of the other maritime mobile service bands between 4000 and 18000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4177 to 4187 kc/s. In the band 22220 to 22270 kc/s, the preferable spacing of calling frequencies is ~~5-kc/s~~ 2.5 kc/s.

Reasons :

The reduced frequency spacing will increase the number of calling frequencies in each band.

Proposals relating to

Article 32

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Section V.

D. Assignment of Frequencies to Mobile Stations

2. Working Frequencies of Mobile Stations

N° 1180 - 1189, 1191 - 1193, 1196, 1197.

## 2. Working Frequencies of Mobile Stations

### a) Channel Spacing and Assignment of Frequencies

**1180** § 32. In all bands the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kc/s apart. The frequencies assignable are shown in Section A of Appendix 15.

**1181** § 33. (1) The working frequencies for high traffic ships in the band 4 160 to 4 177 kc/s are so spaced as to provide channels 1.5 kc/s wide, the extreme frequencies assignable being 4 161 and 4 176 kc/s as shown in Section A of Appendix 15.

**1182** (2) In the band 4 187 to 4 238 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4 188 and 4 236.5 kc/s as indicated in Section A of Appendix 15.

**1183** § 34. The working frequencies assigned to each ship station in the 6, 8, 12 and 16 Mc/s band shall be harmonically related to those assigned in the 4 Mc/s band, except as provided in No. 1180.

**1184** § 35. In case of the 22 Mc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows, as shown in Section A of Appendix 15 :

**1185** a) in the high traffic band, the working frequencies are spaced 6 kc/s apart, the extreme frequencies assignable being 22 151 and 22 217 kc/s ;

**1186** b) in the low traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 272.5 and 22 395 kc/s.

**1187** § 36. In the 25 Mc/s band, the frequency separation shall be 3 kc/s. The extreme frequencies which may be assigned are, as shown in Section A of Appendix 15 : 25 075 and 25 105 kc/s.

### b) Working Frequencies for Ship Stations using Wide-Band Telegraphy, Facsimile and Special Transmission Systems

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

4 140 to 4 160 kc/s

6 211 to 6 240 kc/s

8 280 to 8 320 kc/s

12 421 to 12 471 kc/s

16 562 to 16 622 kc/s

22 100 to 22 148 kc/s

**1189** § 38. (1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems, one or more series of working frequencies designated in Section A of Appendix 15. The total number of series assigned to each ship shall be determined by traffic requirements.

Proposals relating to

Article 32

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Section V.

D. Assignment of Frequencies to Mobile Stations

2. Working Frequencies of Mobile Stations

(Continuation)

**1190** (2) When ship stations employing wide-band telegraphy, facsimile and special transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.

**1191** (3) However, within the limits of the bands given in No. 1188 administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in Section A of Appendix 15. Nevertheless, administrations shall take into account, as far as possible, the provisions of Section A of Appendix 15 concerning channelling and 4 kc/s spacing.

*c) Working Frequencies for High Traffic Ships*

**1192 § 39.** The working frequencies assigned to high traffic ships are included within the following band limits :

4 160 to 4 177 kc/s  
6 240 to 6 265.5 kc/s  
8 320 to 8 354 kc/s  
12 471 to 12 531 kc/s  
16 622 to 16 708 kc/s  
22 148 to 22 220 kc/s

**1193 § 40.** (1) Each administration shall assign to each high traffic ship within its jurisdiction two or more series of working frequencies shown in Section A of Appendix 15 for vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

*d) Working Frequencies for Low Traffic Ships*

**1196 § 42.** Working frequencies assigned to low traffic ships shall be included within the following band limits :

4 187 to 4 238 kc/s  
6 280.5 to 6 357 kc/s  
8 374 to 8 476 kc/s  
12 561 to 12 714 kc/s  
16 748 to 16 952 kc/s  
22 270 to 22 400 kc/s

**1197 § 43.** (1) In each of the low traffic bands, the assignable frequencies are divided into two equal Groups A and B, Group A comprising the frequencies in the lower half of the band and Group B the frequencies in the upper half (see Section A of Appendix 15).

Ref.

F/10(59)

MOD 1180 and 1181

In each of these numbers replace :

"in Section A of Appendix 15"

by

"in Appendix 15".

Reasons :

A consequence of the deletion of Appendix 15-B.

F/8(22)

No. 1182 Replace the present text by the following :

(2) In the band 4187 - 4231 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4188 and 4229.5 kc/s as indicated in Appendix 15.

Reasons :

See Proposal No. F/8(10) relating to No. 452.

F/8(23)

No. 1186 Replace :

22 395 kHz by : 22 365 kc/s.

Reasons :

See proposal relating to No. 452.

F/10(59)

MOD 1184, 1187, 1189, 1191, 1193 and 1197

In each of these numbers replace :

"in Section A of Appendix 15"

by

"in Appendix 15"

Reasons :

A consequence of the deletion of Appendix 15-B.

F/8(24)

No. 1196 Replace the present table by the following :

4187	-	4231 kc/s
6280.5	-	6346 kc/s
8374	-	8462 kc/s
12561	-	12693 kc/s
16748	-	16924 kc/s
22270	-	22370 kc/s

Reasons :

See Proposal No. F/8(10) relating to No. 452.

Ref.

G/60(15)      ADD      1179A      § 31 (bis) The working frequencies for ship stations equipped to use narrow-band direct-printing telegraph systems are so spaced to provide channels 500 c/s wide. The frequencies assignable are shown in Appendix 15.

Reasons :

To provide for direct-printing telegraph systems (see also Agenda Item 3, to follow).

G/77(40)      MOD      1180      §32. In all bands the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kc/s apart. The frequencies assignable are shown in Appendix 15.

Reasons :

Consequential upon deletion of Section B of Appendix 15.

MOD      1181      §33.(1) The working frequencies for high traffic ships in the band 4170 to 4177 kc/s are so spaced as to provide channels 0.5 kc/s wide, the extreme frequencies assignable being 4171 band 4176.5 kc/s as shown in Appendix 15.

Reasons :

Consequential upon the amendment of Appendix 15, and to improve distribution over the band.

MOD      1182      (2) In the band 4187 to 4231 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4188 and 4229.5 kc/s as indicated in Appendix 15.

Reasons :

Consequential upon deletion of Section B of Appendix 15, and to provide additional coast station radiotelephone channels.



Ref.

G/77(40)  
(Contd.)

MOD	1183	834. The working frequencies assigned to each ship station in the 6, 8, 12 and 16 Mc/s band shall be harmonically related to those assigned in the 4 Mc/s band, except as provided in Nos. 1179A and 1180.
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Reasons :

To provide for the use of non-harmonically related frequencies in the bands provided for direct printing telegraph services (see Agenda Item 7.1, G/60(15), Document No. 60).

MOD	1184	835. In case of the 22 Mc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows, as shown in Appendix 15.
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Reasons :

Consequential upon deletion of Section B of Appendix 15.

MOD	1185	(a) In the high traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 172.5 and 22 220 kc/s.
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Reasons :

Consequential upon extension of coast station telephony band. (See amended Nos. 448 and 452, G/77(39) above).

MOD	1186	(b) In the low traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 272.5 and 22 365 kc/s.
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Reasons :

Consequential upon amendment of No. 452.

MOD	1187	836. In the 25 Mc/s band, the frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 25 075 and 25 105 kc/s, as shown in Appendix 15.
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Reasons :

To provide additional channels, and consequential upon the deletion of Section B, Appendix 15.

Ref.

G/77(40)  
(contd.)

MOD 1189 §38.(1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems, one or more series of working frequencies designated in Appendix 15. The total number of series assigned to each ship shall be determined by traffic requirements.

Reasons :

Consequential upon deletion of Section B of Appendix 15.

MOD 1191 (3) However, within the limits of the bands given in No. 1188 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 kc/s spacing.

Reasons :

Consequential upon deletion of Section B, Appendix 15.

MOD 1192 §39. The working frequencies assigned to high traffic ships are included within the following band limits :

4 170 to 4 177 kc/s  
6 250 to 6 265.5 kc/s  
8 330 to 8 354 kc/s  
12 491 to 12 531 kc/s  
16 642 to 16 708 kc/s  
22 168 to 22 220 kc/s.

Reasons :

a) To provide channels for direct-printing telegraph systems (Agenda Item 7.1, Document No. 60), and

b) Consequential upon the revision of channel spacing (see No. 1181 above).

MOD 1193 §40.(1) Each administration shall assign to each high traffic ship within its jurisdiction two or more series of working frequencies shown in Appendix 15 for vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

Reasons :

Consequential upon the deletion of Section B of Appendix 15.

Ref.

G/60(16)      ADD      1191A      The working frequencies assigned to ships for narrow-band direct-printing telegraph systems are included within the following band limits :

4160 to 4170 kc/s  
6240 to 6250 kc/s  
8320 to 8330 kc/s  
12471 to 12491 kc/s  
16622 to 16642 kc/s  
22148 to 22168 kc/s

ADD      1191B      (2) Assignments shall be made in accordance with the channel spacing given in Appendix 15.

Reasons :

To provide for the use, and assignment, of frequencies for narrow-band direct-printing telegraph services (see also Agenda Item 3, to follow).

G/77(40)      MOD      1196      842. Working frequencies assigned to low traffic ships shall be included within the following band limits :

4,187 to 4 231 kc/s  
6 280.5 to 6 346.5 kc/s  
8 374 to 8 462 kc/s  
12 561 to 12.693 kc/s  
16 748 to 16 924 kc/s  
22 270 to 22 370 kc/s

Reasons :

To provide coast station radiotelegraph frequencies to replace those allocated to coast station radiotelephone services (see proposals for Appendix 17, G/77(38) above).

MOD      1197      843.(1) In each of the low traffic bands, the assignable frequencies are divided into two equal Groups A and B, Group A comprising the frequencies in the lower half of the band and Group B the frequencies in the upper half (see Appendix 15).

Reasons :

Consequential upon deletion of Section B of Appendix 15.

Ref.

HOL/72(10)      MOD      1181      §33.(1) The working frequencies for high traffic ships in the band ~~4160~~ 4170.5 to 4177 kc/s are so spaced as to provide channels ~~1.5~~ 0.5 kc/s wide, the extreme frequencies assignable being ~~4161~~ 4171 and 4176 kc/s as shown in Section A of Appendix 15.

Reasons :

See proposals relating to No. 452 (HOL/72(9)) and Agenda Item 7.1 (Document No. 75).

MOD      1182      (2) In the band 4187 to ~~4238~~ 4231 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4188 and ~~4236.5~~ 4229.5 kc/s as indicated in Section A of Appendix 15.

Reasons :

See proposal relating to No. 452 (HOL/72(9)).

MOD      1185      a) in the high traffic band, the working frequencies are spaced 6 ~~2.5~~ kc/s apart, the extreme frequencies assignable being ~~22151~~ 22192 and 22217 kc/s.

Reasons :

See proposals relating to No. 452 (HOL/72(9)) and Agenda Item 7.1 (Document No. 75).

MOD      1186      b) in the low traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22272.5 and ~~22395~~ 22375 kc/s.

Reasons :

See proposal relating to No. 452 (HOL/72(9)).

MOD      1187      §36. In the 25 Mc/s band, the frequency separation shall be 3 ~~2.5~~ kc/s. The extreme frequencies which may be assigned are, as shown in Section A of Appendix 15 : 25075 and 25105 kc/s.

Reasons :

The reduced frequency spacing will increase the number of frequencies.

Ref.

HOL/72(10)  
(contd.)

MOD 1188

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

<del>4140 to 4160</del>	<u>4144 to 4164</u>	kc/s
<del>6211 to 6240</del>	<u>6215 to 6244</u>	kc/s
<del>8280 to 8320</del>	<u>8288 to 8327.5</u>	kc/s
<del>12421 to 12471</del>	<u>12434 to 12484</u>	kc/s
<del>16562 to 16622</del>	<u>16578 to 16638</u>	kc/s
22100 to 22148 kc/s		

Reasons :

See proposal relating to No. 451 (HOL/72(9)).

ADD

b) (bis) Working Frequencies for Ship Stations using Teleprinter and Data Transmission Systems.

ADD

1191 A

§38(bis) The Working frequencies assigned to ship stations using teleprinter and data transmission systems are included within the following band limits :

<u>4164 - 4170.5</u>	kc/s
<u>6244 - 6255.75</u>	kc/s
<u>8327.5 - 8341</u>	kc/s
<u>12484 - 12511.5</u>	kc/s
<u>16638 - 16682</u>	kc/s
<u>22148 - 22191</u>	kc/s

ADD

1191 B

§38(ter)(1) Each administration shall assign to each ship station under its jurisdiction and employing teleprinter and data transmission systems, one or more series of working frequencies designated in Section A of Appendix 15. The total number of series assigned to each ship shall be determined by traffic requirements.

ADD

1191 C

(2) When ship stations employing teleprinter and data transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.

Reasons :

See proposals relating to Nos. 449, 451 A (HOL/72(9)) and Agenda Item 7.1 (Document No. 75).

Ref.

HOL/72(10) MOD 1192 839. The working frequencies assigned to  
(contd.) high traffic ships are included within the  
following band limits :

4160	<u>4170.5</u>	to	4177	kc/s
6240	<u>6255.75</u>	to	6265.5	kc/s
8320	<u>8341</u>	to	8354	kc/s
12471	<u>12511.5</u>	to	12531	kc/s
16622	<u>16682</u>	to	16708	kc/s
22148	<u>22191</u>	to	22220	kc/s

Reasons :

See proposals relating to No. 452 (HOL/72(9)) and  
Agenda Item 7.1 (Document No. 75).

MOD 1196 842. Working frequencies assigned to low  
traffic ships shall be included within the  
following band limits :

4187	to	4238	<u>4231</u>	kc/s
6280.5	to	6357	<u>6346</u>	kc/s
8374	to	8476	<u>8461</u>	kc/s
12561	to	12714	<u>12693</u>	kc/s
16748	to	16952	<u>16924</u>	kc/s
22270	to	22400	<u>22378</u>	kc/s

Reasons :

See proposal relating to No. 452 (HOL/72(9)).

I/33(20)

- |     |      |  |
|-----|------|--|
| MOD | 1181 | Para. 33. (1) The working frequencies for<br>manual telegraphy for high traffic ships in the<br>band 4168 to 4177 kc/s are so spaced as to<br>provide channels 0.75 kc/s wide, the extreme<br>frequencies assignable being 4168.5 and 4176 kc/s<br>as shown in Section A of Appendix 15. |
| MOD | 1182 | (2) In the band 4187 to 4231 kc/s, the working<br>frequencies of low traffic ships are spaced<br>0.5 kc/s apart, the extreme frequencies assignable<br>being 4188 and 4229.5 kc/s as indicated in<br>Section A of Appendix 15.   |
| MOD | 1185 | a) in the high traffic band, the working<br>frequencies are spaced 3 kc/s apart, the extreme<br>frequencies assignable being 22 187 and<br>22 217 kc/s;  |
| MOD | 1186 | b) in the low traffic band, the working fre-<br>quencies are spaced 2.5 kc/s apart, the extreme<br>frequencies assignable being 22 272.5 and<br>22 365 kc/s.   |

Ref.

I/33(20)  
(contd.)

MOD 1192

Para. 39. The working frequencies assigned to high traffic ships for manual telegraphy are included within the following band limits :

4168 - 4177 kc/s  
6252 - 6265.5 kc/s  
8336 - 8354 kc/s  
12 504 - 12 531 kc/s  
16 672 - 16 708 kc/s  
22 185 - 22 220 kc/s

MOD 1196

Para. 42. The working frequencies assigned to low traffic ships shall be included within the following band limits :

4187 - 4231 kc/s  
6280.5 - 6346 kc/s  
8374 - 8461 kc/s  
12 561 - 12 692 kc/s  
16 748 - 16 922 kc/s  
22 270 - 22 368 kc/s

USA/22(48)

MOD 1192

Paragraph 39 The working frequencies assigned to high traffic ships for teleprinter and data transmission are included within the following band limits :

4160 to	<u>4168.125</u>	4177	kc/s
6240 to	<u>6252.1975</u>	6265.5	kc/s
8320 to	<u>8336.25</u>	8354	kc/s
12471 to	<u>12504.375</u>	12531	kc/s
16622 to	<u>16672.5</u>	16708	kc/s
22148 to	<u>22185.5</u>	22220	kc/s

ADD 1192A Paragraph 39 bis) The working frequencies assigned to high traffic ships for manual telegraphy are included within the following band limits :

<u>4168.125</u>	to	<u>4177</u>	<u>kc/s</u>
<u>6252.1875</u>	to	<u>6265.5</u>	<u>kc/s</u>
<u>8336.25</u>	to	<u>8354</u>	<u>kc/s</u>
<u>12504.375</u>	to	<u>12531</u>	<u>kc/s</u>
<u>16672.5</u>	to	<u>16708</u>	<u>kc/s</u>
<u>22185.5</u>	to	<u>22220</u>	<u>kc/s</u>

Ref.

(After No. 1206)

USA/17(23)

ADD (g) Frequencies for Ocean Data Stations

ADD 1206A Para. 45(bis) The frequencies assigned to ocean data and ocean data telecommand stations using telegraphy systems are included within the following band limits :

4136.5 = 4140 kc/s  
6207.5 = 6211 kc/s  
8276.5 = 8280 kc/s  
12417.5 = 12421 kc/s  
16558.5 = 16562 kc/s  
22096.5 = 22100 kc/s

ADD 1206B Para. 45(ter) (1) Each administration may assign to each ocean data and ocean data telecommand station under its jurisdiction and employing a telegraphy system, one or more of the assignable frequencies designated in Section C of Appendix 15.

ADD 1206C (2) However, within the limits of the bands given in No. 1206A, administrations may assign frequencies in a different manner from that shown in Section C of Appendix 15. Nevertheless, administrations shall take into account, as far as possible, the provisions of Section C of Appendix 15 concerning channelling and 300 c/s spacing.

Reasons :

To accommodate requirements for oceanographic communications in the exclusive HF maritime mobile bands.

Background :

The capability of the sea to serve mankind in many ways has created diverse enterprises whose activities are of necessity marine oriented and therefore highly vulnerable to the physical changes which characterize the ocean. As a consequence there is an urgent need to describe and predict the future state of the environment so that activities taking place therein can be conducted safely and efficiently.



The world oceans constitute a sparse data area which has handicapped man's attempt to understand more fully and thereby to predict more accurately the processes occurring at the air-sea interface. One of the most promising solutions to this distressing dilemma is the deployment of unmanned automatic observational stations at sea to acquire routinely this vital meteorological and oceanographic data on a real-time basis. In view of the interaction between the atmosphere and the ocean, stations now being planned will be equipped with meteorological and oceanographic sensors. This is essential since the state of surface and immediate sub-surface of the oceans is linked directly to the action of the overlying atmosphere.

The maritime industry, as an important element in national and international commerce, has a heavy capital investment in the Merchant Marine. This investment is subjected annually to significant financial losses due to ship damage caused by storms at sea. It is estimated that the average dollar costs to the world's ocean shipping from weather damage is in the order of \$156 million a year. The importance of warning and forecast services to oceanic shipping has been recognized by the World Meteorological Organization and the Safety of Life at Sea Convention (1960) by allocating responsibility to various nations for the provision of meteorological and oceanographic services over the ocean areas assigned.

Off-shore oil and sea mining activity has emerged from its embryonic stages and is now being conducted in an ever-increasing tempo on the Continental Shelf. The nature of the complex operations associated with such exploitation of the sea is extremely sensitive to environmental changes particularly at the air-sea interface. It is once more apparent that operational safety and efficiency of this newly-emerging sea industry is dependent upon the availability of detailed meteorological and oceanographic information.

Commercial fishing fleets are constantly ranging the high seas in pursuit of lucrative fisheries. Operating over remote oceanic areas in ships having minimum sea-keeping capabilities in heavy weather makes this group extremely dependent upon warning and forecast services. In addition studies now being conducted indicate that certain relationships may exist between ocean conditions and the concentration of catchable fish. Consequently the provision of meteorological and oceanographic information to these fleets not only ensures a

high degree of operational safety but also has the potential of reducing the cost of fishing as a result of more productive employment of time spent at sea. The resultant economic advantages to producers and consumers of this increasingly important food source would be quite significant.

The coastal belt of most maritime nations normally contains vast industrial complexes as well as one of such countries' most valuable resources - their coastline. Potential damages from coastal storms will undoubtedly increase significantly in the future as development of coastal areas proceeds. To ensure the adoption of the most rational preventative programme of adjustment to the marine environment, climatological data will be required for long-range planning purposes as well as routine warnings and forecasts of storm surges, abnormal tides and damaging surf conditions.

The lack of global meteorological data, particularly over ocean areas, represents one of the greatest obstacles to the improvement of weather forecasting capability throughout the world. The availability of such data from ocean data stations will not only result in more accurate weather forecasts for maritime nations but because what occurs in the atmosphere over one nation affects the atmosphere of adjacent nations, a significant improvement in weather forecasts will accrue equally as well to inland nations.

There thus exists an urgent need for ocean data stations to provide those basic environmental observations which will permit administrations to provide essential environmental services which are responsive to their various needs.

The matter of frequency provision for ocean data communications in the HF bands has been under consideration for some time. It appears most appropriate to consider the prospects of providing frequency support for these communications from within the HF maritime mobile frequency allocations, particularly as ocean data stations are to be located at sea for the purpose of transmitting data which are essential to programmes which primarily serve marine interests.

In connection with No. 1356, (see Proposal No. USA/16(9), Document No. 16), the single sideband working frequencies given in Section B of Appendix 15 for ship radiotelephone stations were

carved out of the bands formerly available for ship radiotelegraph stations at Geneva 1959, for the express purpose of encouraging the use of radiotelephone single sideband operation.

In the intervening period since 1959, single sideband operation has been encouraged under the provisions of No. 1356. A review of the International Frequency List indicates that single sideband operation has been introduced extensively within the ship stations telephony and coast stations telephony subdivided categories of the bands exclusively allocated to the maritime mobile service between 4000 and 27 500 kc/s under the provisions of Appendix 17.

As No. 1356 has already accomplished its intended purpose to a considerable degree and its need therefore has been reduced, it appears that a portion of the allotment in Appendix 15, Section B, for radiotelephone single sideband operations might well be made available at this time for other operations serving maritime interests. This is considered to be particularly appropriate inasmuch as the number of available ship and coast radiotelephone channels are effectively doubled under the provision of Appendix 17 as double sideband operation is converted to single sideband operation.

It is considered that the foreseeable HF needs of ocean data communications could be accommodated within a minimum of 3.5 kc/s of spectrum space in each of the 4, 6, 8, 12, 16 and 22 Mc/s bands.

This proposal would permit the foregoing needs to be satisfied from a portion of the maritime mobile allotment presently contained in Section B of Appendix 15.

It is recognized there does not exist at this time an international agreement on the precise technical system to be used by administrations in providing essential environmental services responsive to their needs. Accordingly, this proposal subdivides each 3.5 kc/s allotment into 10 assignable frequencies spaced 300 c/s apart and additionally, contains provisions for assigning frequencies in a different manner within the limits of the 3.5 kc/s allotment.

Plans for an ocean data system to meet national requirements are being developed within the United States. It is understood that other administrations are also proceeding so that, in the aggregate, these will serve as a basis for formulating an agreed international system.

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Proposals relating to

Article 33

General Radiotelephone Procedure  
in the Maritime Mobile Service

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Section I. General Provisions

N° 1210, 1215 and 1216

Section II. Preliminary Operations

N° 1219

### Section I. General Provisions

- 1209** § 1. (1) The procedure detailed in this Article is applicable to radiotelephone stations of the maritime mobile service, except in cases of distress, urgency or safety, to which the provisions of Article 36 are applicable.
- 1210** (2) Aircraft stations may enter into radiotelephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They shall then comply with the provisions of this Article and of Article 27.
- 1215** (2) Radiotelephone stations of the maritime mobile service should, as far as possible, be equipped with devices for instantaneous switching from transmission to reception and vice versa. This equipment is necessary for all stations participating in communication between ships or aircraft and subscribers of the land telephone system.
- 1216** § 5. Stations of the maritime mobile service equipped for radiotelephony may transmit and receive radiotelegrams by means of radiotelephony.

### Section II. Preliminary Operations

- 1217** § 6. (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 working.
- 1218** (2) If, these precautions having been taken, the emissions of the station should nevertheless interfere with a transmission already in progress, the following rules shall be applied:
- 1219** a) The mobile station whose emission causes interference to the correspondence of a mobile station with a coast or aeronautical station shall cease sending at the first request of the coast station or the aeronautical station.
- 1220** b) The mobile station whose emission causes interference to communications already in progress between mobile stations, shall cease sending at the first request of one of the other stations.
- 1221** c) The station which requests this cessation shall indicate the approximate waiting time imposed on the station whose emission it suspends.

Ref.

G/78(43) SUP 1210

Reasons :

Covered by No. 951

MOD 1215 (2) Radiotelephone stations of the maritime mobile service which participate in communications between ship stations and subscribers of the land telephone system, should as far as possible, avoid manual methods switching from transmission to reception and vice versa.

Reasons :

For clarification.

Reference to aircraft deleted as already covered by No. 951.

G/59(8) ADD 1216A To facilitate radiocommunications the service abbreviations given in Appendix 13 may be used.

Reasons :

To extend the use of these abbreviations to radiotelephony.

ADD 1216B When it is necessary to spell out certain expressions, difficult words, service abbreviations, figures, etc., the phonetic spelling tables in Appendix 16 shall be used.

Reasons :

To permit the use of the phonetic spelling table in Appendix 16 under more general conditions and the use of the proposed figure spelling table.

G/78(93) MOD 1219 (a) The mobile station whose emission causes interference to the correspondence of a mobile station with a coast station shall cease sending at the first request of the coast station.

Reasons :

Reference to aeronautical station deleted as already covered by No. 951.

Ref.

HOL/70(3)      ADD      1215A      (3) Radiotelephone stations of the maritime mobile service shall comply with the provisions of Appendix 17A.

Reasons :

To make Appendix 17A mandatory for radiotelephone stations of the maritime mobile service.

Section I -  
General provisions

HOL/74(18)      ADD      1216 A      In the case of language difficulties, stations of the maritime mobile service shall use the service abbreviations given in Appendix 13 and may communicate by means of the International Code of Signals.

Reasons :

To make the use of the Q Code, contained in Appendix 13 mandatory for radiotelephony when language difficulties arise.

The revised International Code of Signals is suitable for transmission by all means of communication, including radiotelephony.

J/88(59)      MOD      1216      §5. (1) (no change in text)

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J/88(60)      ADD      1216A      (2) In cases of language difficulties stations of the maritime mobile service should use the service abbreviations given in Appendix 13 and the abbreviations in the International Code of Signals.



Ref.

Section I. - General Provisions

1216 After this No. add the following new paragraph :

DNK/38(1) ADD 1216A Para. 5bis. In case of language difficulties, stations of the mobile service shall use the service abbreviations given in Appendix 13, Section I and II. Letters and figures are to be spelled in accordance with the spelling tables given in Appendix 16.

Reasons :

To provide ways and means of communication in radiotelephony when language difficulties arise.

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Proposals relating to  
Article 33

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Section III. Calls, Reply to Calls and  
Signals Preparatory to  
Traffic

Method of Calling

N° 1222, 1224

Frequency to be Used for Calling and for  
Preparatory Signals

A. Bands between 1605 and 4000 kc/s

N° 1226 - 1228, 1230, 1232 - 1235

B. Bands between 4000 and 23000 kc/s

N° 1236

*Method of Calling*

**1222** § 7. (1) The call consists of :

- the call sign or other identification of the station called, not more than three times ;
- the words THIS IS ;
- the call sign or other identification of the calling station, not more than three times.

**1223** (2) When contact is established, the call sign or other identification may thereafter be transmitted once only.

**1224** (3) When the coast station is fitted with equipment for selective calling and the ship station is fitted with equipment for receiving selective calls, the coast station shall call the ship by transmitting the appropriate code signal, and the ship station shall call the coast station by speech in the manner given in No. 1222.

*Frequency to be Used for Calling and for Preparatory Signals***A. Bands between 1 605 and 4 000 kc/s**

**1225** § 8. (1) A radiotelephone ship station calling a coast station of its own nationality should use for the call :

**1226** a) the frequency 2 182 kc/s ;

**1227** b) a working frequency, whenever and wherever traffic density is high.

**1228** (2) A radiotelephone ship station calling a coast station of another nationality should, as a general rule, use the frequency 2 182 kc/s. However, where so agreed by administrations, the ship station may use a working frequency on which watch is kept by that coast station.

**1229** (3) A radiotelephone ship station calling another ship station should use for the call :

**1230** a) the frequency 2 182 kc/s ;

**1231** b) an inter-ship frequency, whenever and wherever traffic density is high and prior arrangements can be made.

**1232** (4) An aircraft station calling a coast station or a ship station may use the frequency 2 182 kc/s.

**1233** (5) Coast stations shall, in accordance with the requirements of their own country, call ship stations of their own nationality either on a working frequency, or, when calls to individual ships are made, on the frequency 2 182 kc/s.

**1234** (6) However, a ship station which keeps watch simultaneously on 2 182 kc/s and a working frequency should be called on the working frequency.

**1235** (7) As a general rule, coast stations should call radiotelephone ship stations of another nationality on the frequency 2 182 kc/s.

**B. Bands between 4 000 and 23 000 kc/s**

**1236** § 9. (1) A ship station calling a coast station by radiotelephony may use either the frequency reserved for this purpose in accordance with Section B of Appendix 15, or the working frequency associated with that of the coast station in accordance with Appendix 17.

Ref.

1222 Para. 7, read :

DNK/38(2) MOD 1222 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

USA/21(41) MOD 1222 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1222.1 <sup>1)</sup> Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

Amend No. 1224 to read :

F/109(94) MOD 1224 "..... the coast station shall call the ship by transmitting the appropriate code signal (see Article 34 - Section II) and the ship station shall call ....."

Amend No. 1233 to read :

F/109(95) MOD 1233 "(5) Subject to the provisions of No.1235A, coast stations shall, in accordance with .... "

F/109(96) ADD 1235A Coast stations shall call ships equipped to receive selective call signals by making class A2H emissions on frequency 2192.65 kc/s (carrier frequency 2191.3 kc/s). After transmission of the ship call number, they shall transmit an identification number to inform the ship of the name of the calling coast station (Nos. 788F and 1318E to K).

Reasons :

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

F/111(148) MOD 1226 Replace by the following :

- a) as far as possible, a working frequency, particularly in areas where the traffic intensity is high;

Reasons:

See proposal relating to number 1227.

Ref.

F/111(149)      MOD      1227      Replace by the following :

- b) the carrier frequency 2182 kc/s wherever it is not possible to use a working frequency.

Reasons:

To give priority to procedure a) (see number 1226) already in use in certain countries.

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F/111(150)      MOD      1228      Replace, wherever necessary, in each of these  
                                 1230      numbers :  
                                 1232      "the frequency 2182 kc/s"  
                                 1233      by  
                                 1234      "the carrier frequency 2182 kc/s".  
                                 1235

Reasons:

Consequence of using SSB.

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Ref.

Article 33 - Section III

ADD : Internal radio communication on ships

G/118(61)

ADD 1224A § 7.(bis) (1) Calls for internal communications on board ship shall consist of :

ADD 1224B a) From the control station :

- the name of the ship followed by a single letter (ALFA, BRAVO, CHARLIE, etc. indicating the substation (see No. 777B) not more than three times;
- the words "THIS IS";
- the name of the ship followed by the word "CONTROL";

ADD 1224C b) From the substation :

- the name of the ship followed by the word "CONTROL" not more than three times;
- the words "THIS IS";
- the name of the ship followed by a single letter (ALFA, BRAVO, CHARLIE, etc. indicating the substation - see No. 777B).

Reasons :

To provide for the use of radio equipment for internal communication on board ship, and to avoid confusion with other ships.

Ref.

F/8(25)      No. 1236 Replace the present text by the following :

(1)      A ship station calling a coast station by radiotelephony shall use the working frequency associated with that of the coast station, in accordance with Appendix 17.

Reasons :

Consequence of abolishing Appendix 15-B because of the amendments proposed for Nos. 447 (F/8(5) and 450 (F/8(8))).

G/91(52)      MOD      1224      (3) When selective calling is used the provisions of Article 28A shall be observed.

Reasons :

To provide for the use of selective calling devices - see new Article 28A.

G/77(41)      MOD      1236      §9.(1) A ship station calling a coast station by radiotelephony may use the working frequency associated with that of the coast station in accordance with Appendix 17.

Reasons :

Consequential upon the deletion of No. 1352 (G/77(42)).

I/31(1)      ADD      1227 AA      c) the assigned frequency 2191.9 kc/s with single sideband emissions and peak envelope power not exceeding 400 W (see No. 1330 AA). (Proposal No. I/31 (2)).

ADD      1233 AA      (5 bis) When using selective calling coast stations shall use the assigned frequency 2171.4 kc/s with single sideband emissions (see No. 1330 AA). (Proposal No. I/31 (2)).

Reasons :

As a consequence of guard bandwidth reduction (see Proposal No. I/31(2)) two single sideband channels are available.

It would be advisable to use them for calling purposes, in order to avoid excessive use of the frequency 2182 kc/s for purposes other than distress traffic

J/84(14)      MOD      1236      §9. (1) A ship station calling a coast station by radiotelephony may use either the frequency ~~reserved for this purpose in accordance with given in~~ Section B of Appendix 15 17, or the working frequency associated with that of the coast station in accordance with Section A of Appendix 17.



Proposals relating to

Article 33

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Section III. Calls, Reply ...

Frequency to be Used for Calling and for  
Preparatory Signals

C. Bands between 156 and 174 Mc/s

N° 1239 and 1241

**C. Bands between 156 and 174 Mc/s**

**1239** § 10. (1) In the bands between 156 and 174 Mc/s used for the maritime mobile services, coast and ship stations should, as a general rule, call on 156.80 Mc/s. However, in the public correspondence service, calling may be conducted on a working channel or on a two-frequency calling channel which has been implemented in accordance with No. 1361.

**1240** (2) When 156.80 Mc/s is being used for distress, urgency or safety communications, a ship station desiring to participate in the port operations service may establish contact on 156.60 Mc/s or another port operations frequency, indicated in heavy type in the List of Coast Stations.

*Form of Reply to Calls*

- 1241** § 11. The reply to calls consists of :
- the call sign or other identification of the calling station, not more than three times ;
  - the words THIS IS ;
  - the call sign or other identification of the station called, not more than three times.

Ref.

G/65(78)      MOD      1239      §10.(1) In the bands between 156 and 174 Mc/s used for the maritime mobile services, coast and ship stations should, as a general rule, call on 156.80 Mc/s. However, calling may be conducted on a working channel or on a two-frequency calling channel, which has been implemented in accordance with No. 1361.

Reasons :

To permit alternative calling arrangements to be made in a port operations service. (See also Additional Item UK9 to follow - new No. 1367A.)

F/109(97)      ADD      1240A      Coast stations shall call ships equipped to receive selective call signals by making class F2 emissions on frequency 156.80 Mc/s. After transmission of the ship call number, they shall transmit a number indicating the radio-telephone channel to be used for the reply and for the exchange of traffic (Nos. 1318E to K); this number shall consist of 4 digits; the thousands digit and the hundreds digit shall be zero, while the tens digit and the units digit shall represent the channel number as indicated in Appendix 18.

1241      Para.11.      Read :

DNK/38(3)      MOD      1241      - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

USA/21(41)      MOD      1241      after "THIS IS"  
add the note      1)

USA/21(41)      ADD      1241.1      1) Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

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Proposals relating to  
Article 33

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Section III. Calls, Reply ...

Frequency for Reply

- A. Bands between 1605 and 4000 kc/s  
N° 1242, 1244, 1247
- B. Bands between 4000 and 23000 kc/s  
N° 1249 - 1251
- C. Bands between 156 and 174 Mc/s  
N° 1253

*Frequency for Reply*

**A. Bands between 1 605 and 4 000 kc/s**

**1242** § 12. (1) When a ship station is called on 2 182 kc/s it should reply on the same frequency unless another frequency is indicated by the calling station.

**1243** (2) When a ship station is called on a working frequency by a coast station of the same nationality, it shall reply on the working frequency normally associated with the frequency used by the coast station for the call.

**1244** (3) A ship station, after calling a coast station or another ship station, shall indicate the frequency on which a reply is required if this frequency is not the normal one associated with the frequency used for the call.

**1245** (4) A ship station which frequently exchanges traffic with a coast station of another nationality may use the same procedure for reply as ships of the nationality of the coast station, where this has been agreed by the administrations concerned.

**1246** (5) As a general rule a coast station shall reply :

**1247** a) on 2 182 kc/s to calls made on 2 182 kc/s unless another frequency is indicated by the calling station ;

**1248** b) on a working frequency to calls made on a working frequency.

**B. Bands between 4 000 and 23 000 kc/s**

**1249** § 13. (1) When a ship station is called by a coast station, it may reply either on the calling frequency given in Section B of Appendix 15, or on the working frequency associated with that of the coast station in accordance with Appendix 17.

**1250** (2) When a coast station is called by a ship station, the coast station should reply on one of its working frequencies specified in the List of Coast Stations.

**1251** (3) In the Tropical Zone of Region 3, when a station is called on 6 204 kc/s, it should reply on the same frequency.

**C. Bands between 156 and 174 Mc/s**

**1252** § 14. (1) When a station is called on 156-80 Mc/s it should reply on the same frequency.

**1253** (2) When a coast station open to public correspondence calls a ship station either by speech or by selective calling, using a two-frequency channel, the ship station shall reply by speech on the frequency associated with that of the coast station ; conversely, a coast station shall reply to a call from a ship station on the frequency associated with that of the ship station.

F/111(150) MOD 1242 Replace "the frequency 2182 kc/s"  
by "the carrier frequency 2182 kc/s"

**Reasons :** Consequence of using SSB.

F/109(98)      ADD      1243A      (2 bis) When a ship station receives a selective all signal transmitted by a coast station, it must enter into correspondence with the latter as soon as possible, using the normal procedure provided for calls to coast stations from ship stations.

F/111(151)      MOD      1244      Replace the opening words by :  
  
                              (3) When calling a coast station or another  
                              ship station, a ship station ...

Reasons:

To show that the ship station has to indicate the reply frequency during the call.

F/111(152)	ADD	1244A	Add the following number 1244A :
			(3 bis) When a ship station calls a coast station, the reply frequency given by the ship when making the call should generally be the normal working frequency of the coast station or, if this is not possible, another working frequency of this station (see number 1270).

Reasons:

To generalize the use of working frequencies for replies made by coast stations.

F/111(150) MOD 1247 Replace "the frequency 2182 kc/s"  
by "the carrier frequency 2182 kc/s"

Reasons : Consequence of using SSB.

Ref.

F/8(26) No. 1249 Replace the present text by the following :

(1) When a ship station is called by a coast station, it shall reply on the working frequency associated with that of the coast station, in accordance with Appendix 17.

Reasons :

Consequence of abolishing Appendix 15-B because of the amendments proposed for Nos. 447 (F/8(5)) and 450 (F/8(6)).

---

F/8(27) No. 1251 Replace the present text by the following :

(3) In the Tropical Zone of Region 3, when a station is called on 6205.35 kc/s (carrier frequency 6204 kc/s), it should reply on the same frequency.

Reasons :

To harmonize the designation of frequencies used with SSB (see F/8(30)).

---

F/109(99)      ADD      1252A      (1 bis) However, when a ship station receives a selective call signal from a coast station, it must reply on the radiotelephone channel the number of which has been displayed following the call.

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Amend the beginning of No. 1253 to read :

F/109(100)      MOD      1253      (2) When a coast station open to public correspondence calls a ship station by speech on a two-frequency channel, the ship station shall reply ..... .

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G/113(59)

ADD 1242A When a ship station is called by selective calling 2170.5 kc/s (carrier frequency) it shall reply on 2191 kc/s (carrier frequency).

G/79(98)

ADD 1248A c) on a working frequency to calls made on the frequency 2192.35 kc/s (carrier frequency 2191 kc/s). (See No. 1339A.)

Reasons :

To provide for coast stations to reply to calls made on 2192.35 kc/s when this is used as a supplementary calling frequency.

G/77(41)

MOD 1249 §13.(1) When a ship station is called by a coast station, it should reply on the working frequency associated with that of the coast station in accordance with Appendix 17.

Reasons :

Consequential upon deletion of No. 1352 (G/77(42)).

MOD 1250 (2) When a coast station is called by a ship station, the coast station should reply on the working frequency associated with that of the ship station in accordance with Appendix 17.

Reasons :

For clarification.

J/84(15)

MOD 1249 §13. (1) When a ship station is called by a coast station, it may reply either on the ~~calling~~ frequency given in Section B of Appendix 15 17, or on the working frequency associated with that of the coast station in accordance with Section A of Appendix 17.

Reasons :

Consequential to the proposed amendment of Appendices 15 and 17 (see Agenda Item 3, Document No. 85).

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Proposals relating to

Article 33

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Section III. Calls, Reply ...

Indication of the Frequency  
to be Used for Traffic

N° 1254, 1255

Difficulties in Reception

N° 1266

*Indication of the Frequency to be Used for Traffic*

**A. Bands between 1 605 and 4 000 kc/s**

**1254 § 15.** If contact is established on the frequency 2 182 kc/s, coast and ship stations shall transfer to one of their normal working frequencies for the exchange of traffic.

**B. Bands between 4 000 and 23 000 kc/s**

**1255 § 16.** After a ship station has established contact with a coast station, or another ship station, on the calling frequency of the band chosen, traffic shall be exchanged on their respective working frequencies.

**C. Bands between 156 and 174 Mc/s**

**1256 § 17. (1)** Whenever contact has been established between a coast station in the public correspondence service and a ship station either on 156.80 Mc/s, or on a two-frequency calling channel (see No. 1361), 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 Mc/s or, preferably, to its channel designator.

**1257 (2)** When contact on 156.80 Mc/s has been established between a coast station in the port operations service and a ship station, the ship station should indicate the particular service required (such as navigational information, docking instructions, etc.) and the coast station shall then indicate the channel to be used for the exchange of traffic by reference to the frequency in Mc/s or, preferably, to its channel designator.

**1258 (3)** A ship station, when it has established contact with another ship station on 156.80 Mc/s, should indicate the inter-ship channel to which it is proposed to transfer for the exchange of traffic by reference to the frequency in Mc/s or, preferably, to its channel designator.

*Difficulties in Reception*

**1266 § 20. (1)** If the station called is unable to accept traffic immediately, it should reply to the call as indicated in No. 1241 followed by "Wait . . . . minutes", indicating the probable duration of waiting time in minutes. If the probable duration exceeds ten minutes (five minutes in the case of an aircraft station communicating with a station of the maritime mobile service), the reason for the delay shall be given. Alternatively, the station called may indicate by any appropriate means that it is not ready to receive traffic immediately.

**Ref.**

F/111(150) MOD 1254 Replace "the frequency 2182 kc/s"  
by "the carrier frequency 2182 kc/s"

**Reasons :** Consequence of using SSB.

F/8(28) No. 1255 Delete this number

**Reasons :**

Consequence of the deletion of No. 450 (P/B(8)).

F/109(101)      ADD      1257A      (2 bis) However, when contact has been established between a coast station and a ship station following transmission by the former of a selective call signal, traffic must be exchanged on the radiotelephone channel used by the ship to reply (see No. 1252A).

G/77(41) MOD 1255 §16. After a ship station has established contact with a coast station, or another ship station, traffic shall be exchanged on their respective working frequencies.

**Reasons :**

Consequential upon the deletion of No. 1352.

J/84(16) SUP 1255

**Reasons :**

Consequence of abolishing the calling frequencies set out in Section B of Appendix 15 (see Nos. 450 and 1352, J/84(4) and J/84(25) respectively).

Ref.

Difficulties in Reception

		1266	Para. 20. Read :
DNK/38(4)	MOD	1266	.... "Wait ..... minutes" (or AS spoken as ALFA SIERRA ..... (minutes) in case of language difficulties);
G/78(93)	MOD	1266	§ 20.(1) If the station called is unable to accept traffic immediately, it should reply to the call as indicated in No. 1241 followed by "Wait .... minutes", indicating the probable duration of waiting time in minutes. If the probable duration exceeds ten minutes the reason for the delay shall be given. Alternatively the station called may indicate by any appropriate means, that it is not ready to receive traffic immediately.

Reasons :

Reference to aircraft deleted as already covered by No. 951.

Proposals relating to  
Article 33

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Section IV. Forwarding (Routing) of Traffic

N° 1273, 1280, 1284, 1285, 1287 and 1289

#### Section IV. Forwarding (Routing) of Traffic

##### *Traffic Frequency*

**1272** (4) After contact has been established on the frequency to be used for traffic, the transmission of a radiotelegram or radiotelephone call shall be preceded by :

- 1273**
- the call sign or other identification of the station called ;
  - the words THIS IS ;
  - the call sign or other identification of the calling station.

**1274** (5) The call sign or other identification need not be sent more than once.

##### **B. Transmission of Radiotelegrams**

**1280** § 23. (1) The transmission of a radiotelegram should be made as follows :

- Radiotelegram begins : from ... (name of ship or aircraft) ;
- number ... (serial number of radiotelegram) ;
- number of words ... ;
- date ... ;
- time ... (time radiotelegram was handed in aboard ship or aircraft) ;
- service indicators (if any) ;
- address ... ;
- text ... ;
- signature ... (if any) ;
- radiotelegram ends, over.

**1284** (5) When, during the transmission of a radiotelegram, it is necessary to spell certain expressions, difficult words, etc., the spelling table given in Appendix 16 shall be used.

**1285** (6) In transmitting groups of figures each figure shall be spoken separately and the transmission of each group or series of groups shall be preceded by the words "in figures". In cases of language difficulties the figure table given in Appendix 16 shall be used.

**1286** (7) Numbers written in letters shall be spoken as they are written, their transmission being preceded by the words "in letters".



Proposals relating to  
Article 33

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Section IV.

(continuation)

**C. Acknowledgment of Receipt**

**1287** § 24. (1) The acknowledgment of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner:

- the call sign or other identification of the sending station ;
- the words THIS IS ;
- the call sign or other identification of the receiving station ;
- "Your No. . . . received, over" ;

*or*

- "Your No. . . . to No. . . . received, over".

**1288** (2) The radiotelegram, or series of radiotelegrams, shall not be considered as cleared until this acknowledgment has been received.

**1289** (3) The end of work between two stations shall be indicated by each of them by means of the word "Out".

DNK/38(5) MOD 1273 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

USA/21(41) MOD 1273 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1273.1 1) Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

F/111(153) MOD 1280 Replace "commutez"  
by "à vous"

Reasons : The word "commutez" is hardly ever used. This concerns only the French text.

DNK/38(6) ADD 1280A (lbis). However, in case of language difficulties, the transmission of a radiotelegram should be made as follows :

- KA spoken as KILO ALFA
- PBL spoken as PAPA BRAVO LIMA ..... (name of ship) ..... (serial number) ..... (number of words) ..... (date) ..... (time of handing-in) ..... (service indicators, if any)
- BT spoken as BRAVO TANGO
- (paid service indicators (if any))
- ADS spoken as ALFA DELTA SIERRA .....
- BT spoken as BRAVO TANGO
- TXT spoken as TANGO X-RAY TANGO .....
- BT spoken as BRAVO TANGO
- SIG spoken as SIERRA INDIA GOLF (if any) ...
- AR spoken as ALFA ROMEO
- K spoken as KILO

Reasons :

To provide ways and means of communication in radiotelephony when language difficulties arise.

Ref.

G/78(93) SUP 1284

Reasons :

Included in new No. 1216A - see Agenda Item 6 (G/59(8)), Document No. 59).

MOD 1285 (6) In transmitting groups of figures each figure shall be spoken separately and the transmission of each group or series of groups shall be preceded by the words "in figures".

Reasons :

Consequential upon new 1216B - see Agenda Item 6 - (G/59(8)).

DNK/38(7) MOD 1287 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);  
- "Your No. ... received, over" (or R spoken as ROMEO ... (number), K spoken as KILO in case of language difficulties); or  
- "Your No. ... to No. ... received, over" (or R spoken as ROMEO ... (numbers), K spoken as KILO in case of language difficulties).

1289 (3) Read, in fine :  
DNK/38(8) MOD 1289 .... the word "Out" (or VA spoken as VICTOR ALFA in case of language difficulties.

F/13(77) MOD 1287 Throughout the texts of this number, replace the word "received" by the letter "R" (ROMEO).

Reasons :

The letter "R" (ROMEO) which is already used in radiotelegraphy (Appendix 13, section II) and contemplated for use in radiotelephony in the I.M.C.O. revised International Code of Signals seems to be phonetically preferable to the word "received", and has the advantage of international usage.

F/111(153) MOD 1287 Replace "commutez" by "à vous".

Reasons :

The word "commutez" is hardly ever used. This concerns only the French text.

Ref.

F/111(154)      MOD      1290      Replace :  
"on 2182 kc/s or on 156.80 Mc/s"  
by  
"on the carrier frequency 2182 kc/s or on  
156.80 Mc/s".

Reasons:      Consequence of using SSB.

G/65(78)      MOD      1290      §25.(1) Calling and signals preparatory to traffic shall  
not exceed two minutes when made on 2182 kc/s or on  
156.80 Mc/s, except in cases of distress, urgency or  
safety to which the provisions of Article 36 apply.

Reasons :

For clarification.

USA/21(41)      MOD      1287      after "THIS IS"  
add the note      1)

USA/21(41)      ADD      1287.1      1) Where language difficulty is encountered, International  
Code of Signals DELTA ECHO may be used in lieu of  
THIS IS.

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Proposals relating to  
Article 33

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Section V. Duration and Control of Working

N° 1290

Section VI. Tests

N° 1295

#### **Section V. Duration and Control of Working**

**1290** § 25. (1) In the maritime mobile service calling and signals preparatory to traffic shall not exceed two minutes when made on 2 182 kc/s or on 156.80 Mc/s (but see No. **1209**).

**1291** (2) In communications between land stations and mobile stations, the mobile station shall comply with the instructions given by the land station in all questions relating to the order and time of transmission, to the choice of frequency, and to the duration and suspension of work.

**1292** (3) In communications between mobile stations, the station called controls the working in the manner indicated in No. **1291**. However, if a land station finds it necessary to intervene, these stations shall comply with the instructions given by the land station.

#### **Section VI. Tests**

**1293** § 26. When it is necessary for a mobile station to send signals for testing or adjustments which are liable to interfere with the working of neighbouring coast stations, the consent of these stations shall be obtained before such signals are sent.

**1294** § 27. (1) When it is necessary for a station to make test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals shall not be continued for more than ten seconds, and shall include the call sign or other identification of the station emitting the test signals. This call sign or other identification shall be spoken slowly and distinctly.

**1295** (2) Any signals sent for testing shall be kept to a minimum particularly on 2 182 kc/s, 156.80 Mc/s and in the Tropical Zone of Region 3 on 6 204 kc/s.



G/65

MOD 1290 §25.(1) Calling and signals preparatory to traffic shall not exceed two minutes when made on 2182 kc/s or on 156.80 Mc/s, except in cases of distress, urgency or safety to which the provisions of Article 36 apply.

Reasons :

For clarification.

F/8(29)

No. 1295 Replace the present text by the following :

(2) Any signals sent for testing shall be kept to a minimum, particularly on the carrier frequency 2182 kc/s, the frequency 156.80 Mc/s and in the Tropical Zone of Region 3 on 6205.35 kc/s (carrier frequency 6204 kc/s).

Reasons :

To harmonize the designation of frequencies used with SSB (see F/8(30)).

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**Proposals relating to  
Article 34**

**Calls by Radiotelephony**

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N° 1296, 1301 - 1303, 1317 and 1318

### **Calls by Radiotelephony**

**1296** § 1. (1) The provisions of this Article are not applicable to the aeronautical mobile service when special agreements exist between the governments concerned.

**1301** (2) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands.

**1302** (3) They may, however, announce this transmission by the following brief preamble sent on a calling frequency :

— “Hullo all stations” not more than three times ;

— the words “THIS IS” ;

— “... Radio” not more than three times ;

— “Listen for my traffic list on ... kc/s”.

In no case may this preamble be repeated.

**1303** (4) The provisions of No. **1302** are obligatory when 2182 kc/s or 156.80 Mc/s is used.

**1317** (2) The information referred to in Nos. **1314** to **1316** should be furnished by mobile stations without prior request from the coast station, whenever such a measure seems appropriate.

**1318** (3) The information referred to in Nos. **1314** to **1317** is furnished on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

Ref.

F/111(155)      MOD      1301      Add the following second sentence :  
  
This transmission shall be preceded by a call to all stations.

Reasons:

See proposals relating to numbers 1302 and 1303.

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F/111(156)      MOD      1302      Replace first two lines by the following :  
  
(3) The call to all stations sent before transmission of the traffic list may be transmitted on the calling frequency in the following form : .

Reasons:

See proposal relating to number 1303.

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F/111(157)      MOD      1303      Replace by the following :  
  
(4) The provisions of number 1302 are obligatory for traffic lists which are not transmitted at fixed times.

Reasons:

Ship stations must listen to lists sent at fixed times directly on the working frequencies of the coast stations (see numbers 1304 and 1331).

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Ref.

F/109(102)

MOD

A) Place Nos. 1296 to 1318 under the heading :

"Section I - General"

F/109(103)

ADD

B) Add a Section II as follows :

Section II - Use of selective calling devices in the maritime mobile service

1318A

§ 1. Coast stations may call ship stations singly or in groups by using the signals described below.

All ships equipped to receive such signals may be called by using the signal described in No. 1318Q.

1318B

§ 2. (1) A 5-digit call number shall be assigned to each ship; coast stations and certain radiotelephone traffic channels shall be designated by a 4-digit number. In the transmission of these numbers, each digit shall be represented by a tone.

1318C

(2) The tones used to represent the digits in a ship's selective call shall be taken from the following series :

Digit	1	2	3	4	5	6	7	8	9	0	Repetition digit
Tone (c/s)	1124	1197	1275	1358	1446	1540	1640	1747	1860	1981	2110

For example, the tone series corresponding to selective call number 12133 is 1124-1197-1124-1275-2110 kc/s, and the series corresponding to number 22222 is 1197-2110-1197-2110-1197 c/s.

1318D

(3) The tones shall be transmitted one after another; the duration of each tone, measured between the points at 50% of maximum amplitude, shall be 100 ms  $\pm$  10 ms, and the time interval between two consecutive tones, measured between the points at 50% of maximum amplitude, shall be 3 ms  $\pm$  2 ms.

1318E § 3. (1) Each call shall consist of :

1318F - transmission of the call number (tone, 5 times);

1318G - an interval of  $350 \pm 30$  ms;

1318H - transmission of the identification number of the calling coast station or of the number of the channel to be used for the reply and for the exchange of traffic (see Nos. 1235A and 1240A) (tone, 4 times);

1318J - an interval of  $350 \pm 30$  ms;

1318K - repetition of the operations described in Nos. 1318F, 1318G and 1318H.

1318L (2) A new call can be made only after an interval of at least one second following the end of the preceding call.

1318M § 4. If the selective call signal is used on frequencies other than the international frequencies provided for this purpose (Article 33), the call may comprise only :

1318N - first transmission of the call number (tone, 5 times);

1318O - an interval of  $900 \pm 100$  ms;

1318P - second transmission of the call number (tone, 5 times).

1318Q § 5. (1) A special call signal "to all ships", to activate the receiving selectors installed on board all ships regardless of call number, may be used.

(2) This signal consists in the continuous transmission of the sequence of eleven tones mentioned in No. 1318C. The tones are transmitted one after another; the length of each tone, measured between the points at 50% of maximum amplitude, is  $17 \pm 1$  ms and the time interval between two consecutive tones, measured between the points at 50% of maximum amplitude, is less than 1 ms.

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

F/13(78)

MOD 1302 Throughout the texts of this number, replace the words "hullo all stations" by "CQ" (CHARLIE QUEBEC)

Reasons :

The abbreviation "CQ" is already used in radiotelegraphy (Appendix 13, section II) and contemplated for use in the revised International Code of Signals, and it offers the advantage of international usage.

G/65(79)

MOD 1302 (3) They may, however, announce this transmission by the following brief preamble sent on a calling frequency :

- "Hello all ships" not more than three times;
- the words "THIS IS";
- "... radio" not more than three times;
- "Listen for my traffic list on ... kc/s".

In no case may this preamble be repeated.

Reasons :

To conform to the French text. ("Appel a tous les navires".)

ADD 1308A a) However, in the maritime mobile service when a station called does not reply, the call may be repeated at three-minute intervals.

Reasons :

To speed up communications by reducing the permitted intervals between calls.

ADD 1311A (5) However, in the maritime mobile service, before renewing the call, the calling station shall ascertain that further calling is unlikely to cause interference to other communications in progress and that the station called is not in communication with another station.

Reasons :

Consequential upon the insertion of new No. 1308A.

G/78(94)

MOD 1317 (2) The information referred to in Nos. 1314 to 1316 should be furnished by mobile stations without prior request from the coast station, whenever such a measure seems appropriate. This information is furnished on the authority of the master or the person responsible for the mobile station.

Reasons :

Nos. 1317 and 1318 combined and amended for clarification.

SUP 1318

Reasons :

Combined with No. 1317 for clarification.



Ref.

USA/21(41) MOD 1302 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1302.1 1) Where language difficulty is encountered, International  
Code of Signals DELTA ECHO may be used in lieu of  
THIS IS.

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Proposals relating to  
Article 35

Use of Frequencies for Radiotelephony  
in the Maritime Mobile Service

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Section I. General Provisions

N° 1320

Section II. Bands between 1605 and 4000 kc/s

N° 1323, 1325, 1334 - 1337

**Section I. General Provisions**

**1319** § 1. (1) The provisions of this Article are applicable to radiotelephone stations of the maritime mobile service.

**1320** (2) Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They shall then comply with the provisions of this Article and Article 27.

**Section II. Bands between 1 605 and 4 000 kc/s**

*A. Distress*

**1323** § 3. (1) The frequency 2 182 kc/s is the international distress frequency for radiotelephony; it shall be used for this purpose by ship, aircraft and survival craft stations using frequencies in the authorized bands between 1 605 and 4 000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2 182 kc/s.

**1324** (2) However, ship and aircraft stations which cannot transmit on 2 182 kc/s should use any other available frequency on which attention might be attracted.

**1325** (3) Except for transmissions authorized on 2 182 kc/s, all transmissions on the frequencies between 2 170 and 2 194 kc/s are forbidden.

**1326** (4) Any coast station using 2 182 kc/s for distress purposes should be able to transmit, as soon as practicable, the radiotelephone alarm signal described in No. 1465 (see also Nos. 1471, 1472 and 1473).

**1334** (3) In addition, ship stations should keep the maximum watch practicable on 2 182 kc/s for receiving by any appropriate means the radiotelephone alarm signal described in No. 1465, as well as distress, urgency and safety signals.

**1335** § 7. Ship stations open to public correspondence should, as far as possible during their hours of service, keep watch on 2 182 kc/s.

*D. Traffic*

**1336** § 8. (1) Coast stations which use 2 182 kc/s for calling shall be able to use at least one other frequency in the authorized bands between 1 605 and 2 850 kc/s.

**1337** (2) Coast stations open to the public correspondence service on one or more frequencies between 1 605 and 2 850 kc/s shall also be capable of transmitting and receiving class A3 emissions on 2 182 kc/s.

Ref.

G/78(45) SUP 1320

Reasons :

Covered by No. 951.

G/76(30)

Section II - Bands between 1605 and 4000 kc/s

under title :

ADD 1322A Unless otherwise specified in these regulations the class of emission to be used in the public correspondence service shall be class A3A or class A3J using the upper sideband mode and a bandwidth not exceeding 2.7 kc/s; the normal method of operation for each coast station shall be indicated in the List of Coast Stations.

Reasons :

To specify the types of emission and use of the upper sideband mode in all cases.

G/79(44) MOD 1325 (3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190,5 kc/s are forbidden.

Reasons :

To take advantage of the improvement of transmitter and receiver design to reduce the guard-band for 2182 kc/s to  $\pm 8.5$  kc/s.

F/8(30) Article 35 - Section I

After No. 1321 insert the following :

No. 1321a Frequencies on which SSB emissions are sent shall be designated by the assigned frequency followed, in brackets, by details of the carrier frequency.

Reasons :

To clarify the method of designating frequencies used for SSB emissions.

Ref.

F/8(31) Article 35 - Section II

Under the title : Section II. Bands between 1606 and 4000 kc/s insert No. 1322a as follows :

No. 1322a Unless otherwise specified in the present Regulations (see Nos. 987, 996, 1323, 1336 and 1337), the class of emission to be used in the bands between 1605 and 4000 kc/s shall be class A3A or class A3J using the upper sideband and with the necessary bandwidth not exceeding 2.7 kc/s.

Reasons :

It seemed necessary to state that, for the section as a whole, the upper sideband must always be used in the SSB system.

Furthermore, it seems advisable to indicate the classes of emission to be used.

F/8(32) No. 1323 Replace the present text by the following :

(1) The frequency 2182 kc/s<sup>(1)</sup> is the international distress frequency for radiotelephony; it shall be used for this purpose by ship, aircraft and survival craft stations using frequencies in the authorized bands between 1605 and 4000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2182 kc/s. The class of emission to be used for the frequency 2182 kc/s. subject to the cases covered by Nos. 987 and 996, shall be class A3H.

Add the following footnote :

1323.1 (1) Whatever the class of emission used, the value indicated, 2182 kc/s, always designates the carrier frequency of the emission.

Reasons :

The distress frequency must be used with class A3 or A3H. To avoid ambiguity it is preferable to designate it in every case by its carrier frequency.

Ref.

F/8(33) No. 1325 Replace the present text by the following :

(3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190.5 kc/s are forbidden.

Reasons :

See Proposal No. F/8(1) relating to No. 442.

Add the following number 1326A :

F/111(158)      ADD      1326A      Before transmitting on 2182 kc/s, a station in the mobile service should listen to this frequency for a reasonable period to make sure that no distress traffic is being sent (see number 1007).

Reasons:

This is to avoid the risk of interference to distress traffic when the station has heard neither the distress call nor the message.

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Add the following number 1326B :

F/111(159)      ADD      1326B      The provisions of number 1326A do not apply to stations in distress.

Reasons:

Stations in distress apply the rules specified in Article 36.

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Ref.

J/84(17)

ADD

1322A

§3. Apparatus in radiotelephone stations of the maritime mobile service installed for operation on frequencies in the authorized bands between 1605 and 4000 kc/s and in the authorized bands between 4000 and 23 000 kc/s shall satisfy the technical and operational conditions specified in Appendix 17.

Reasons :

In consequence of the rule-making of technical characteristics of SSB system, the stations employing SSB equipment shall conform to these technical conditions.

J/84(18)

ADD

1323A

(1a) Whatever the class of emission used, the frequency 2182 kc/s always designates the carrier frequency on the emission.

Reasons :

With the amendment that the distress frequency may use class A3 or A3H emissions, it is necessary to indicate the frequency 2182 kc/s by carrier frequency.



Ref.

J/84(19)      MOD      1325      (3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between ~~2170~~ 2173.5 and ~~2194~~ 2190.5 kc/s are forbidden.

Reasons :

The guard band for the distress frequency 2182 kc/s is proposed to be reduced to 17 kc/s.

RFA/94(22)      MOD      1323      § 3. (1) The frequency 2182 kc/s is the international distress frequency for radiotelephony; it shall be used for this purpose by ship, aircraft, survival craft stations and by floatable emergency position-indicating radio beacons using frequencies in the authorized bands between 1605 and 4000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for signals of floatable emergency position-indicating radio beacons, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2182 kc/s.

Reasons :

Insertion in the Regulations of provisions relating to emergency position-indicating beacons (see C.C.I.R. Recommendation No. 439).

RFA/4(2)      MOD 1325      (3) Except for transmissions authorized on 2182 kHz, all transmissions on the frequencies between 2173.5 and 2190.5 kHz are forbidden.

NOC 1326

Reasons:

In view of the present stage of technical development we consider it appropriate to reduce the guard-band for the international distress frequency 2182 kHz to 17 kHz in order to thus obtain two single sideband frequencies each of 3.5 kHz bandwidth.

The World Administrative Radio Conference to deal with matters relating to the maritime mobile service should establish these two single sideband frequencies and include appropriate provisions in the Radio Regulations.

Ref.

HOL/70(4)      MOD      1325      (3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between ~~2170~~ 2173.5 and ~~2194~~ 2190.5 kc/s are forbidden.

Reasons :

To reduce the guard band of 2182 kc/s as a result of the technical developments in equipment.

With respect to the two 3.5 kc/s channels thus being made available (2170 - 2173.5 kc/s and 2190.5 - 2194 kc/s), the Netherlands Administration has, at this time, no specific proposals to make. It is, however, considered that the possible use of these two channels should be in conformity with the Table of Frequency Allocations, that is to say for additional calling purposes.

I/31(2)      MOD      1325      (3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190.5 kc/s are forbidden.

ADD      1330-AA      (3) Transmissions on the two channels of 3.5 kc/s bandwidth each, with assigned frequencies 2171.4 and 2191.9 kc/s, are limited to single sideband emissions (see Nos. 1339-BA through 1339-BY) (Proposal No. I/31(4)).

Reasons :

Bearing in mind the technical developments during the past years, the actual guard band of 2182 kc/s is no longer necessary and it may be reduced in order to improve utilization of the 1605 - 4000 kc/s band.

The proposed reduction is compatible with transmitter frequency tolerance and receiver selectivity of survival craft stations.

USA/16(1)      MOD      1325      (3) Except for transmissions authorized on 2182 kc/s, all transmissions on the frequencies between ~~2170~~ 2173.5 and ~~2194~~ 2190.5 kc/s are forbidden.<sup>1)</sup>

USA/16(2)      ADD      1325.1      1) Transmissions on the two channels of 3.5 kc/s bandwidth each, with carrier frequencies at 2170 and 2190.5 kc/s, formed by reduction of the band 2170-2194 kc/s to 2173.5-2190.5 kc/s, are limited to single sideband emissions A3A and A3J (see Nos. 1339BA through 1339BX) (Proposal No. USA/16(6)).

USA/16(1)      WOC      1323, 1324, 1326, 1327 - 1331, 1332 - 1335

Ref.

F/109(104)      ADD      1329A      "(1 bis) the frequency 2192.65 kc/s (carrier frequency 2191.3 kc/s) is used in class A2H emission by coast stations for selective calls to ships."

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It is proposed to modify No. 1334 of the Radio Regulations, Geneva, 1959, to read as follows :

POL/83(3)      MOD      1334      (3) In addition, all ship stations should keep the maximum watch practicable on 2182 kc/s for receiving by any appropriate means the radiotelephone alarm signal described in No. 1465, as well as distress, urgency and safety signals,

and, in consequence, to delete No. 1335 of the said Regulations :

SUP      1335

Background :

So far ship stations equipped for radiotelegraphy traffic, but having as well the radiotelephony means of communication were keeping watch only on the international distress frequency for radiotelegraphy 500 kc/s (International Convention for the Safety of Life at Sea, Section IV, part B, rule 6).

In this situation big ocean-going ships watching only on 500 kc/s could not hear distress calls of small craft transmitted on 2182 kc/s.

To increase the safety of small ships and improve efficacy of assistance to shipwreck survivors the big ships should keep watch on both international distress frequencies 500 kc/s and simultaneously.

The introduction among the ship equipment of automatic position indicating beacon signals helping to locate the position of mobile station in distress and to look for survivors equipped with the above mentioned beacons working on 2182 kc/s stresses the necessity of keeping watch on this frequency and the need of introducing of this duty as a rule to all ship stations.

Ref.

RFA/94(23)      MOD      1334      § 6. (3) In addition, ship stations should keep the maximum watch practicable on 2182 kc/s for receiving by any appropriate means the radiotelephone alarm signal described in No. 1465, as well as distress, urgency and safety signals including the signals of emergency position-indicating radio beacon described in Article 36, Section VIII A.

Reasons :

Insertion in the Regulations of provisions relating to emergency position-indicating beacons (see C.C.I.R. Recommendation No. 439).

F/8(34)      No. 1336 Add the following sentence to the present text :

This other frequency shall be capable of being used with class A3H for the transmission of messages concerning safety of shipping announced on 2182 kc/s (No. 1492).

Reasons :

See Proposal No. F/8(17) relating to No. 986.

F/8(35)      No. 1337 Replace the present text by the following :

(2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall be capable of sending, class A3H emissions and receiving class A3 and A3H emissions on 2182 kc/s.

Reasons :

See Proposal No. F/8(15) relating to No. 984.

J/84(20)      MOD      1336      §8. (1) Coast stations which use 2182 kc/s for calling shall be able to use at least one other frequency in the authorized bands between 1605 and 2850 kc/s. These stations should be able to use the frequency 2192 kc/s for simplex operation, if required by their service. The frequency 2171.5 kc/s may be used as an additional frequency.

Reasons :

See proposal relating to No. 1339A (J/84(22)).

Ref.

J/84(21)      MOD      1337      (2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting class A3 or A3H emissions and receiving class A3 and A3H emissions on 2182 kc/s.

Reasons :

See proposal relating to No. 984 (J/84(8)).

CAN/43(22)      MOD      1337(2)      Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting Class A3 or A3H and receiving Class A3 and A3H emissions on 2182 kc/s.

Reasons :

To provide for the use of single sideband emissions on 2182 kc/s.

G/76(30)      MOD      1337      (2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting class A3 or A3H emissions on 2182 kc/s and receiving classes A3 or A3H emissions on 2182 kc/s.

Reasons :

To take account of single sideband operation.

HOL/73(16)      MOD      1337      (2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting ~~and receiving class A3 emissions~~ on 2182 kc/s with class A3H emissions and be capable of receiving classes A3 and A3H emissions on 2182 kc/s.

Reasons :

To permit the use of the classes of emission A2H and A3H on the distress and calling frequencies 500 kc/s and 2182 kc/s respectively.

The C.C.I.R. considers the emissions A2H and A3H to be as effective as A2 and A3 emissions for use as alarm, distress, urgency and safety signals.

Ref.

I/35(26)

MOD 1337

(2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting class A3 or A3H emissions, and receiving class A3 and A3H emissions on 2182 kc/s.

Reasons :

As a consequence of the modification introduced in No. 984 of Article No. 28 (Proposal No. I/35(24)).

USA/20(39)

MOD 1337

(2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting and receiving class A3 emissions on 2182 kc/s. Coast stations shall be capable of transmitting and receiving on 2182 kc/s with classes A3 or A3H emissions until 1 January 1970. After 1 January 1970 coast stations shall be capable of transmitting on 2182 kc/s with class A3H emissions and be capable of receiving classes A3 and A3H emissions on 2182 kc/s.

Reasons :

To provide for the permissive use of full carrier single sideband (SSB) emissions on the distress and calling frequencies 500 kc/s and 2182 kc/s for stations using SSB transmitting equipment. The C.C.I.R. has determined that the emissions A2H and A3H are as effective as A2 or A3 emissions for use as alarm, distress, urgency and safety signals.

Background :

Increasing use of single sideband (SSB) emission in the maritime mobile service requires that provision be made for SSB compatibility with existing double sideband (DSB) systems associated with the distress and safety uses of 500 kc/s and 2182 kc/s. The C.C.I.R. has carefully examined the technical aspects of the use of full carrier SSB emissions, A2H and A3H, and has found them to be compatible, including the use of the alarm signal. Either emission, A2 or A2H, A3 or A3H, may be used with equal effectiveness where A2 or A3 emissions are specified in the Radio Regulations for distress and safety uses.

Ref.

USA/16(3)      MOD      1337

(2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting and receiving class-A3-emissions on 2182 kc/s. Coast stations shall be capable of transmitting and receiving on 2182 kc/s with classes A3 or A3H emissions until 1 January, 1970. After 1 January 1970 coast stations shall be capable of transmitting on 2182 kc/s with class A3H emissions and be capable of receiving classes A3 and A3H emissions on 2182 kc/s.

NOC      1338      (3)

NOC      1339      (4)

USA/16(4)      ADD      1339A

(5) The power supplied to the antenna transmission line by transmitters operating on carrier frequencies 2170 and 2190.5 kc/s shall not exceed 400 watts (P<sub>p</sub>).

Reasons :

To specify the class of emission capability of coast stations on 2182 kc/s, to reduce the guard band on that frequency, and to stipulate a power limitation for the two single sideband frequencies thereby provided.

Background :

The guard band for the distress frequency 2182 kc/s is proposed to be reduced to 17 kc/s per second and the remaining seven kc/s divided into 2 assignable channels which would be limited to stations employing single sideband emissions. The amendment of No. 1325 (USA/16(1)) provides for this reduction. The amendment of No. 1337 (USA/16(3)) is a consequential amendment resulting from the proposed mandatory transition of the maritime mobile service to single sideband. It may be necessary to defer use of these channels until conversion is completed.

Ref.

G/79(99)    ADD    1339A    § 8 (bis) When 2182 kc/s is being used for distress the frequency 2192.35 kc/s (carrier frequency 2191 kc/s) may be used by ships as a supplementary frequency for calling coast stations. During this period ship stations shall not use 2192.35 kc/s as an international working frequency in those areas where it is in use as a supplementary calling frequency.

Reasons :

To provide alternative calling arrangements during periods of distress working.

I/31(2)    ADD    1339-AA    (5) During the transition period from double sideband to single sideband operation, in order to facilitate single sideband communications, the assigned frequency 2191,9 kc/s may also be used by ship stations for the exchange of traffic.

Reasons :

Bearing in mind the technical developments during the past years, the actual guard band of 2182 kc/s is no longer necessary and it may be reduced in order to improve utilization of the 1605 - 4000 kc/s band.

The proposed reduction is compatible with transmitter frequency tolerance and receiver selectivity of survival craft stations.

I/31(3)    Add to Section II of Article 35 the new paragraph D.bis

D.(bis) - Conversion to single sideband

- ADD    1339-AA    Para. 8(bis) (1) The following schedule shall be applicable when converting coast and ship stations on maritime radiotelephone channels from double sideband to single sideband :
- ADD    1339-AB    a) date from which coast stations shall be able to transmit with single sideband : 1 January 1971;
- ADD    1339-AC    b) date on which coast stations shall discontinue A3 emissions : 1 January 1973;



Ref.

I/31(3)  
(contd.)

- ADD 1339-AD c) date from which no more new double sideband equipments on board ship shall be installed : 1 January 1971;
- ADD 1339-AE d) date on which ship stations shall discontinue A3 emissions : 1 January 1980;
- ADD 1339-AF (2) During the period of transition from double sideband to single sideband, coast and ship stations shall be able to use full carrier (A3H) emissions to permit communication with both double sideband and single sideband radiotelephone stations.

I/31(4)

Add to Section II of Article 35 the following paragraph D(ter)

D(ter). Technical and operational provisions relating to use of single sideband

- ADD 1339-BA Para. 8(ter). (1) Definitions of carrier modes :

Carrier mode	Level N (db) of the carrier with respect to peak envelope power
Full carrier (A3H)	$0 \geq N \geq -6$
Reduced carrier (A3A)	$-6 > N \geq -26$
Suppressed carrier (A3J)	$-26 > N$

- ADD 1339-BB (2) Mode of operation.

- ADD 1339-BC Coast and ship station transmitters shall be capable of reducing carriers to the following levels below peak envelope power :

- a)  $16 \text{ db} \pm 2 \text{ db}$  for A3A emissions;
- b) not less than 40 db for A3J emissions.

- ADD 1339-BD c) In actual operation, ship and coast stations shall utilize the carrier levels indicated, respectively, for A3H, A3A and A3J modes.

Ref.

I/31(4)  
(contd.)

- ADD 1339-BE Coast and ship station transmitters shall be capable of operating in A3H, A3A and A3J.
- ADD 1339-BF After 1 January 1980, A3H will no longer be required for coast station transmitters not fitted to operate on 2182 kc/s.
- ADD 1339-BG (3) Transmitter carrier frequencies shall be maintained within the following tolerances :
- ADD 1339-BH (a) Coast stations :  $\pm 20$  cycles per second;
- ADD 1339-BI (b) Ship stations:  $\pm 100$  cycles per second;
- ADD 1339-BJ (i) The short-term limits (of the order of 15 minutes) of ship stations shall be  $\pm 40$  cycles per second.
- ADD 1339-BK (4) Coast and ship stations shall use upper sideband emissions.
- ADD 1339-BL (5) The transmitter audio-frequency band shall be 350 to 2700 cycles per second, with a permitted amplitude variation of 6 db.
- ADD 1339-BM (6) The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.
- ADD 1339-BN (7) When using single sideband A3H, A3A or A3J transmission the mean power of any emission supplied to the antenna transmission line of a coast or ship station on any discrete frequency, shall be less than the mean power ( $P_m$ ) of the transmitter in accordance with the following table :

ADD 1339-BO

Frequency separation $\Delta$ from the assigned frequency kc/s	Minimum attenuation below mean power ( $P_m$ ) db
$1.75 < \Delta \leq 5.25$	25
$5.25 < \Delta \leq 8.75$	35
$8.75 < \Delta$	$43 + 10 \log_{10} P_m(\text{Watts})$

Ref.

- I/31(4)  
(contd.)
- ADD 1339-BP Para. 8(quarter). Channel utilization
- ADD 1339-BQ (9) In the transition to single sideband, as provided by Nos. 1339-AA through 1339-AE (Proposal No. I/31(3)), each double sideband frequency bandwidth will comprise two single sideband frequencies of at least three kc/s each.
- ADD 1339-BR (10) The division between the two single sideband frequencies, thus formed, will be at the double sideband carrier frequency. For the purpose of these regulations, during the transition to single sideband, these two frequencies, relative to the double sideband carrier frequency, are designated as follows :
- ADD 1339-BS (a) higher in frequency :  
upper channel; and
- ADD 1339-BT (b) lower in frequency :  
lower channel.
- ADD 1339-BU (11) Stations using single sideband single channel emissions A3H, A3A and A3J in accordance with Nos. 1339-B0 through 1339-BS shall operate either in the upper channel or in the lower channel.
- ADD 1339-BV Para. 8(quinquies). Assigned and carrier frequencies
- ADD 1339-BW (12) The assigned frequency of a station operating in the upper channel would be 1400 cycles per second higher than the carrier frequency of the double sideband channel, and the carrier frequency would be the same as the carrier frequency of the double sideband channel.
- ADD 1339-BY (13) The assigned frequency of a station operating in the lower channel would be 1600 cycles per second lower than the carrier frequency of the double sideband channel, and the carrier frequency would be 3000 cycles per second below the carrier frequency of the double sideband channel.

Ref.

I/31(4)  
(cont.)

Reasons :

The proposal aims to take into account the power limits for single sideband emissions and the reduction of guard bandwidth of 2182 kc/s.

The above-mentioned power limits are calculated on the basis of the equivalent interfering effect of emissions, it having been shown by experience that the most important factor of the interference potential is provided by the mean power of the emissions.

From the table in the C.C.I.R. Doc. 1/1017 (Oslo, 1966) it results that, as far as interference potential is concerned, the peak envelope power/mean power ratio for A3H emission is more unfavourable than the one for A3A and A3J emissions; considering the case of modulation by smoothly read text.

The value of this ratio would be 6 db but, taking into consideration the fact that single sideband transmitters are frequently fitted with limiters or dynamic compressors, it seems to be more convenient to adopt the reduced value 5 db.

J/84(22)

ADD 1339A

§8a For the conduct of simplex telephony, all stations on ships making international voyages should be able to use :

ADD 1339B

(1) the ship-shore working frequency 2192 kc/s, if required by their service;

ADD 1339C

(2) the intership frequency 2171.5 kc/s, if required by their service. This frequency may be used as an additional ship-shore frequency.

Reasons :

Two channels derived from the reduction of the guard band of 2182 kc/s make international frequencies for communications between land and ship or between ships for the technical and operational convenience of ship stations having the transmitter and receiver on spot frequency. This matter is in line with the purport of Recommendation No. 28 of the Ordinary Administrative Radio Conference, Geneva, 1959.

Ref.

USA/16(5)

D(bis). Conversion to Single Sideband

- ADD 1339AA § 8(bis).(1) The following schedule shall be applicable in converting coast and ship stations on maritime mobile radiotelephone channels from double sideband to single sideband :
- ADD 1339AB a) Discontinue installation of double sideband equipment on ship stations by 1 January 1970;
- ADD 1339AC b) Discontinue use by coast stations of double sideband emission (see No. 1339BC) by 1 January 1970;
- ADD 1339AD c) Discontinue use by ship stations of double sideband emission and by coast stations of full carrier (A3H) emission on 1 January 1975, except that coast stations shall retain the capability of operating with class A3H emission on 2182 kc/s.<sup>1)</sup>
- ADD 1339AE (2) During the period of transition from double sideband to single sideband, coast stations and single sideband ship stations shall have the capability of using full carrier (A3H) emission to permit communication with both double sideband and single sideband radiotelephone stations.
- ADD 1339.1AD 1) Where necessary to meet circumstances peculiar to domestic operations of an administration, the discontinuance by ship and coast stations of double sideband emission may be extended to 1 January 1977.

Ref.

USA/16(5)  
(contd.)

Reasons :

To provide a specific schedule for the mandatory transition from double to single sideband in the band 1605 - 4000 kc/s.

Background :

The new sub-section "D(bis)" is proposed for addition to Article 35 as a means of including in the Radio Regulations mandatory provisions covering the transition of the maritime mobile service from double sideband to single sideband and the discontinuance of double sideband in accordance with a specific schedule. The date of 1975 has been selected in order to allow a period of eight years, from the date of the W.A.R.C., for completion of the transition to single sideband.

USA/16(6)

D(ter). Technical and Operational Provisions

Relating to use of Single Sideband

ADD 1339BA § 8(ter).(1) Definitions of carrier modes :

<u>Carrier mode</u>	<u>Level N(db) of the carrier with respect to peak envelope power</u>
<u>Full carrier (A3H)</u>	<u><math>0 \geq N \geq -6</math></u>
<u>Reduced carrier (A3A)</u>	<u><math>-6 &gt; N \geq -26</math></u>
<u>Suppressed carrier (A3J)</u>	<u><math>-26 &gt; N</math></u>

ADD 1339BB (2) Mode of operation :

Ref.

USA/16(6)  
(contd.)

ADD 1339BC

a) Coast station transmitters operating on frequencies other than 2182 kc/s shall be capable of operating with class A3A emissions having a carrier reduction of 16 + 2 db below peak envelope power and class A3J emission having a carrier reduction of not less than 40 db below peak envelope power. Coast station transmitters shall be capable of operating with class A3H emissions when authorized to operate on 2182 kc/s.

ADD 1339BD

b) Ship station transmitters shall be capable of operating with class A3H emission, class A3A emission having a carrier reduction of 16 + 2 db below peak envelope power, and class A3J emission having a carrier reduction of not less than 40 db below peak envelope power.

ADD 1339BE

c) In actual operation, ship and coast stations shall utilize the carrier levels indicated, respectively, for A3H, A3A and A3J modes.

ADD 1339BF

d) Notwithstanding the provisions of a), b) and c) above, stations operating solely in systems employing fewer than the three defined single sideband modes need not be equipped to operate in the unused modes.

Ref.

USA/16(6)  
(contd.)

ADD 1339BG

(3) The carrier frequency of transmitters shall be maintained within the following tolerances :

ADD 1339BH

a) Coast stations : + 20 c/s per second;

ADD 1339BI

b) Ship stations :  $\pm$  100 c/s per second;

ADD 1339BJ

i) The short term limits (of the order of 15 minutes) of ship stations shall be  $\pm$  40 c/s per second.

ADD 1339BK

(4) Coast and ship stations shall use upper sideband emissions.

ADD 1339BL

(5) The transmitter audio-frequency band shall be 350 to 2700 c/s per second, with a permitted amplitude variation of 6 db.

ADD 1339BM

(6) The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.

ADD 1339BN

(7) When using single sideband A3H, A3A or A3J emission the mean power of any emission supplied to the antenna transmission line of a coast or ship station on any discrete frequency, shall be less than the mean power ( $P_m$ ) of the transmitter in accordance with the following table :

ADD 1339BO

<u>Frequency separation <math>\Delta</math> from the assigned frequency kc/s</u>	<u>Minimum attenuation below mean power (<math>P_m</math>) db</u>
<u><math>1.75 &lt; \Delta \leq 5.25</math></u>	<u>25</u>
<u><math>5.25 &lt; \Delta \leq 8.75</math></u>	<u>35</u>
<u><math>8.75 &lt; \Delta</math></u>	<u><math>43 + 10 \log_{10} P_m(\text{Watts})</math></u>

ADD 1339BP

§ 8(quarter). Channel utilization

ADD 1339BQ

(9) In the transition to single sideband, as provided by Nos. 1339AA through 1339AE, each double sideband frequency of at least six kc/s bandwidth will comprise two single sideband frequencies of at least three kc/s each.



Ref.

USA/16(6)  
(contd.)

ADD 1339BR

(10) The division between the two single sideband frequencies, thus formed, will be at the double sideband carrier frequency. For the purpose of these regulations during the transition to single sideband, these two frequencies, relative to the double sideband carrier frequency are designated as follows :

ADD 1339BS

a) higher in frequency : upper channel; and

ADD 1339BT

b) lower in frequency : lower channel

ADD 1339BU

(11) Stations using single sideband single channel emissions A3H, A3A and A3J in accordance with Nos. 1339BP through 1339BT shall operate either in the upper channel or in the lower channel.

ADD 1339BV

§ 8(quinquies). Assigned and carrier frequencies

ADD 1339BW

(12) The assigned frequency of a station operating in the upper channel would be 1400 c/s per second higher than the carrier frequency of the double sideband channel, and the carrier frequency would be the same as the carrier frequency of the double sideband channel.

ADD 1339BX

(13) The assigned frequency of a station operating in the lower half channel would be 1600 c/s per second lower than the carrier frequency of the double sideband channel, and the carrier frequency would be three thousand cycles per second below the carrier frequency of the double sideband channel.

ADD 1339BY

(14) If an administration assigns frequencies other than as indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with this Article.

ADD 1339BZ

(15) The classes of emission used as the normal methods of operation for each coast station shall be indicated in the List of Coast Stations.

Ref.

USA/16(6)  
(contd.)

Reasons :

To include in the Radio Regulations technical and operational provisions necessary to support the transition to single sideband in the bands between 1605 and 4000 kc/s; to make a consequential amendment to No. 1350; to amend No. 1351 to provide for the use that can be made in Regions 2 and 3, of the two single sideband frequencies obtained by the reduction of the guard band of 2182 kc/s.

Background :

The technical characteristics follow those developed by the C.C.I.R. XI Plenary Assembly, Oslo, 1966.

Proposals relating to  
Article 35

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Section II.

N° 1341, 1342, 1344, 1345, 1350 and 1351

*E. Additional Provisions Applying to Region 1*

**1340** § 9. (1) The provisions of this sub-section apply only to stations of the maritime mobile service.

**1341** (2) The carrier power of mobile radiotelephone stations operating in the authorized bands between 1 605 and 2 850 kc/s shall not exceed 100 watts.

**1342** (3) The carrier power of coast radiotelephone stations, operating in the authorized bands between 1 605 and 3 800 kc/s, shall be limited to :

— 2 kilowatts for coast stations located north of latitude 32°N ;

— 3.5 kilowatts for coast stations located south of latitude 32°N.

**1343** § 10. (1) All stations on ships making international voyages should be able to use :

**1344** a) the ship-shore working frequency 2 049 kc/s, if required by their service ;

**1345** b) the intership frequency 2 056 kc/s, if required by their service. This frequency may be used as an additional ship-shore frequency.

**1346** (2) These frequencies shall not be used for working between stations of the same nationality.

*F. Additional Provisions Applying to Regions 1 and 3*

**1349** § 12. (1) In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized band between 1 605 and 2 850 kc/s shall, during their hours of service, and as far as possible, take steps to keep watch on the international distress frequency 2 182 kc/s for three minutes twice each hour beginning at x h. 00 and x h. 30 Greenwich Mean Time (G.M.T.)<sup>1</sup>.

**1350** (2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease within the band 2 170-2 194 kc/s.

*G. Additional Provisions Applying to Regions 2 and 3*

**1351** § 13. All stations on ships making international voyages should be able to use the intership frequency 2 638 kc/s, if required by their service.

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**1349.1**<sup>1</sup> In Region 3, this Regulation does not apply to Japan and the Philippines.

Ref.

F/8(36) No. 1341 Replace the present text by the following :

(2) The peak envelope power (1) of mobile stations operating in the authorized bands between 1605 and 2850 kc/s shall not exceed 400 watts.

Reasons :

To replace the expression of the carrier power of DSB transmitters by the expression of the peak envelope power of SSB transmitters.

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F/8(37) No. 1342 Replace the present text by the following :

(3) The peak envelope power (1) of coast radiotelephone stations operating in the authorized bands between 1605 and 3800 kc/s shall be limited to :

- 8 kilowatts for coast stations located north of latitude 32°N;
- 14 kilowatts for coast stations located south of latitude 32°N.

Reasons :

See Proposal No. F/8(36) relating to No. 1341.

F/8(38) No. 1344 Replace the present text by the following :

a) at least one of the ship-shore working frequencies 2047.35 kc/s (carrier frequency 2046 kc/s), 2050.65 kc/s (carrier frequency 2049.3 kc/s) and 2172.15 kc/s (carrier frequency 2170.8 kc/s) if required by their service;

Reasons :

Consequence of the use of SSB.

Ref.

F/8(39) No. 1345 Replace the present text by the following :

b) at least one of the intership frequencies 2054.35 kc/s (carrier frequency 2053 kc/s) and 2057.65 kc/s (carrier frequency 2056.3 kc/s) if required by their service; these frequencies may be used as supplementary "ship-shore" frequencies.

Reasons :

Consequence of using SSB.

G/76(30) MOD 1341 (2) The power of mobile radiotelephone stations, operating in the authorized bands between 1605 and 2850 kc/s shall not exceed the following :

- 100 watts (Pc) for classes A3 and A3H emissions;
- 400 watts (Pp) for classes A3A and A3J emissions.

Reasons :

To take account of single sideband operation.

MOD 1342 (3) The power of coast radiotelephone stations operating in the authorized bands between 1605 and 3800 kc/s shall not exceed the following :

- Coast stations located north of latitude 32 N (2 kilowatts (Pc) for class A3 and A3H emissions. (8 kilowatts (Pp) for classes A3A and A3J emissions.
- Coast stations located south of latitude 32 N (3.5 kilowatts (Pc) for class A3 and A3H emissions. (14 kilowatts (Pp) for class A3A and A3J emissions.

Reasons :

To take account of single sideband operation.

ADD 1344A aa) the ship-shore working frequencies 2047.35 kc/s (carrier frequency 2046 kc/s, and 2050.35 kc/s (carrier frequency 2049 kc/s), if required by their service;

G/79(99) ADD 1344B ab) the ship-shore working frequency 2192.35 kc/s (carrier frequency 2191 kc/s).

Reasons :

To provide for the use of an SSB channel consequent upon the reduction of the guard-band for 2182 kc/s.

Ref.

G/76(30)      ADD      1345A      ba) the intership frequencies 2054.35 kc/s (carrier frequency 2053 kc/s) and 2057.35 kc/s (carrier frequency 2056 kc/s), if required by their service. These frequencies may be used as additional ship-shore frequencies.

Reasons :

Consequential upon conversion to single-sideband operation.

HOL/70(4)      MOD      1341      (2) The carrier peak envelope power of mobile radiotelephone stations operating in the authorized bands between 1605 and 2850 kc/s shall not exceed ~~100~~ 400 watts.

MOD      1342      (3) The carrier peak envelope power of coast radiotelephone stations, operating in the authorized bands between 1605 and 3800 kc/s, shall be limited to :

- 2 8 kilowatts for coast stations located north of latitude 32° N;
- ~~3.5~~ 14 kilowatts for coast stations located south of latitude 32° N.

Reasons :

To provide in the Radio Regulations a comparable power level for single sideband emissions.

I/31(5)

Modify Section II - paras. E and F - of Article 35 as follows :

MOD      1341      (2) The power of mobile radiotelephone stations, operating in the authorized bands between 1605 and 2850 kc/s, shall not exceed :

- 100 watts (carrier power) for A3 emissions;
- 300 watts (p.e.p.) for A3A, A3H, A3J emissions.

MOD      1342      (3) The power of coast radiotelephone stations, operating in the authorized bands between 1605 and 3800 kc/s, shall be limited as follows :

Ref.

I/31(5)  
(contd.)

- a) for coast stations located north of latitude 32° N :
  - 2 kilowatts (carrier power) for A3 emissions;
  - 6 kilowatts (p.e.p.) for A3A, A3H, A3J emissions;
- b) for coast stations located south of latitude 32° N :
  - 3.5 kilowatts (carrier power) for A3 emissions;
  - 10.5 kilowatts (p.e.p.) for A3A, A3H, A3J emissions.

Reasons :

The proposal aims to take into account the power limits for single sideband emissions and the reduction of guard bandwidth of 2182 kc/s.

The above-mentioned power limits are calculated on the basis of the equivalent interfering effect of emissions, it having been shown by experience that the most important factor of the interference potential is provided by the mean power of the emissions.

From the table in the C.C.I.R. Doc. I/1017 (Oslo, 1966) it results that, as far as interference potential is concerned, the peak envelope power/mean power ratio for A3H emission is more unfavourable than the one for A3A and A3J emissions, considering the case of modulation by smoothly read text.

The value of this ratio would be 6 db but, taking into consideration the fact that single sideband transmitters are frequently fitted with limiters or dynamic compressors, it seems to be more convenient to adopt the reduced value 5 db.

POL/81(1)

MOD

1341

(2) The ~~carrier~~ peak envelope power of mobile radiotelephone stations operating in the authorized bands between 1605 and 2850 kc/s shall not exceed ~~100~~ 500 watts.

MOD

1342

(3) The ~~carrier~~ peak envelope power of coast radiotelephone stations, operating in the authorized bands between 1605 and 3800 kc/s, shall be limited to :

- 2 10 kilowatts for coast stations located north of latitude 32° N,
- ~~3.5~~ 15 kilowatts for coast stations located south of latitude 32° N.



POL/81(1)  
(contd.)

The proposal to modify the definition of power of radio-telephone transmitters in maritime mobile service stations operating in the authorized bands between 1605 and 3800 kc/s.

Reasons :

The introduction of A3A and A3J emissions into the maritime mobile service causes the difficulty of proper interpretation of the said Radio Regulations numbers where only carrier power is limited.

The purpose of these limitations was to prevent superfluous interference caused by remote stations operating in the same frequency band and it is necessary too to limit the power of single sideband transmitters both with the reduced and suppressed carriers. The proposed limitation of peak envelope power comprises both single sideband and double sideband emissions.

---

F/8(40) No. 1350 Replace the present text by the following :

(2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease on the frequencies between 2173.5 and 2190.5 kc/s.

Reasons :

See Proposal No. F/8(1) relating to No. 442.

F/8(41) No. 1351 Replace the present text by the following :

All stations on ships making international voyages should be able to use the intership frequency 2639.65 kc/s (carrier frequency 2638.3 kc/s) if required by their service.

Reasons :

Although this question primarily concerns Regions 2 and 3, it is proposed that the two SSB frequencies replacing the DSB frequency 2638 kc/s should be used :

- one for intership traffic,
- the other for requirements to be defined in Regions 2 and 3.

Ref.

G/79(99)      MOD      1350      2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease within the band 2173.5 - 2190.5 kc/s.

Reasons :

Consequent upon the amendment to No. 1325.

HOL/70(4)      MOD      1350      (2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease within the band ~~2170-2194~~ 2173.5 - 2190.5 kc/s.

Reasons :

See proposal relating to No. 1325.

I/31(5)      MOD      1350      (2) During the period mentioned above, except for the transmissions provided for in Article 36, transmissions within the band 2173.5 - 2190.5 kc/s shall cease.

J/84(23)      MOD      1350      (2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmissions shall cease within the band ~~2170~~ 2173.5 - ~~2194~~ 2190.5 kc/s.

Reasons :

See proposal relating to No. 1325 (J/84(19)).

---

J/84(24)      MOD      1351      § 13. All stations on ships making international voyages should be able to use the intership frequency ~~2638~~ 2639.5 kc/s, if required by their service.

Reasons :

See proposal relating to No. 445 (J/84(2)).

Ref.

USA/16(7)      MOD      1350

(2) During the periods mentioned above, except for the transmission provided for in Article 36, transmissions shall cease within the band 2170 2173.5 - 2194 2190.5 kc/s.

---

G. Additional provisions applying to Regions 2 and 3

USA/16(8)      MOD      1351

§ 13. All stations on ships making international voyages should be able to use the intership frequency 2638 kc/s and, when using single sideband, the intership frequencies whose carriers are 2170 and 2190.5 kc/s, if required by their service.

Reasons :

To include in the Radio Regulations technical and operational provisions necessary to support the transition to single sideband in the bands between 1605 and 4000 kc/s; to make a consequential amendment to No. 1350; to amend No. 1351 to provide for the use that can be made in Regions 2 and 3, of the two single sideband frequencies obtained by the reduction of the guard band of 2182 kc/s.

Background :

The technical characteristics follow those developed by the C.C.I.R. XI Plenary Assembly, Oslo, 1966.

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Proposals relating to  
Article 35

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Section III. Bands between 4000 and 23000 kc/s  
N° 1352 - 1358

Section IV. Bands between 156 and 174 Mc/s  
N° 1363

### Section III. Bands between 4 000 and 23 000 kc/s

#### A. Call, Reply and Safety

**1352 § 14.** In the bands authorized for radiotelephony, ship stations may use, for calling, one of the following frequencies :

8 269 kc/s  
12 403.5 kc/s  
16 533.5 kc/s  
22 074 kc/s

**1353 § 15.** In that part of the Tropical Zone situated in Region 3, 6 204 kc/s using double sideband emissions is designated for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.

#### B. Watch

**1354 § 16.** Coast stations open to public correspondence may, optionally, maintain watch on the calling frequencies listed in No. 1352. Stations maintaining this watch shall be indicated in the List of Coast Stations.

#### C. Traffic

**1355 § 17. (1)** For the conduct of duplex telephony, the frequencies of emission of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Appendix 17.

**1356 (2)** The single sideband working frequencies given in Section B of Appendix 15 are intended to encourage the use of single sideband operation.

**1357 (3)** Administrations may assign these frequencies to ships of any category according to traffic requirements.

**1358 (4)** The Recommendations of the C.C.I.R. should be used as a guide in the design of equipment intended to operate in these bands.

### Section IV. Bands between 156 and 174 Mc/s

#### A. Call, Reply and Safety

**1363 (5)** All emissions in the band 156.725-156.875 Mc/s capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.80 Mc/s are forbidden.

Ref.

F/8(42)

Under the title : Section III - Bands between 4000 and 23000 kc/s,  
insert the following No. 1351a :

1351a Unless otherwise specified in the Regulations (see Nos. 1353 and 1355 bis), the class of emission to be used in the bands between 4000 and 23000 kc/s shall be class A3A or class A3J using the upper sideband and with the necessary bandwidth not exceeding 2.7 kc/s.

Reasons :

It seemed necessary to state that, for Section III as a whole, the upper sideband must always be used in the SSB system.

Furthermore, it seems advisable to indicate the classes of emission to be used.

F/8(43)

No. 1352 Delete this number

Reasons :

See Proposal No. F/8(8) relating to No. 450.

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F/8(44)

No. 1353 Replace the present text by the following :

In that part of the Tropical Zone situated in Region 3, 6205.35 kc/s (carrier frequency 6204 kc/s), using class A3H emissions, is designated for call, reply and safety purposes. It may also ... (the rest of the number unchanged).

Reasons :

The carrier frequency of the DSB emission on 6204 kc/s would be retained for SSB emissions, as proposed for 2182 kc/s, Since 6204 kc/s is for use by stations operating with SSB or DSB, class A3H emissions are necessary.

---

F/8(45)

No. 1354 Replace the present text by the following :

For each coast station open to public correspondence the List of Coast Stations shall indicate the frequencies on which watch is maintained.

Reasons :

Consequence of the deletion of No. 452 (F/8(10)).

Ref.

F/8(46) After No. 1355 add the following :

1355a When the amount of traffic requires it and the frequency allotments permit it (Appendix 25), the use of class A3B emissions is authorized. The carrier frequency to be used is the highest carrier frequency in the two adjacent channels allotted.

Reasons :

To clarify the conditions for use of class A3B emissions.

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F/8(47) No. 1356 Delete this number

Reasons :

See Proposal No. F/8(7) relating to No. 449.

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F/8(48) No. 1357 Delete this number

Reasons :

See Proposal No. F/8(7) relating to No. 449.

---

F/8(49) No. 1358 Delete this number

Reasons :

The technical characteristics of SSB transmitters must be stated. See Proposal below (F/8(51)) relating to Appendix 17 A.

G/76(31)

Section III - Bands between 4000 and 23 000 kc/s

under title :

ADD 1351A Unless otherwise specified in these regulations, the class of emission to be used shall be class A3A or class A3J using the upper sideband mode and a bandwidth not exceeding 2.7 kc/s; the normal method of operation for each coast station shall be indicated in the List of Coast Stations.

Reasons :

To specify the types of emission and use of the upper sideband mode in all cases.



Ref.

G/77(42) SUP 1352

Reasons :

Consequential upon the deletion of Section B, Appendix 15, and modification of No. 453 (G/77(39) above).

Under "B. Watch"

G/78(95) ADD 1353A § 15 (bis) The hours of service of coast stations open to public correspondence and the frequency or frequencies on which watch is maintained shall be indicated in the List of Coast Stations.

Reasons :

To provide for watchkeeping arrangements.

G/77(42) SUP 1354

Reasons :

Consequential upon deletion of No. 1352.

SUP 1356 and 1357

Reasons :

Consequential upon the deletion of Section B, Appendix 15.

G/76(31) MOD 1358 (4) Equipment intended for use on radio-telephony in these bands should conform to the Recommendations of the C.C.I.R. and other technical standards in Appendix 17A.

Reasons :

To provide for single sideband operation.

Ref.

HOL/72(11)

Article 35

See also proposals relating to Agenda Item 1 (HOL/70(4), Document No. 70).

Section III. Bands between 4000  
and 23000 kc/s

A. Call, Reply and Safety

MOD 1352

§14. In the bands authorized for radio-  
telephony, ship stations may use, for  
calling, one of the following frequencies :

	<u>4140.5</u> kc/s
8269	<u>8284.5</u> kc/s
<del>12403.5</del>	<u>12429</u> kc/s
<del>16533.5</del>	<u>16573</u> kc/s
22074	<u>22096</u> kc/s

Reasons :

See proposal relating to No. 450 (HOL/72(9)).

SUP 1356

Reasons :

After the mandatory conversion to single sideband  
No. 1356 is unnecessary.

MOD 1357

(2) Administrations may assign these the  
frequencies of Section B of Appendix 15  
to ships of any category according to traffic  
requirements and to coast stations for single  
sideband single channel simplex operation.  
Such stations shall not use a power in excess  
of 1 kW peak envelope power.

Reasons :

See proposal relating to Agenda Item 3, No. 449  
(HOL/72(9)).

---

Ref.

I/33(21)

As a consequence of the suppression of Section B of present Appendix 15, delete No. 1352 in Article 35.

In Proposal No. I/33(18) it is suggested that the band limits for radiotelegraph coast stations be modified. It is therefore necessary to adopt provisions to allow for the maintaining of the date in the appropriate part of Column 2 to these of the assignments recorded in the Master Register, that must be reallocated. To this end, insert the following Resolution in the Radio Regulations.

I/31(6)

In Section III of Article 35 delete Nos. 1356, 1357 and 1358

Reasons :

Consequently to the new arrangement of Appendices 15 and 17 proposed under Agenda item No. 3, (Document No. 33) prescriptions of Nos. 1356 through 1358 are to be deleted.

J/84(25)

SUP 1352

Reasons :

Consequential to the proposed amendment of Nos. 449 (J/84(3)) and 450 (J/84(4)).

J/84(26)

MOD 1354

§16. For each coast station open to public correspondence, the List of Coast Stations shall indicate the frequencies on which watch is maintained.

Reasons :

Consequential to the proposed amendment of Nos. 449 (J/84(3)) and 450 (J/84(4)).

J/84(27)

MOD 1355

§17. (1) For the conduct of duplex telephony, the frequencies of emission of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Section A of Appendix 17.

Reasons :

Consequence of changing the Table of Transmitting Frequencies of APPENDIX 17 into SECTION A of APPENDIX 17.

Ref.

J/84(28)      MOD      1356      (2) The single sideband working frequencies given in Section B of Appendix 17 are used for the conduct of simplex telephony. However, the class of emissions is limited to A3J. In addition, the peak envelope power of coast station transmitters using these frequency bands shall not exceed 1 kW ( $P_p$ ).

Reasons :

For conversion to SSB system of DSB system for the maritime mobile radiotelephony, it is desirable to use frequency bands in new Section B of Appendix 17 for communications between ships or between ship and land for simplex operation, and for efficient utilization of these frequency bands, to limit emissions to class A3J emissions and restrict power for use in a coast station to 1 kW ( $P_p$ ).

J/84(29)      SUP      1357

Reasons :

Consequential to the proposed amendment of Appendix 15.

J/84(30)      SUP      1358

Reasons :

See proposal relating to No. 1322A (J/84(17)).

USSR/49(3)      Item 2.2 :

It is recommended that the possibility be considered of improving the safety service by allocating for radiotelephone traffic between ships engaged in search and rescue operations an additional frequency in the 3155 - 3200 kc/s band, for example 3158  $\pm$  3 kc/s, used exclusively by the Maritime Mobile Service; this would be at the expense of the mobile and fixed stations. It is also recommended that the right to use frequency 6204 kc/s for this service (see No. 1353 of the Radio Regulations) be extended to all regions of the world.

Ref.

USA/16(8)	NOC	1352 and 1353	A. Call, reply and safety
	NOC	1354	B. Watch
USA/16(9)	NOC	1355	
	SUP	1356	
	MOD	1357	(2) Administrations may assign <u>these the frequencies of Section B of</u> <u>Appendix 15 to ships of any category according</u> <u>to traffic requirements and to coast stations</u> <u>for single sideband single channel simplex</u> <u>operation. Such stations shall not use power</u> <u>in excess of 1 kW P<sub>p</sub>.</u>
	SUP	1358	

Reasons :

To provide for the simplex use by coast stations of the frequencies of Appendix 15B to the Radio Regulations. To delete No. 1358, consequential to the insertion of Section E below (USA/16(11)).

USA/17(14)

Amend No. 1357 to permit the use of the 6 Mc/s SSB channels contained in Appendix 15, Section B, by both coast and ship radiotelephone stations on a simplex basis. (See U.S. proposals in response to Agenda Item 1, Document No. 16).

Reasons :

The 6 Mc/s SSB frequencies referred to in No. 449 and in Appendix 15, Section B, are available only to ship stations and are therefore of limited usefulness to administrations having little or no requirement for HF intership communication. Amendment of No. 1357 as indicated would provide for both coast and ship stations using SSB radiotelephony.

Ref.

Use on board ships of frequencies of the order of 27 MHz

F/15(91)

Article 35 - Insert the following Section III bis :

Section III bis - Bands between 26.1 and 27.5 MHz

1358 a) Frequencies in the 26.960 - 27.280 MHz band may be used for radiotelephony between different parts of a ship. The carrier wave power may not exceed 0.05 watt. The provisions of No. 225 shall apply.

Reasons :

To permit the use of low-power portable equipment operating in the 27 MHz band for very short-distance intercommunication on board ship.

F/109(105)

ADD

1359A

"(1 bis) the frequency 156.80 Mc/s is used in class F2 emission by coast stations for selective calls to ships."

---

Ref.

I/31(7)

Add to Section III of Article 35 the following new para. D

D. Conversion to single sideband

- ADD 1358-AA Para. 17(bis) (1) The following schedule shall be applicable when converting coast and ship stations on maritime radiotelephone channels from double to single sideband :
- ADD 1358-AB a) date from which coast stations shall be able to transmit with single sideband : 1 January 1971;
- ADD 1358-AC b) date on which coast stations shall discontinue A3 emissions : 1 January 1971;
- ADD 1358-AD c) date from which no more new double sideband equipments on board ships shall be installed : 1 January 1971;
- ADD 1358-AE d) date on which ship stations shall discontinue A3 emissions : 1 January 1977.
- ADD 1358-AF During the period of transition from double sideband to single sideband, coast stations shall be able to use full carrier (A3H) emissions to permit communication with both double sideband and single sideband radiotelephone stations.

I/31(8)

Add to Section III of Article 35 the following new para. E

E. Technical and operational provisions relating to use of single sideband

- ADD 1358-BA Para. 17(ter). (1) Definitions of carrier modes :

Carrier mode	Level N (db) of the carrier with respect to peak envelope power
Full carrier (A3H)	$0 \geq N \geq -6$
Reduced carrier (A3A)	$-6 > N \geq -26$
Suppressed carrier (A3J)	$-26 > N$

Ref.

I/31(8)  
(contd.)

- |     |         |   |
|-----|---------|---|
| ADD | 1358-BB | (2) Mode of operation   |
| ADD | 1358-BC | Coast and ship station transmitters shall be capable of reducing carriers to the following levels below peak envelope power :<br><br>a) 16 db $\pm$ 2 db for A3A emissions;<br><br>b) not less than 40 db for A3J emissions.  |
| ADD | 1358-BD | c) In actual operation, ship and coast stations shall utilize the carrier levels indicated, respectively, for A3H, A3A and A3J.   |
| ADD | 1358-BE | Coast and ship station transmitters shall be capable of operating in A3H, A3A and A3J.  |
| ADD | 1358-BF | After 1 January 1977, A3H will no longer be required.   |
| ADD | 1358-BG | (3) The carrier frequency of transmitters shall be maintained within the following tolerances :<br><br>a) Coast stations : $\pm$ 20 cycles per second;<br><br>b) Ship stations : $\pm$ 100 cycles per second.<br><br>i) The short-term limits (of the order of 15 minutes) of ship stations shall $\pm$ 40 cycles per second. |
| ADD | 1358-BH |   |
| ADD | 1358-BI |   |
| ADD | 1358-BJ |   |
| ADD | 1358-BK | (4) Coast and ship stations shall use upper sideband emissions.   |
| ADD | 1358-BL | (5) The transmitter audio-frequency band shall be 350 to 2700 c/s per second, with a permitted amplitude variation of 6 db.   |
| ADD | 1358-BM | (6) The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.   |



Ref.

I/31(8)  
(contd.)

ADD 1358-BN

- (7) When using single sideband A3H, A3A or A3J transmissions the mean power of any emission supplied to the antenna transmission line of a coast or ship station on any discrete frequency, shall be less than the mean power ( $P_m$ ) of the transmitter in accordance with the following table :

ADD 1358-BO

Frequency separation $\Delta$ from the assigned frequency kc/s	Minimum attenuation below mean power ( $P_m$ ) db
$1.75 < \Delta \leq 5.25$	25
$5.25 < \Delta \leq 8.75$	35
$8.75 < \Delta$	$43 + 10 \log_{10} P_m (\text{Watts})$

ADD 1358-BP

Para. 17(quarter) (1) Channel utilization

ADD 1358-BQ  
[Transferred  
from Appendix 17,  
para. 3 and  
modified]

- a) A station employing single sideband emissions shall be considered to be in accordance with the Table of Appendix 17 if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for single sideband emissions in accordance with the Table.

ADD 1358-BR  
[Transferred  
from Appendix 17,  
para. 3 and  
modified]

- b) A station employing independent sideband emissions shall be considered to be in accordance with the Table of Appendix 17 if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double sideband emissions in accordance with the Table.

ADD 1358-BS  
[Transferred  
from Appendix 17,  
para. 3 and  
modified]

- c) Stations employing double sideband emissions (A3) or two channel independent sideband emissions (A3B) shall operate with assigned frequencies of the appropriate values listed in the Table of Appendix 17 for A3 emissions.

Ref.

- I/31(8)  
(contd.)
- ADD 1358-BT d) Stations employing single sideband single  
/Transferred channel emissions (A3A, A3H or A3J) shall  
from Appendix 17, operate with assigned frequencies at the  
para. 3.2 and appropriate values listed in the Table of  
modified/ Appendix 17.1)
- ADD 1358-BU (2) Assigned frequency.
- ADD 1358-BV a) The assigned frequency of a station employing  
single sideband (A3A, A3H or A3J) will be  
1400 c/s per second higher than the carrier  
frequency. Both assigned and carrier frequen-  
cies are shown in the Table of Appendix 17.
- ADD 1358-BW b) If an administration assigns frequencies  
/Transferred other than those indicated above, its  
from Appendix 17, radiotelephone service shall not cause harmful  
para. 4/ interference to radiotelephone stations of  
the maritime mobile service which use frequen-  
cies assigned to them in accordance with  
Appendix 17.
- 
- ADD 1358.1-BT Independent sideband emission may be used by  
agreement between the administrations concerned  
and affected in those instances where adjacent  
single sideband channels are assigned to a coast  
station.

Reasons :

Such modifications are a consequence of the conversion to single sideband technique of maritime mobile stations operating in the band between 1605 and 4000 kc/s.

Ref.

USA/16(10)

ADD

D. Conversion to Single Sideband

ADD

1358AA

17(bis). (1) The following schedule shall be applicable in converting coast and ship stations on maritime mobile radiotelephone channels from double sideband to single sideband :

ADD

1358AB

a) Discontinue installation of double sideband equipment on ship stations by 1 January 1970;

ADD

1358AC

b) Discontinue use by coast stations of double sideband emission by 1 January 1970;

ADD

1358AD

c) Discontinue use by ship stations of double sideband emission and by coast stations of full carrier (A3H) emission on 1 January 1974.

ADD

1358AE

(2) During the period of transition from double sideband to single sideband, coast stations shall have the capability of using full carrier (A3H) emission to permit communication with both double sideband and single sideband radiotelephone ship stations.

Reasons :

To provide a specific schedule for the mandatory transition from double to single sideband.

Background :

The new sub-Section "D" is proposed for addition to Article 35 as a means of including in the Radio Regulations mandatory provisions for the transition of the maritime mobile service to single sideband and the discontinuance of double sideband in accordance with a specific schedule. The date of 1974 has been selected to allow a period of seven years, from the date of the W.A.R.C., for completion of the transition to single sideband.

Ref.

USA/16(10)  
(contd.)

The national regulations of the U.S. provide for the transition from double to single sideband to be completed by 1 January 1974, on a mandatory basis.

USA/16(11)

ADD

E. Technical and operational provisions  
relating to use of single sideband

ADD

1358BA § 17(ter).(1) Definitions of carrier modes :

<u>Carrier mode</u>	<u>Level N(db) of the carrier with respect to peak envelope power</u>
<u>Full carrier (A3H)</u>	<u><math>0 \geq N \geq -6</math></u>
<u>Reduced carrier (A3A)</u>	<u><math>-6 &gt; N \geq -26</math></u>
<u>Suppressed carrier(A3J)</u>	<u><math>-26 &gt; N</math></u>

ADD

1358BB

(2) Mode of operation :

ADD

1358RC

a) Coast station transmitters shall be capable of operation with class A3A emission having a carrier reduction of  $16 \pm 2$  db below peak envelope power and class A3J emission having a carrier reduction of not less than 40 db below peak envelope power.

ADD

1358BD

b) Ship station transmitters shall be capable of operation with class A3A emission having a carrier reduction of  $16 \pm 2$  db below peak envelope power and class A3J emission having a carrier reduction of not less than 40 db below peak envelope power.

Ref.

USA/16(11)  
(contd.)

ADD 1358BE

c) In actual operation, ship and coast stations shall utilize the carrier levels indicated respectively for the modes employed.

ADD 1358BF

d) Notwithstanding the provisions of a), b) and c) above, stations operating solely under the provision of No. 1357 may be equipped for class A3J emission only.

ADD 1358BG

(3) The carrier frequency of transmitters shall be maintained within the following tolerances :

ADD 1358BH

a) Coast stations :  
± 20 c/s per second;

ADD 1358BI

b) Ship stations :  
± 100 c/s per second;

i) The short term limits (of the order of 15 minutes) of ship stations shall be ± 40 c/s per second.

ADD 1358BJ

(4) Coast and ship stations shall use upper sideband emissions.

ADD 1358BK

(5) The transmitter audio-frequency band shall be 350 to 2700 c/s per second, with a permitted amplitude variation of 6 db.

ADD 1358BL

(6) The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.

ADD 1358BM

(7) When using single sideband A3H, A3A or A3J emission the mean power of any emission supplied to the antenna transmission line of a coast or ship station on any discrete frequency, shall be less than the mean power (Pm) of the transmitter in accordance with the following table :

Ref.

USA/16(11)  
(contd.)

ADD 1358BN

<u>Frequency separation <math>\Delta</math> from the assigned frequency kc/s</u>	<u>Minimum attenuation below mean power (<math>P_m</math>) db</u>
$1.75 < \Delta \leq 5.25$	25
$5.25 < \Delta \leq 8.75$	35
$8.75 < \Delta$	$43 + 10 \log_{10} P_m (\text{Watts})$

ADD 1358BO 17(quarter). (1) Channel utilization

MOD 1358BP  
/Transferred from  
Appendix 17,  
paragraph 3/

a) ~~Assignments-to~~ A stations  
utilizing single side-  
band ~~or independent-side-~~  
band emissions shall be  
considered to be in  
accordance with the Table  
of Appendix 17 if the  
necessary bandwidth does  
not extend beyond the  
upper or lower limits of  
the bandwidth provided  
for ~~double~~ single sideband  
emissions in accordance  
with the Table of  
Appendix 17.

MOD 1358BQ  
/Transferred from  
Appendix 17,  
paragraph 3/

b) ~~Assignments-to~~ A stations  
utilizing ~~single-side-~~  
band ~~or~~ independent  
sideband emissions shall  
be considered to be in  
accordance with the Table  
of Appendix 17 if the  
necessary bandwidth does  
not extend beyond the  
upper or lower limits of  
the bandwidth provided  
for double sideband  
emissions in accordance  
with the Table of  
Appendix 17.

Ref.

USA/16(11)  
(contd.)

MOD 1358BR  
/Transferred from  
Appendix 17,  
paragraph 3.1/

c) Stations employing double sideband emissions (A3) or two channel independent sideband emissions (A3B) ~~should~~ shall operate with assigned frequencies at the appropriate values listed in column 4 or 9 of the Table of Appendix 17.

MOD 1358BS  
/Transferred from  
Appendix 17,  
paragraph 3.2/

d) Stations using single sideband single channel emissions (A3A, A3H or A3J) ~~should~~ shall operate either in the upper half or in the lower ~~half of the~~ channels ~~designated by the center~~ with assigned frequencies at the appropriate values listed in columns 2, 5, 7 or 10 of the Table of Appendix 17.1)

ADD 1358BT

(2) Assigned frequency

ADD 1358BU

a) The assigned frequency of a station employing single sideband (A3A, A3H or A3J) will be 1400 c/s per second higher than the carrier frequency. Both assigned and carrier frequencies are shown in the Table of Appendix 17.

ADD 1358.1BS

1) Independent sideband emission may be used by agreement between administrations concerned and affected in those instances where adjacent single sideband channels are assigned to a coast station.

Ref.

USA/16(11)  
(contd.)

MOD 1358BV  
/Transferred from  
Appendix 17,  
paragraph 4/

- b) If an administration assigns frequencies other than those indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with ~~this~~ Appendix 17.

ADD 1358BW 18(quinquies) The classes of emission used as the normal methods of operation for each coast station shall be indicated in the List of Coast Stations.

Reasons :

To include in the Radio Regulations technical and operational provisions necessary to support the transition to single sideband in the bands between 4000 and 23 000 kc/s.

Background :

The technical characteristics follow those developed by the C.C.I.R. XI Plenary Assembly, Oslo, 1966.

USA/55(51)

MOD 1363 (5) All emissions in the band ~~156.725~~ 156.7625 - ~~156.875~~ 156.8375 Mc/s capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.80 Mc/s are forbidden.

Reasons :

To provide for the reduction of the guard band on each side of 156.80 Mc/s.

Background :

Nos. 287 and 1363 of the Radio Regulations, Geneva, 1959, provide guard bands, including the communication channel of 156.80 Mc/s, from 156.725 to 156.875 Mc/s. With inclusion in the Radio Regulations of provision for permissible use of the intermediate channels between those appearing in Appendix 18, it is appropriate to also reduce the guard bands of 156.80 Mc/s. Accordingly, it is proposed that Article 5 (No. 287) and Article 35 (No. 1363) be amended to reduce the guard bands to 37.5 kc/s either side of 156.80 Mc/s in lieu of the existing 75 kc/s.



Ref.

- USA/55(46)      ADD      1363A      (6) The frequency 156.65 Mc/s is designated as the navigational communication channel (see Nos. 37A, 1363B and 1363C).
- ADD      1363B      (7) The navigational communication channel (see No. 1363A) may be used for both calling and working and may be specified for such use by administrations.
- ADD      1363C      (8) To facilitate a continuous watch on the navigational communication channel 156.65 Mc/s, administrations should encourage the provision by their ship stations of a separate capability for this purpose.

Reasons :

To designate 156.65 Mc/s for use on a world-wide basis for navigational communications.

Background :

Coordination is currently in process to include in U.S. statutes, applicable to various classes of vessels when underway or engaged in operations on certain of the navigable waters of the U.S., a mandatory requirement to carry VHF radiotelephone equipment capable of operating on a frequency within the band 156 to 174 Mc/s for the exchange of navigational information. This channel would be designated exclusively for navigational communications and would include the following uses :

- a) To enable persons directing the movement of vessels to communicate with one another, with the operators of bridges, locks or other shore based installations and floating plants that physically restrict or affect vessel movements, so as to inform one another of their intentions and resolve manoeuvring situations between approaching vessels.
- b) To enable shore stations to relay navigational information between approaching vessels whenever physical conditions prevent direct communication between them and the information is necessary for navigational safety. Brief transmissions containing the following types of information are necessary for safety of navigation and are contemplated for :
  - 1) Departure from a pier, dock or anchorage;
  - 2) Entry into a confined waterway;
  - 3) Estimated time of arrival at a pier, dock or anchorage;
  - 4) Taking on and discharging of pilots.
- c) To enable all stations to communicate as necessary while on the scene during a maritime distress or emergency.

Ref.

USA/55(46)  
(cont.)

The usage of the radiotelephone on the navigational information frequency would be limited to persons engaged in piloting and directing the movement of the vessel. Such vessels would be required to maintain a listening watch on the navigational communications channel. VHF equipment installed aboard such vessels would be required to be maintained in effective operating condition. The proposed amendment of Appendix 18 and the inclusion in Article 1 (No. 37A) of the definition of "navigational communications" is intended to provide world-wide availability of a common channel for this purpose.

G/78(95)ADD

1367A

(5) However, when within the service area of a Port Operations Coast Station, ship stations may maintain watch either on 156.80 Mc/s or on the appropriate port operations channel if watch cannot be maintained on both.

Reasons :

To permit watch being maintained on a port operations channel when in an area served by a port operations service.

Proposals relating to

Article 36

Distress Signal and Traffic.

Alarm, Urgency and Safety Signals

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Section III. Distress Call and Message

Nº 1393

### Section I. General

**1387** § 5. (1) The characteristics of the radiotelegraph alarm signal are given in No. 1463.

**1388** (2) The characteristics of the radiotelephone alarm signal are given in No. 1465.

### Section II. Distress Signal

**1389** § 6. (1) The radiotelegraph distress signal consists of the group - - - — - - - , symbolized herein by SOS, transmitted as a single signal in which the dashes are emphasized so as to be distinguished clearly from the dots.

**1390** (2) The radiotelephone distress signal consists of the word MAYDAY pronounced as the French expression "m'aider".

**1391** (3) These distress signals indicate that a ship, aircraft or other vehicle is threatened by grave and imminent danger and requests immediate assistance.

### Section III. Distress Call and Message

**1392** § 7. (1) The distress call sent by radiotelegraphy consists of :  
— the distress signal SOS, sent three times ;  
— the word DE ;  
— the call sign of the mobile station in distress, sent three times.

**1393** (2) The distress call sent by radiotelephony consists of :  
— the distress signal MAYDAY, spoken three times ;  
— the words THIS IS ;  
— the call sign or other identification of the mobile station in distress, spoken three times.

Proposals relating to  
Article 36

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Section III.  
(continuation)

**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. When practicable, the true bearing and distance in nautical miles from a known geographical position may be given.

**1399** (3) As a general rule, an aircraft in flight shall signal its position either in radiotelephony or radiotelegraphy :

- by 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 ; or
- by the name of the nearest place, and its approximate distance in relation thereto, together with one of the words NORTH, SOUTH, EAST or WEST, as the case may be, or when practicable, by words indicating intermediate directions.

**1400** (4) However, in radiotelegraphy, the words NORTH or SOUTH and EAST or WEST, indicated in Nos. **1397** and **1399**, may be replaced by the letters N or S and E or W.

Ref.

G/60(22) ADD 1388A §5(bis) The characteristics of the emergency position-indicating radio-beacon signals are given in Nos. 1476B and 1476C.

Reasons :

Consequential upon the introduction of emergency position-indicating radio-beacon stations.

Section I - General

HOL/75(24) ADD 1388 A (3) The characteristics of the emergency position-indicating radio beacon signal employed by survival craft stations are given in Nos. 1476 B, 1476 C and 1476 D.

Reasons :

To include in the Radio Regulations the Recommendation of the C.C.I.R. concerning the use of emergency position-indicating radio beacons on 2182 kc/s, as well as the recommended practices adopted by I.C.A.O. concerning survival radio equipment on the frequencies 121.5 Mc/s and 243 Mc/s.

RFA/94(24) ADD 1388A § 5.(3) The characteristics of the signals of floatable emergency position-indicating radio beacons are given in Article 36, Section VIII A.

DNK/38(9) MOD 1393 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

Reasons :

To provide ways and means of communication in radiotelephony when language difficulties arise.

USA/21(41) MOD 1393 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1393.1 1) Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

Ref.

J/88(61)

ADD

1400A

(5) In radiotelephony, in cases of language difficulties, the expressions in Nos. 1397 or 1399 should be replaced by the following expressions :

Latitude

Code letter L (Lima) followed by a four figure group (2 figures for degrees, 2 figures for minutes).

Longitude

Code letter G (Golf) followed by a five figure group (3 figures for degrees, 2 figures for minutes).

If necessary, N (November) for Latitude North, or S (Sierra) for Latitude South, and either E (Echo) for Longitude East, or W (Whiskey) for Longitude West should be sent immediately following the figure group.

Reasons :

It is necessary to clarify what is to be used as one signal in case of radiotelegraphy communications, or the use of the same abbreviation different in meaning between the Radio Regulations and the revised International Code of Signals.



Proposals relating to  
Article 36

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Section IV. Distress Call and Message  
Transmission Procedure

N° 1408

**Section IV. Distress Call and Message Transmission Procedure**

*A. Radiotelegraphy*

**1401** § 11. (1) The radiotelegraph distress procedure shall consist of :

**1402** — the alarm signal ; followed in order by :

**1403** — the distress call and an interval of two minutes ;

**1404** — the distress call ;

**1405** — the distress message ;

**1406** — two dashes of ten to fifteen seconds duration each ;

**1407** — the call sign of the station in distress.

**1408** (2) However, when time is vital, the second step of this procedure (No. 1403) or even the first and second steps (Nos. 1402 and 1403), may be omitted. These two steps of the distress procedure may also be omitted in circumstances where transmission of the alarm signal is considered unnecessary.

Ref.

F/111(160)      MOD      1408      Replace the end of the first sentence by :  
..... may be omitted or shortened.

Reasons:

The present provisions of number 1408 enable the procedures specified in numbers 1402 and 1403 to be omitted when it is vital to save time. In some circumstances it should be possible to be able to reduce the length of the procedures specified in numbers 1402 and 1403.

In receivers fitted with automatic alarm devices, the alarm devices are generally actuated after three or four dashes at most. The interval of 2 minutes (number 1403) between distress calls can be reduced and still be effective since some ship station operators will be in a position to listen in within a very short time after the ships have received the alarm signal.

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Proposals relating to  
Article 36

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Section V. Acknowledgment of Receipt  
of a Distress Message

N° 1426, 1430 and 1432

Section VI. Distress Traffic

N° 1451

Section VII. Transmission of a Distress Message  
by a Station not itself in Distress

N° 1460

Section VIII. Radiotelegraph and Radiotelephone  
Alarm Signals

N° 1470, 1472 and 1474

## Section V. Acknowledgment of Receipt of a Distress Message

**1425** § 21. (1) Stations of the mobile service which receive a distress message from a mobile station which is, beyond any possible doubt, in their vicinity, shall immediately acknowledge receipt.

**1426** (2) However, in areas where reliable communications with one or more coast stations are practicable, ship stations may defer this acknowledgment for a short interval so that a coast station may acknowledge receipt.

**1428** § 22. The acknowledgment of receipt of a distress message shall be given in the following form :

**1430** b) Radiotelephony :

- the call sign or other identification of the station sending the distress message, spoken three times ;
- the words THIS IS ;
- the call sign or other identification of the station acknowledging receipt, spoken three times ;
- the word RECEIVED ;
- the distress signal.

**1431** § 23. (1) Every mobile station which acknowledges receipt of a distress message shall, on the order of the master or person responsible for the ship, aircraft or other vehicle, transmit, as soon as possible, the following information in the order shown :

- its name ;
- its position in the form prescribed in Nos. **1397**, **1399** and **1400** ;
- the speed at which it is proceeding towards, and the approximate time it will take to reach, the mobile station in distress.

**1432** (2) Before sending this message, the station shall ensure that it will not interfere with the emissions of other stations better situated to render immediate assistance to the station in distress.

## Section VI. Distress Traffic

**1449** § 34. (1) When distress traffic has ceased, or when silence is no longer necessary on a frequency which has been used for distress traffic, the station which has controlled this traffic shall transmit on that frequency a message addressed "to all stations" indicating that normal working may be resumed.

**1451** (3) In radiotelephony, this message consists of :

- the distress signal MAYDAY ;
- the call "to all stations", spoken three times ;
- the words THIS IS ;
- 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".

Proposals relating to  
Article 36

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(continuation)

Sections VII and VIII

**Section VII. Transmission of a Distress Message by a Station  
not itself in Distress**

**1457** (2) This transmission of the distress message shall always be preceded by the call indicated below, which shall itself be preceded whenever possible by the radiotelegraph or radiotelephone alarm signal.

**1458** (3) This call consists of :

**1459** a) Radiotelegraphy :

- the signal  $\overline{DDD} \overline{SOS} \overline{SOS} \overline{SOS} \overline{DDD}$  ;
- the word DE ;
- the call sign of the transmitting station, sent three times.

**1460** b) Radiotelephony :

- the signal MAYDAY RELAY pronounced as the French expression "m'aider relais", spoken three times ;
- the words THIS IS ;
- the call sign or other identification of the transmitting station, spoken three times.

**Section VIII. Radiotelegraph and Radiotelephone Alarm Signals**

**1465** § 40. (1) The radiotelephone alarm signal consists of two substantially sinusoidal audio frequency tones transmitted alternately. One tone shall have a frequency of 2 200 cycles per second and the other a frequency of 1 300 cycles per second, the duration of each tone being 250 milliseconds.

**1466** (2) The radiotelephone alarm signal, when generated by automatic means, shall be sent continuously for a period of at least thirty seconds but not exceeding one minute ; when generated by other means, the signal shall be sent as continuously as practicable over a period of approximately one minute.

**1470** § 42. (1) These signals shall only be used to announce :

**1471** a) that a distress call or message is about to follow ; or

**1472** b) the transmission of an urgent cyclone warning. In this case they may only be used by coast stations duly authorized by their government ; or

**1473** c) the loss of a person or persons overboard. In this case they may only be used when the assistance of other ships is required and cannot be satisfactorily obtained by the use of the urgency signal only, but the alarm signal shall not be repeated by other stations. The message shall be preceded by the urgency signal (see Nos. **1477** and **1478**).

**1474** (2) In cases described in Nos. **1472** and **1473**, the transmission of the warning or message by radiotelegraphy shall not begin until two minutes after the end of the radiotelegraph alarm signal.



Ref.

F/111(161)      MOD      1426      Third line :  
Replace : "may defer"  
by      : "should defer".

Reasons:

The coast station should be able to acknowledge receipt of the call without difficulty.

---

Add the following number 1427A :

F/111(162)      ADD      1427A      Stations in the mobile service which receive a distress message from a mobile station which, beyond any possible doubt, is a long distance away, need not acknowledge receipt of messages except as specified in number 1455.

Reasons:

To obviate unnecessary acknowledgements.

---

Ref.

1430 Read :

DNK/38(10) MOD 1430 - the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

- the word RECEIVED (or RRR spoken as ROMEO ROMEO ROMEO in case of language difficulties);

Reasons :

To permit the use of the abbreviations in radiotelephony when language difficulties arise.

F/13(77) MOD 1430 Throughout the texts of this number, replace the word "received" by the letter "R" (ROMEO).

Reasons :

The letter "R" (ROMEO) which is already used in radiotelegraphy (Appendix 13, section II) and contemplated for use in radiotelephony in the I.M.C.O. revised International Code of Signals seems to be phonetically preferable to the word "received", and has the advantage of international usage.

USA/21(41) MOD 1430 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1430.1 1) Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

RFA/93(19) ADD 1431A (2) If the bearings taken of the ship in distress give reason to doubt the correctness of the position indicated by the radio station in distress in accordance with Nos. 1395 or 1396, any radio station in the mobile service can, on the order of the master or person responsible for the ship, aircraft, vehicle or radio direction-finding station, transmit the results of the bearings or the position determined by radio direction-finding in the following order :

a) - - QTE the name or call sign of the radio station in distress;

the time of the bearing;

the true bearing of the radio station in distress (if indicated, classification in accordance with Appendix 23 § 8.(3));

Ref.

RFA/93(19)  
(cont.)

- - QTH the name or call sign of the  
radio direction-finding station;

the position at the time of  
bearing (if indicated, with the  
following classification :

F = position of the transmitting  
station accurate to within  
3 to 5 nautical miles;

G = position of the trans-  
mitting station accurate  
to within 5 to 10  
nautical miles).

b) - - QTF the name or call sign of the  
radio station in distress;

the time of determination of  
the position;

the determined position of the  
radio station in distress (if  
indicated, with classification  
in accordance with Appendix 23  
§ 8.(3)).

- - QRA the name or call sign of the  
control station.

MOD 1432 (3) Before sending one of these messages,  
the station shall .....(the rest unchanged).

Reasons : In many distress cases this information can contribute  
to a more accurate indication of the position of the ship in  
distress and thus facilitate the search for that ship.

G/59(9) ADD 1433A §24(bis) When there are language difficulties,  
the International Code of Signals should be used.

Reasons :

To provide for the use of the International Code of  
Signals.

F/111(163) ADD 1448A If the person in charge of the station in  
distress considers that silence is no longer  
justified, he should transmit or have  
transmitted without delay the message referred  
to in numbers 1450 or 1451.

Reasons: To draw attention to the possibility of  
re-establishing normal traffic.

DNK/38(11) MOD 1451 - the words THIS IS (or DE spoken as DELTA ECHO  
in case of language difficulties);

F/13(78) MOD 1451 Throughout the text of these numbers, replace the words "hullo all stations" by "CQ" (CHARLIE QUEBEC)

Reasons :

The abbreviation "CQ" is already used in radiotelegraphy (Appendix 13, section II) and contemplated for use in the revised International Code of Signals, and it offers the advantage of international usage.

USA/21(41) MOD 1451 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1451.1 <sup>1)</sup> Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

DNK/38(12) MOD 1460 the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);

USA/21(41) MOD 1460 after "THIS IS"  
add the note 1)

USA/21(41) ADD 1460.1 <sup>1)</sup> Where language difficulty is encountered, International Code of Signals DELTA ECHO may be used in lieu of THIS IS.

G/78(96) ADD 1462A § 38 (bis) A mobile station should not acknowledge receipt of a distress message transmitted by a land station under the conditions mentioned in Nos. 1452 to 1455 until the Master or person responsible has confirmed that the mobile station concerned is in a position to render assistance.

Reasons :

To avoid unnecessary acknowledgements which could interfere with distress working.

RFA/94(25) ADD 1466A (3) The use of the radiotelephone alarm signal by floatable emergency position-indicating radio beacons is described in Article 36 Section VIII A.

RFA/94(26) ADD 1473A (1 A) The radiotelephone alarm signal may be used by floatable emergency position-indicating radio beacons of Type "H" No. 1476D.

F/14(82) Replace the present text by the following :

1470 (1) These signals shall only be used to announce (see also Nos. 1476 c, 1476 e and 1476 f).

Ref.

F/111(164)      MOD      1472      Add at the end :

The warning should be preceded by the safety signal (see numbers 1488 and 1489).

Reasons:

Useful addition. Note analogy with number 1473.

---

F/111(165)      MOD      1474      Replace by the following :

(2) In the cases referred to in numbers 1472 and 1473, an interval of two minutes shall, if possible, separate the end of the radio-telegraph alarm signal and the beginning of the warning or the message.

Reasons:

When time is short (man overboard, for example), the interval of two minutes is impracticable.

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Proposals relating to  
Article 36

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Introduction of a new Section VIII A

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Ref.

DNK/ISL/NOR/30(2)

Section VIII (bis). Survival Craft Beacon Signals

- ADD 1476A § 44 (bis). (1) The position-indicating beacon signal employed by survival craft stations consists of:
- ADD 1476B a) a keyed emission modulated by a tone of 1300 c/s ( $\pm 20$  c/s) having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between 1 and 5 seconds:
- or,
- ADD 1476C b) the radiotelephone alarm signal. The Morse letter "B" and/or the call sign of the ship to which the beacon belongs, should be included by keying the carrier modulated by a tone of 1300 c/s ( $\pm 20$  c/s) or of 2200 c/s ( $\pm 35$  c/s);
- or,
- ADD 1476D c) a swept tone modulation sweeping downward over a range of not less than 700 c/s, within the range 1600 to 300 c/s, with a repetition rate between two and three sweeps per second.
- ADD 1476E (2) The position-indicating beacon signal shall be generated automatically and shall normally be sent continuously. It may be interrupted for radiotelephone transmissions or reception when such a facility is provided.
- ADD 1476F § 44 (ter). This signal shall indicate that a person(s) is in a distress situation, may no longer be on board an aircraft or ship and that receiving facilities may not be available.

Reasons:

To give international regulatory effect to the C.C.I.R. Recommendation concerning emergency position-indicating beacons on 2182 kc/s, as adopted at the XIth Plenary Assembly of the C.C.I.R., Oslo, 1966, and to the Standards and recommended practices adopted by I.C.A.O. concerning survival radio equipment on the frequencies 121.5 and 243 Mc/s. By definition such beacons are considered to fall under the category "Survival Craft Stations" mentioned in No. 41 of the Radio Regulations.

Ref.

Add the following numbers :

- F/14(83)      No.1476a    No. 44A (1) The signals to be used by the position-indicating beacons referred to in No. 999a (see F/14(81)) are as follows :
- F/14(84)      No.1476b    a) either a keyed signal composed of a series of dashes modulated at 1300 Hz of a constant duration of 1 to 5 seconds with intervals lasting, at a maximum, for the same time as the dashes;
- 
- F/14(85)      No.1476c    b) or a radiotelephone alarm signal (No.1465) transmitted for about 30 seconds and followed by the transmission in Morse in Class A2 with a modulating frequency of 1300 Hz or 2200 Hz of either :
- the letter B; or
  - the call sign of the ship to which the beacon belongs; or
  - the above two groups of signals.
- 
- F/14(86)      No.1476d    (2) The signals from the position-indicating beacons are produced automatically; their transmission may be interrupted for the sending or receiving of radiotelephone messages if the apparatus is so equipped.
- F/14(87)      No.1476e    No. 44B (1) The signals defined in paragraph 44A above indicate that one or more people, a ship or an aircraft is in distress and may have no other transmitting medium and no receiving media.
- F/14(88)      No.1476f    (2) Any mobile service station receiving one of these signals, while no distress or urgent traffic is being passed, shall consider that the circumstances are as described in No. 1453.

Reasons :

Insertion in the Regulations of provisions relating to emergency position-indicating beacons (see C.C.I.R. Recommendation No. 439).

Ref.

3/60(23)

ADD Section VIIIA - Emergency position-indicating  
radio-beacon signals

ADD 1476A §44(bis) (1) The emergency position-indicating radio-beacon signal consists of :

ADD 1476B - a keyed emission modulated by a tone of 1300 cycles per second having a ratio of the period of the emission to the period of silence equal to or greater than one, and an emission duration between one and five seconds;

or

ADD 1476C - the radiotelephone alarm signal (see No. 1465) followed by the morse letter 'B' and/or the call-sign of the ship to which the beacon belongs transmitted by keying a carrier modulated by a tone of 1300 cycles per second or of 2200 cycles per second.

ADD 1476D (2) The signal in No. 1476B shall be sent continuously or as in No. 1476C.

ADD 1476E (3) The keying cycle of the signal in No. 1476C shall consist alternately of the keying signal having a duration between thirty and fifty seconds followed by a period of silence having a duration between thirty and sixty seconds.

ADD 1476F (4) However, the keying cycles in Nos. 1476D and 1476E may be interrupted for speech transmission if administrations so desire.

ADD 1476G (5) The purpose of the emergency position-indicating radio-beacon signals is to indicate the position of survivors and to facilitate search and rescue operations.

ADD 1476H (6) These signals shall only be used to assist in the location of survivors either aboard a ship or survival craft in the water.

ADD 1476I (7) Equipment designed to transmit emergency position-indicating radio-beacon signals shall meet the requirements specified in Appendix 20A.

Reasons :

To provide for use of emergency position-indicating radio-beacons.

Ref.

HOL/75(24)

ADD

Section VIII A -  
Survival craft beacon signals

ADD

1476 A

§ 44 (bis) The emergency position-indicating radio beacon signal employed by survival craft stations consists of :

ADD

1476 B

a) a keyed emission modulated by a tone of 1300 cycles per second ( $\pm 20$  c/s), having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between one and five seconds. The keying signal shall be transmitted continuously;

or,

ADD

1476 C

b) the radiotelephone alarm signal. The Morse letter "B" and/or the call sign of the ship to which the beacon belongs should be included by keying a carrier modulated by a tone of 1300 cycles per second ( $\pm 20$  c/s) or 2200 cycles per second ( $\pm 35$  c/s)

The keying cycle shall consist alternatively of the keying signal having a duration between 30 and 50 seconds, and a period of silence having a duration between 30 and 60 seconds;

or,

ADD

1476 D

c) a swept tone modulation sweeping downward over a range of not less than 700 cycles per second, within the range 1600 to 300 cycles per second, with a repetition rate between two and three sweeps per second.

ADD

1476 E

§ 44 (ter) The emergency position-indicating radio beacon signal shall indicate that persons are in a distress situation, may no longer be on an aircraft or ship and that receiving facilities may not be available.

Reasons :

To include in the Radio Regulations the Recommendation of the C.C.I.R. concerning the use of emergency position-indicating radio beacons on 2182 kc/s, as well as the recommended practices adopted by I.C.A.O. concerning survival radio equipment on the frequencies 121.5 Mc/s and 243 Mc/s.

Ref.

I/36(28)

Add to Article 36 the following new Section VIII (bis)

Section VIII (bis). Survival craft beacon signals

- ADD 1476AA § 44 (bis) (1) The position-indicating beacon signal employed by survival craft stations consists of :
- ADD 1476AB a) a keyed emission modulated by a tone of 1300 c/s ( $\pm 20$  c/s) having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between 1 and 5 seconds.
- Or
- ADD 1476AC b) the radiotelephone alarm signal. The Morse letter "B" and/or the call sign of the ship to which the beacon belongs, should be included by keying the carrier modulated by a tone of 1300 c/s ( $\pm 20$  c/s) or of 2200 c/s ( $\pm 35$  c/s). The keying cycle should consist alternatively of the keying signal having a duration between 30 and 50 seconds, and a period of silence having a duration between 30 and 60 seconds.
- Or
- ADD 1476AD c) a swept tone modulation sweeping downward over a range of not less than 700 c/s, within the range 1500 to 300 c/s, with a repetition rate between two and three sweeps per second.
- ADD 1476AE (2) The position-indicating beacon signal shall be generated automatically and normally shall be sent continuously. It may be interrupted for radiotelephone transmissions or reception when this capability is provided.
- ADD 1476B § 44 (ter) This signal shall indicate that a person(s) is in a distress situation, may no longer be on an aircraft or ship and that receiving facilities may not be available.

Background :

The position-indicating beacon signal characteristics specified above are in accordance with C.C.I.R. Recommendation (Doc. XIII/1008 - Oslo, 1966).

Ref.

Add the following next to Article 36,  
Section VIII :

J/89(78)	ADD		<u>Section VIII A. Signals of emergency position-indicating radio beacons</u>
J/89(79)	ADD	<u>1476A</u>	<u>§44a. The signal of an emergency position-indicating radio beacon may consist either of of the following :</u>
J/89(80)	ADD	<u>1476B</u>	<u>(a) A keyed emission modulated by a tone of 1300 c/s (<math>\pm 20</math>c/s) having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between 1 and 5 seconds.</u>
J/89(81)	ADD	<u>1476C</u>	<u>(b) The radiotelephone alarm signal accompanied by the Morse letter "B" and/or the identification (including the call sign of the ship to which the beacon belongs) by keying a carrier modulated by a tone of 1300 cycles (<math>\pm 20</math> c/s) or of 2200 cycles (<math>\pm 35</math> c/s) (see No. 1465).</u>
J/89(82)	ADD	<u>1476D</u>	<u>The keying signal given in No. 1476B should be transmitted continuously.</u>
J/89(83)	ADD	<u>1476E</u>	<u>The signal given in No. 1476C should consist alternately of the keying signal having a duration between 30 and 50 seconds, followed by a period of silence having a duration between 30 and 60 seconds.</u>
J/89(84)	ADD	<u>1476F</u>	<u>The keying signal given in Nos. 1476D or 1476E may be interrupted by speech transmission.</u>

Reasons :

To lay down conditions for the use of the emergency position-indicating radio beacon. In Japan there is already in wide use the automatic apparatus for distress information using class A1 emissions on 2091 kc/s. Therefore, it is requested that in Regions 2 and 3, where the band 2088.5 - 2093.5 kc/s is reserved exclusively for calling, the band between 2088.5 and 2093.5 should be designated as a safety frequency band in the radiotelegraph maritime mobile service and be added to frequencies with which survival craft stations shall be provided (see No. 455).

Ref.

RFA/94(27)

ADD

Section VIII A

Signals of floatable emergency position-  
indicating radio beacons

ADD

1476A

The signals of floatable emergency position-indicating radio beacons consist of :

ADD

1476B

(1) In type "L" 1 3 beacons :

a keyed emission modulated by a tone of 1300 c/s ( $\pm 20$  c/s) having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between 1 and 5 seconds. The depth of modulation shall be between 30 and 90 per cent. This signal shall be transmitted continuously.

ADD

1476C

(2) In type "H" 2 3 beacons :

ADD

1476D

a) the radiotelephone alarm signal (No. 1465) followed by the Morse letter "B" and/or the call sign of the ship to which the beacon belongs, modulated by a tone of 1300 c/s ( $\pm 20$  c/s) or of 2200 c/s ( $\pm 35$  c/s), or

ADD

1476E

b) a keyed emission modulated by a tone of 1300 c/s ( $\pm 20$  c/s) having a ratio of the period of the emission to the period of silence equal to or greater than 1, and an emission duration between 1 and 5 seconds;

ADD

1476F

The depth of modulation shall be between 30 and 90 per cent.

ADD

1476G

These type "H" signals shall have a duration between 30 and 50 seconds and a period of silence lasting between 30 and 60 seconds.

1476.1

<sup>1</sup> beacons producing a field strength equal to or less than 10 microvolts per metre at a distance of 30 nautical miles at sea level;

1476.2

<sup>2</sup> beacons producing a field strength greater than 10 microvolts per metre at a distance of 30 nautical miles at sea level;

1476.3

<sup>3</sup> beacons carried by ships of the U.S.A. may use a swept tone modulation sweeping downward over a range of not less than 700 c/s within the range 1600 to 300 c/s with a repetition rate of between two and three sweeps per second.

Ref.

RFA/94(27)  
(cont.)

- ADD 1476H The purpose of the signals of floatable emergency position-indicating radio beacons is to indicate that one or more persons are in a distress situation, may no longer be on board and that other means of radiocommunications may not be available.
- ADD 1476I Any station of the mobile service receiving one of these signals, while no distress or urgent traffic is being passed, shall inform other stations accordingly.

Reasons :

Insertion in the Regulations of provisions relating to emergency position-indicating beacons (see C.C.I.R. Recommendation No. 439).

USA/22(52)

ADD

Section VIIIA

Survival craft beacon signals

- ADD 1476A Paragraph 44 (bis) (1) The position indicating beacon signals employed by survival craft stations consists of:
- ADD 1476B a) a keyed emission modulated by a tone of 1300 cycles per second having a ratio of the period of the emission to the period of silence equal to or greater than one, and an emission duration of between 1 and 5 seconds; or
- ADD 1476C b) a swept tone modulation sweeping downward over a range of not less than 700 cycles per second within the range 1600 to 300 cycles per second with a repetition rate of between two and three sweeps per second.
- ADD 1476D (2) The position-indicating beacon signal shall be generated automatically and normally shall be sent continuously. It may be interrupted for radiotelephone transmissions or reception when this capability is provided.
- ADD 1476E Paragraph 44 (ter) This signal shall indicate that a person(s) is in a distress situation, may no longer be on an aircraft or ship and that receiving facilities may not be available.

Reasons :

To provide for world-wide conditions of use, definitions and frequencies for emergency position-indicating beacons.



Proposals relating to  
Article 36

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Section IX. Urgency Signal

N° 1477, 1478, 1482 - 1484, 1486 and 1487

**Section IX. Urgency Signal**

**1477** § 45. (1) In radiotelegraphy, the urgency signal consists of three repetitions of the group XXX, sent with the letters of each group and the successive groups clearly separated from each other. It shall be transmitted before the call.

**1478** (2) In radiotelephony, the urgency signal consists of three repetitions of the word PAN pronounced as the French word "panne". It shall be transmitted before the call.

**1479** § 46. (1) The urgency signal shall be sent only on the authority of the master or the person responsible for the ship, aircraft or other vehicle carrying the mobile station.

**1480** (2) The urgency signal may be transmitted by a land station only with the approval of the responsible authority.

**1481** § 47. (1) The urgency signal indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or the safety of a person.

**1482** (2) The urgency signal and the message following it shall be sent on one of the international distress frequencies (500 kc/s or 2 182 kc/s) or on one of the frequencies which may be used in case of distress (see Nos. 1107, 1108, 1208, 1321, 1323, and 1324).

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

**1484** § 48. Messages preceded by the urgency signal shall, as a general rule, be drawn up in plain language.

**1485** § 49. (1) Mobile stations which hear the urgency signal shall continue to listen for at least three minutes. At the end of this period, if no urgency message has been heard, they may resume their normal service.

**1486** (2) However, land and mobile stations which are in communication on frequencies other than those used for the transmission of the urgency signal and of the call which follows it may continue their normal work without interruption provided the urgency message is not addressed "to all stations" (CQ).

**1487** § 50. When the urgency signal has been sent before transmitting a message "to all stations" (CQ) and which calls for action by the stations receiving the message, the station responsible for its transmission shall cancel it as soon as it knows that action is no longer necessary. This message of cancellation shall likewise be addressed "to all stations" (CQ).

Ref.

Heading  
Section IX

Replace heading of Section IX as follows :

F/111(166)

MOD

Section IX - Urgency

Reasons:

Section IX now deals with the urgency call as well as urgency signals. See proposal relating to number 1481A.

---

F/111(167)

MOD

1477 and Delete last sentence in each of these  
MOD 1478 numbers.

Reasons:

See proposal relating to number 1481A. The urgency signal is now included in the urgency call.

---

Add the following number 1481A :

F/111(168)

ADD

1481A

The urgency call in radiotelegraphy consists of :

- the urgency signal (XXX sent three times);
- if necessary (see number 1483A), the call sign of the station called (sent three times);
- the word DE;
- the call sign of the station sending the message (sent three times);
- if necessary (see number 1482A), the abbreviation QSW followed by an indication of the frequency to be used for transmitting the urgent message.

Reasons:

Further information is needed in connection with the call referred to in numbers 1477, 1478 and 1486.

As in the case of the distress procedure, the use of the signal "CQ" (call to all stations) is not necessary.

Ref.

Add the following number 1481B :

F/111(169)      ADD      1481B      The urgency call in radiotelephony consists of :

- the urgency signal (PAN spoken three times);
- if necessary (see number 1483A), the identification of the called station (spoken three times);
- the words THIS IS;
- the identification of the transmitting station (spoken three times);
- if necessary (see number 1482A), an indication of the frequency to be used for transmitting the urgent message.

Reasons:

See proposal relating to number 1481A.

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F/111(170)      MOD      1482      First line : replace "the urgency signal and the message" by "the urgency call and the message".

Reasons:

See proposals relating to numbers 1481A and 1481B.

---

Add the following number 1482A :

F/111(171)      ADD      1482A      However, in regions of heavy traffic or in the case of a long message or a medical call, the message should be transmitted on a working frequency. An indication to this effect should be given at the end of the urgency call.

Reasons:

To minimize the use of the distress frequency.

---

Ref.

F/111(172)      MOD      1483      At the end :  
  
Replace : "the urgency signal" by  
"the urgency call".

Reasons:

See proposals relating to numbers 1481A and 1481B.

---

Add the following number 1483A :

F/111(173)      ADD      1483A      Urgent messages may be addressed either as  
messages to all stations or as messages to  
a particular station.

Reasons:

Useful clarification.

---

F/111(174)      MOD      1484      Replace : "the urgency signal" by  
"the urgency call".

Reasons:

See proposals relating to numbers 1481A and 1481B.

---

F/111(175)      MOD      1486      At the end :  
  
Replace : provided the urgency message is  
not addressed "to all stations" (CQ)  
  
by  
  
provided the urgency message is not  
addressed as "to all stations".

Reasons:

See proposals relating to numbers 1481A and 1481B.

---

F/111(176)      MOD      1487      At the beginning :  
  
Replace by :  
  
When the urgency call "to all stations"  
precedes a message calling for action by the  
stations ....

Reasons:

See proposals relating to numbers 1481A and 1481B.

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Proposals relating to  
Article 36

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Section X. Safety Signal

N° 1488, 1489, 1492 - 1494

**Section X. Safety Signal**

**1488** § 51. (1) In radiotelegraphy, the safety signal consists of three repetitions of the group TTT, the individual letters of each group, and the successive groups being clearly separated from each other. It shall be sent before the call.

**1489** (2) In radiotelephony, the safety signal consists of the word SÉCURITÉ pronounced clearly as in French, spoken three times and transmitted before the call.

**1490** § 52. (1) The safety signal indicates that the station is about to transmit a message concerning the safety of navigation or giving important meteorological warnings.

**1491** (2) The safety signal and call shall be sent on the distress frequency or one of the frequencies which may be used in case of distress (see Nos. 1107, 1108, 1208, 1321, 1323, and 1324).

**1492** (3) Where practicable, the safety message which follows should be sent on a working frequency, particularly in areas of heavy traffic, and a suitable announcement to this effect shall be made at the end of the call.

**1493** § 53. (1) With the exception of messages transmitted at fixed times, the safety signal, when used in the maritime mobile service, shall be transmitted towards the end of the first available period of silence (see No. 1130 for radiotelegraphy and No. 1349 for radiotelephony); the message shall be transmitted immediately after the period of silence.

**1494** (2) In the cases prescribed in Nos. 1612, 1615 and 1619, the safety signal and the message which follows it shall be transmitted as soon as possible, and shall be repeated at the end of the first period of silence which follows.

**1495** § 54. All stations hearing the safety signal shall listen to the safety message until they are satisfied that the message is of no concern to them. They shall not make any transmission likely to interfere with the message.



Ref.

Heading  
Section X

Replace the title of Section X as follows :

F/111(177)      MOD      Section X - Safety

Reasons:

Section X is no longer concerned solely with the safety signal. See proposals relating to number 1490A.

---

F/111(178)      MOD      1488 and      Delete the last sentence in each of these  
MOD      1489      numbers.

Reasons:

See proposal relating to number 1490A. The safety signal is now included in the safety call.

---

Add the following number 1490A :

F/111(179)      ADD      1490A      The safety call in radiotelegraphy consists of :

- the safety signal (TTT sent three times),
- if necessary (see number 1492A), the call sign of the station called (sent three times),
- the word DE,
- the call sign of the transmitting station (sent three times),
- if necessary (see number 1492), the abbreviation QSW followed by an indication of the frequency to be used for transmitting the safety message.

Reasons:

Information should be given on the call referred to in numbers 1488, 1489, 1491 and 1492. As in the case of the distress procedure, it is not necessary to use "CQ" in the case of a call to all stations.

---

Ref.

Add the following number 1490B :

F/111(180)      ADD      1490B      The safety call in radiotelephony consists of :

- the safety signal (SECURITE spoken three times),
- if necessary (see number 1492A), the identification of the station called (spoken three times),
- the words THIS IS,
- if necessary (see number 1492), an indication of the switch-over to the frequency to be used for transmitting the safety message.

Reasons:

See proposal relating to number 1490A.

---

F/111(181)      MOD      1492      Replace by the following :

(3) Wherever possible, the safety message which follows the safety call should be sent on a working frequency, particularly .... (remainder unchanged).

Reasons:

To emphasize the necessity of minimizing the use of the distress frequency after the call.

---

Add the following number 1492A :

F/111(182)      ADD      1492A      Safety messages shall generally be addressed to all stations. In some cases, however, they may be addressed to a particular station.

Reasons:

Useful clarification. In some cases the message is in fact addressed to a single station (e.g. in the case of a ship transmitting observations to a maritime authority through a coast station).

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Ref.

F/111(183)

MOD

1493

Second line :

Replace "the safety signal" by "the safety call".

Reasons:

See proposals relating to numbers 1490A and 1490B.

---

F/111(184)

MOD

1494

Second line::

Replace "the safety signal" by "the safety call".

Reasons:

See proposals relating to numbers 1490A and 1490B.

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Proposals relating to  
Article 40

Accounting for Radiotelegrams and Radiotelephone Calls

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Section III. Establishment of Accounts  
for Radiotelephone Calls

N° 1530

**Section III. Establishment of Accounts for Radiotelephone Calls**

**1529** (2) In the case of radiotelephone calls destined for ship or aircraft stations and originating in a country other than that to which the land station belongs :

**1530** a) 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 ship or aircraft station charges,  
— credits the administration to which the mobile station of destination is subject (or, if appropriate, the administration to which the operating enterprise of the mobile station of destination is subject, or the operating enterprise direct) with the ship or aircraft station charges ;

**1531** b) the administration or recognized private operating agency of the country in which the calls originate credits, through the international telephone accounts, the administration of the country to which the land station is subject, and the administrations or recognized private operating agencies of intermediate countries, if any, with the charges relating to transmission over the international telephone system.

**1532 § 13.** The provisions of Nos. **1520** to **1523** relative to the accounting for radiotelegrams exchanged between stations on ships or aircraft shall be followed in the case of radiotelephone calls exchanged between stations on ships or aircraft.

**1533 § 14.** For accounting purposes, collect radiotelephone calls shall be regarded as originating in the country or mobile station of destination.

Ref.

F/111(185)      MOD      1530      Second line :

Replace "débits des taxes terrestres ou des  
taxes de bord" by  
"débits des taxes terrestres et des taxes de  
bord".

Reasons:

Drafting error.

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Proposals relating to

Appendix 3

Table of Frequency Tolerances

### APPENDIX 3

#### Table of Frequency Tolerances \*

(See Article 12)

1. Frequency tolerance is defined in Article 1 and is expressed in parts in  $10^6$  or, in some cases, in cycles per second.

2. The power shown for the various categories of stations is the mean power as defined in Article 1.

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1st January, 1966* to transmitters in use and to those to be installed before 1st January, 1964	Tolerances applicable to new transmitters installed after 1st January, 1964 and to all transmitters after 1st January, 1966*
	* 1st January, 1970 in the case of all tolerances marked with an asterisk.	

<b>Band : 1 605 to 4 000 kc/s</b>		
1. <i>Fixed Stations</i> :		
-power 200 W or less	100	100
-power above 200 W	50	50
2. <i>Land Stations</i> :		
-power 200 W or less	100	100
-power above 200 W	50	50
3. <i>Mobile Stations</i> :		
a) Ship Stations	200	200
b) Survival Craft Stations	—	300
c) Aircraft Stations	200 *	100 *
d) Land Mobile Stations	200	200
4. <i>Radiodetermination Stations</i> :		
-power 200 W or less	100	100
-power above 200 W	50	50
5. <i>Broadcasting Stations</i>	50	20
<b>Band : 4 to 29.7 Mc/s</b>		
1. <i>Fixed Stations</i> :		
-power 500 W or less	100	50
-power above 500 W	30	15
2. <i>Land Stations</i> :		
a) <i>Coast Stations</i> :		
-power 500 W or less	50	50
-power above 500 W and less than or equal to 5 kW	50 *	30 *
-power above 5 kW	50	15

Proposals relating to  
Appendix 3  
(continuation)

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1st January, 1966* to transmitters in use and to those to be installed before 1st January, 1964	Tolerances applicable to new transmitters installed after 1st January, 1964 and to all transmitters after 1st January, 1966*
	* 1st January, 1970 in the case of all tolerances marked with an asterisk.	
b) Aeronautical Stations: -power 500 W or less -power above 500 W c) Base Stations: -power 500 W or less -power above 500 W 3. <i>Mobile Stations</i> : a) Ship Stations : 1) Class A1 emission 2) Emission other than Class A1: -power 50 W or less -power above 50 W b) Survival Craft Stations c) Aircraft Stations d) Land Mobile Stations 4. <i>Broadcasting Stations</i>	100 50 100 50 200 50 50 50 200 200 * 200 30	100 50 100 50 200 200 50 50 200 100 * 200 15
<i>Band : 100 to 470 Mc/s</i> 1. <i>Fixed Stations</i> : -power 50 W or less -power above 50 W 2. <i>Land Stations</i> : a) Coast Stations b) Aeronautical Stations c) Base Stations : -power 5 W or less -power above 5 W 3. <i>Mobile Stations</i> : a) Ship Stations and Survival Craft Stations: -in the band 156-174 Mc/s: -outside this band b) Aircraft Stations c) Land Mobile Stations: -power 5 W or less -power above 5 W	100 * 100 * 100 100 100 100 100 100 100 100 100 100	50 * 20 * 20 50 50 20 20 50 50 50 50 20

Proposals relating to

Appendix 3

(continuation)

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1st January, 1966 * to transmitters in use and to those to be installed before 1st January, 1964	Tolerances applicable to new transmitters installed after 1st January, 1964 and to all transmitters after 1st January, 1966*
	* 1st January, 1970 in the case of all tolerances marked with an asterisk.	
4. <i>Radiodetermination Stations</i>	200 * d) e)	50 * d) e)
5. <i>Broadcasting Stations (other than television)</i>	30	20
6. <i>Broadcasting Stations (television sound and vision):</i>		
-power 100 W or less	100	100
-power above 100 W	30	1 000 c/s

#### Notes Referring to Table of Frequency Tolerances

a) At the present time some administrations permit ship transmitters fulfilling the role of standby to a main transmitter not only for distress but also for traffic purposes to operate with a tolerance of 5 000. These administrations should make every effort to ensure that by 1st January, 1966, all ship transmitters operating in the band 10—535 kc/s, other than ship's emergency transmitters, have a frequency tolerance of 1 000.

b) In the area covered by the North American Regional Broadcasting Agreement (NARBA) the tolerance of 20 c/s may continue to be applied.

c) For ship transmitters, of power 50 W or less, using frequencies below 13 Mc/s in tropical regions, the tolerance of 50 can be increased to 200 since these transmitters are sometimes used in such regions in the same circumstances as those of the band 1 605—4 000 kc/s.

d) This tolerance is not applicable to survival craft stations operating on the frequency 243 Mc/s.

e) Where specific frequencies are not assigned to radar stations, the bandwidth occupied by the emissions of such stations shall be maintained wholly within the band allocated to the service and the indicated tolerance does not apply.

f) For transmitters using time division multiplex the tolerance of 300 may be increased to 500.

g) This tolerance applies only to such emissions for which the necessary bandwidth does not exceed 3 000 kc/s; for larger bandwidth emissions a tolerance of 300 applies.

Ref.

F/8(50)

Appendix 3

Amend the table of frequency tolerances as follows :

Band : 1605 to 4000 kc/s

2. Land stations kc/  
after land stations, add the reference (h);
3. Mobile stations :  
after a) ship stations, add the reference (i);

Band : 4 to 29.7 Mc/s

2. Land stations :  
after a) coast stations, add the reference (j);
3. Mobile stations :  
a) ship stations;  
after 2. emissions other than class A1, add  
the reference (k).

At the end of Appendix 3, add the following footnotes :

- h) For coast radiotelephone station transmitters installed after 1 January 1973 the tolerance is 20 o/s.
- i) For ship radiotelephone station transmitters (other than those referred to in No. 987) installed after 1 January 1973 the tolerance is 100 o/s.
- j) For coast radiotelephone station transmitters installed after 1 January 1970 the tolerance is 20 o/s.
- k) For ship radiotelephone stations installed after 1 January 1970 the tolerance is 100 c/s.

Reasons :

To complete the table of frequency tolerances with respect to those applicable to coast and ship stations after the dates by which conversion to SSB is compulsory.

Ref.

F/11(68)

Appendix 3 - Amend the table of frequency tolerances to read as follows :

Band : 100 to 470 MHz

3 mobile stations :

a) ship stations and survival craft stations :

after - in the band 156 - 174 MHz - insert a reference (1)

At the end of Appendix 3, insert the following footnote :

1) The tolerance is 10 parts in  $10^6$  for ship station transmitters brought into service after 1 January 1970.

Reasons :

To provide for a frequency tolerance such that ship station transmitters will be able to operate with a separation of 25 kHz between adjacent channels (see also the draft Resolution F/11(70) to Doc. N° 11).

G/76(33)

MOD

APPENDIX 3

Table of frequency tolerances \*

(See Article 12)

Band : 1605 to 4000 kc/s

2. Land stations :

In column 3, after 100, add h)

In column 3, after 50, add h)

3. Mobile Stations :

a) Ship stations

In column 3, after 200, add 1)

Band : 4 to 29.7 Mc/s

2. Land stations :

a) Coast stations

In column 3, after 50, add h)

In column 3, after 30, add h)

In column 3, after 15, add h)

\* Certain services may need tighter tolerances for technical and operational reasons.



G/76(33)  
(contd.)

3. Mobile Stations :

a) Ship stations

2) Emission other than class A1 :

In column 3, after 50 c), add i)

In column 3, after 50, add i)

Notes referring to table of frequency tolerances

ADD h) For coast station single sideband radiotelephone transmitters installed after 1 January 1970 the tolerance is 20 c/s.

ADD i) For ship station single sideband radiotelephone transmitters installed after 1 January 1970 the tolerance is 100 c/s.

Reasons :

To include the frequency tolerance for coast and ship station single sideband radiotelephone transmitters.

HOL/70(5)

APPENDIX 3

Table of Frequency Tolerances

Band : 1605 to 4000 kc/s :

MOD

2. Land Stations :

after Land Stations, add the reference h);

MOD

3. Mobile Stations :

after a) Ship Stations, add the reference i).

Band : 4 to 29.7 Mc/s :

MOD

2. Land Stations :

after a) Coast Stations, add the reference h);

MOD

3. Mobile Stations :

a) Ship Stations :

after 2) Emission other than class A1, add the reference i).

HOL/70(5)

(contd.)

Notes referring to Table of Frequency Tolerances

ADD

h) For coast radiotelephone station transmitters installed after 1 January, 1970 the tolerance is 20 c/s.

i) For ship radiotelephone station transmitters (other than those referred to in No. 987) installed after 1 January, 1970 the tolerance is 100 c/s.

Reasons :

To include in the table the frequency tolerances recommended by the C.C.I.R.

See also proposal relating to Appendix 17A (HOL/70(6)).

J/84(31)

MOD

Amend Appendix 3, Table of frequency tolerances as follows :

## APPENDIX 3

Table of frequency tolerances \*)

(See Article 12)

1. Frequency tolerance is defined in Article 1 and is expressed in parts  $10^6$  or, in some cases, in cycles per second.

2. The power shown for the various categories of stations is the mean power as defined in Article 1.

---

\* Certain services may need tighter tolerances for technical and operational reasons.

Ref.

J/84(31)  
(cont.)

Frequency bands (lower limit exclusive, upper limit inclusive) and categories of stations	Tolerances ap- plicable until 1 January 1966*) to transmitters in use and to those to be in- stalled before 1 January 1964	Tolerances ap- plicable 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	
1	2	3
<u>Band</u> : 1605 to 4000 kc/s		
1. <u>Fixed stations</u> :		
-power 200 W or less	100	100
-power above 200 W	50	50
2. <u>Land stations</u> :		
-power 200 W or less	100	100 <u>h)</u>
-power above 200W	50	50 <u>h)</u>
3. <u>Mobile stations</u> :		
a) Ship stations	200	200 <u>i)</u>
b) Survival craft stations	-	300
c) Aircraft stations	200 *)	100 *)
d) Land mobile stations	200	200
4. <u>Radiodetermination stations</u>		
-power 200W or less	100	100
-power above 200 W	50	50
5. <u>Broadcasting stations</u>	50	20

Ref.

J/84(31)  
(cont.)

1	2	3
<u>Band : 4 to 29.7 Mc/s</u>		
1. <u>Fixed stations :</u>		
-power 500 W or less	100	50
-power above 500 W	30	15
2. <u>Land stations :</u>		
a) <u>Coast stations :</u>		
-power 500 W or less	50	50 <u>h)</u>
-power above 500 W and less than or equal to 5 kW	50 *)	30*) <u>h)</u>
-power above 5 kW	50	15 <u>h)</u>
b) <u>Aeronautical stations :</u>		
-power 500 W or less	100	100
-power above 500 W	50	50
c) <u>Base stations :</u>		
-power 500 W or less	100	100
-power above 500 W	50	50
3. <u>Mobile stations :</u>		
a) <u>Ship stations :</u>		
1) Class A1 emission	200	200
2) Emission other than class A1 :		
-power 50 W or less	50 c)	50 c) <u>1)</u>
-power above 50 W	50	50 <u>1)</u>
b) <u>Survival craft stations</u>	200	200
c) <u>Aircraft stations</u>	200 *)	100 *)
d) <u>Land mobile stations</u>	200	200
4. <u>Broadcasting stations</u>		
	30	15

Notes referring to table of frequency tolerances

- a) NOC
- b) NOC
- c) NOC
- d) NOC
- e) NOC
- f) NOC
- g) NOC

ADD      h) The tolerance applicable to radiotelephone coast  
station transmitters after 1 January 1970 is 20 c/s.

ADD      i) The tolerance applicable to radiotelephone ship  
station transmitters after 1 January 1974 is 100 c/s.

Reasons :

To amend the frequency tolerance necessary for SSB  
system in accordance with C.C.I.R.'s Recommendation.

---

Ref.

USA/22(49)

APPENDIX 3

Change Table of Frequency Tolerances\*) applicable to high traffic ship stations using Class A1 emission from 200 parts per million to 50 parts per million, as indicated hereinafter :

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1 January 1966 <sup>1)</sup> 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 <sup>1)</sup>
	1) 1 January 1970 in the case of all tolerances marked with an asterisk	
b) Aeronautical Stations: -power 500 W or less -power above 500 W	100 50	100 50
c) Base Stations: -power 500 W or less -power above 500 W	100 50	100 50
3. Mobile Stations:		
a) Ship Stations:		
1) Class A1 emission	200	200
<u>Low traffic ships</u>	<u>200</u>	<u>200</u>
<u>High traffic ships</u>		<u>50**)</u>
2) Emission other than Class A1:		
-power 50 W or less	50 c)	50 c)
-power above 50 W	50	50
b) Survival Craft Stations	200	200
c) Aircraft Stations	200*)	100*)
d) Land Mobile Stations	200	200
4. Broadcasting Stations	30	15

\*) As amended by the E.A.R.C. Space (1963)

\*\*) Effective upon the entry into force of the revised Regulations

Proposals relating to  
Appendix 9

Service Documents

---

List IV. List of Coast Stations

List V. List of Ship Stations

**APPENDIX 9**  
**Service Documents**  
(See Articles 8, 9, 10 and 20)

**List IV. List of Coast Stations**

*Part A. Alphabetical index of coast stations.*

Name of the station	Call sign	See part B, page
1	2	3

*Part B. Particulars of coast stations.*

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

Name of the station <sup>1</sup>	Call sign	Emission			Service		Charges <sup>4</sup>	Geographical co-ordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks <sup>7</sup>
		Frequencies <sup>3</sup> (kc/s or Mc/s)	Class	Power (kW) <sup>3</sup>	Nature	Hours of service (G.M.T.)			
1	2	3	4	5	6	7	8	9	10

<sup>1</sup> Indicate for each country the coast station or coast stations to which radiotelegrams intended for high frequency transmission to ship stations should be sent.

<sup>2</sup> The normal working frequency is printed in heavy type. In the case of duplex telephony, frequencies used for transmission and reception are indicated in conformity with No 1322.

<sup>3</sup> 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.

<sup>4</sup> The internal telegraph charge of the country to which the coast station is subject and the charge applied by this country to telegrams destined for adjacent countries are given at the end of this list.

<sup>5</sup> If the accounts for charges are settled by a private enterprise, the name and address of such private enterprise should, if necessary, be stated.

<sup>6</sup> Indicate if radar service is provided.

<sup>7</sup> Information concerning the times of transmission of traffic lists, and the hours of watch keeping of the coast station on the various frequencies, etc.



Proposals relating to  
Appendix 9

(continuation)

## List V. List of Ship Stations

### *Particulars of ship stations*

The information concerning these stations shall be published in two or three lines in the following order :

*1st line :*

- call sign, name of the ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names (in this case, the name and the call sign shall be separated by a fraction bar) and the service symbols (see Appendix 10) ;
- nature of service ;
- hours of service in the form of a symbol or a reference.

Times not indicated by a symbol shall be given in Greenwich Mean Time (G.M.T.).

*2nd and 3rd lines :*

below the call sign :

- the basic ship charge per word for a radiotelegram<sup>1</sup> ;
- if appropriate, the basic ship charge for a radiotelephone call of three minutes.<sup>1</sup>

This information shall be followed by a note reference to indicate the administration or private enterprise to which the accounts should be addressed. In case of a change of address of the operating authority, a second note reference after the charge should indicate the new address and the date from which the change will take effect ;

- when two or more ships of the same nationality bear the same name, and also where the accounts for the charges should be sent directly to the owner of the ship, the name of the shipping line of the firm to which the ship belongs shall be given by means of note reference ;
- the country having jurisdiction over the station (abbreviated indication) ;
- the bands of frequencies and the classes of emissions shall be indicated by means of the following abbreviations printed in heavy type :

<i>Radiotelegraphy</i>	<i>Radiotelephony</i>
w = 110 — 150 kc/s	t = 1 605 — 4 000 kc/s
x = 405 — 535 kc/s	u = 4 000 — 23 000 kc/s
y = 1 605 — 3 800 kc/s	v = 156 — 174 Mc/s
z = 4 000 — 25 110 kc/s	

These abbreviations should, if necessary, be followed by reference to brief notes and indications of the frequencies for which the transmissions are adjusted, which shall appear at the end of the list.

The meanings of abbreviations shall be printed at the foot of every second page of the list.

<sup>1</sup> These charges are fixed or approved by each administration.

Ref.

APPENDIX 9

F/109(106)

MOD

A) In the text relating to List IV - List of Coast Stations - Part B :

- Add a footnote 8 in the heading of column 1 of the table which will then read :

~~"Name of the station~~<sup>1</sup> - 8".

- Add at the end

"8 Where appropriate, the name of the station shall be followed by the identification number, in brackets, used when the station transmits selective call signals."

MOD

B) At the end of the text concerning List V - List of Ship Stations - add :

" - where appropriate, the letter t or v shall be followed by (S) to show that the ship is equipped for selective calling on the international frequency provided in the Radio Regulations for this purpose in the band concerned."

ADD

C) After the text on List VI, add :

"List VII bis : List of selective call numbers used in the maritime mobile service

Part I - List of call numbers assigned to ships

Name of the station <sup>1</sup>	Call number	Frequencies used for the selective call
----------------------------------	-------------	---

<sup>1</sup> The names of ships shall be shown in alphabetical order irrespective of nationality. Homonyms shall be followed by the call sign (the name and the call sign to be separated by a fraction bar).

ADD

Part II - List of identification numbers of coast stations

Identification number <sup>1</sup>	Name and nationality of coast station	Frequencies used for the selective call
------------------------------------	---------------------------------------	---

<sup>1</sup> The numbers shall be shown in logical order.

Reasons :

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

Ref.

G/91(53)

Appendix 9

List V. List of ship stations.

.....

MOD

2nd and 3rd lines :

below the call sign :

- the selective call number;
- the basic ship charge per word for a radio-telegram;<sup>1</sup>
- if appropriate, the basic ship charge for a radiotelephone call of three minutes.<sup>1</sup>

.....

Reasons :

To provide for the inclusion of the selective call number.

---

<sup>1</sup> These charges are fixed or approved by each administration.

Proposals relating to  
Appendix 10

Service Document Symbols

## Modified by the E.A.R.C. For Space.

## Service Document Symbols

(See Article 20 and Appendix 9)

✕	Station on board a warship or a military or naval aircraft ("GS") <sup>1</sup>
□	Station classified as situated in a region of heavy traffic (Article 32) ("TI") <sup>1</sup>
○	By day ("HJ") <sup>1</sup>
◐	By night ("HN") <sup>1</sup>
[ ]	A ship which carries lifeboats equipped with radio apparatus; a number inside the brackets shows the number of such lifeboats ("S") <sup>1</sup>
▽	High-traffic ship ("HS") <sup>1</sup>
⊗	Radar facilities available ["R(")] <sup>1</sup>
AL	Aeronautical radionavigation land station
AM	Aeronautical radionavigation mobile station
AT	Amateur station
AX	Aeronautical fixed station
BC	Broadcasting station, sound
BT	Broadcasting station, television
C	Continuous operation during hours shown
Ca	Cargo ship
CO	Station open to official correspondence exclusively
CP	Station open to public correspondence
CR	Station open to limited public correspondence
CV	Station open exclusively to correspondence of a private agency
D30°	Directive antenna having maximum radiation in the direction of 30° (expressed in degrees from True North, from 0 to 360 clockwise)
DR	Directive antenna provided with a reflector
EC	Communication-satellite space station
ED	Space telecommand space station
EH	Space research space station
EK	Space tracking space station
EM	Meteorological-satellite space station
EN	Radionavigation-satellite space station
ER	Space telemetering space station
EX	Experimental station
FA	Aeronautical station
FB	Base station
FC	Coast station
FE	Earth station (Earth-Space service)
FL	Land station
FP	Port station
FR	Receiving station only, connected with the general network of telecommunication channels
FS	Land station established solely for the safety of life
FX	Fixed station
GMT	Greenwich Mean Time

Proposals relating to  
Appendix 10  
(continuation)

H	Scheduled operation
H8	8-hour service provided by a ship station of the second category
H16	16-hour service provided by a ship station of the second category
H24	Continuous throughout the twenty-four hours
HJ	Day service
HN	Night service
HT	Transition period service
HX	Intermittent throughout the twenty-four hours, or station having no specific working hours
I	Intermittent operation during the time indicated
LR	Radiolocation land station
MA	Aircraft station
ME	Space station
ML	Land mobile station
MO	Mobile station
MR	Radiolocation mobile station
MS	Ship station
ND	Non-directional antenna
NL	Maritime radionavigation land station
OT	Station open exclusively to operational traffic of the service concerned
Pa	Passenger ship
RA	Radio astronomy station
RC	Non-directional radiobeacon
RD	Directional radiobeacon
RG	Radio direction-finding station
RM	Maritime radionavigation mobile station
RT	Revolving radiobeacon
SM	Meteorological aids station
SS	Standard frequency station
TC	Communication-satellite earth station
TD	Space telecommand earth station
TH	Space research earth station
TK	Space tracking earth station
TM	Meteorological-satellite earth station
TN	Radionavigation-satellite earth station
TR	Space telemetering earth station
TS	Television, sound channel
TV	Television, vision channel



Ref.

APPENDIX 10

Add after the symbol "RT"

F/109(107)

ADD

"S ship station equipped for selective calling on an international frequency provided for this purpose in the Radio Regulations".

Reasons :

To include in the Regulations provisions on selective calling devices as defined in draft Recommendation D.a prepared by C.C.I.R. Study Group XIII.

APPENDIX 10

USA/17(24)

Service Document Symbols

ADD

OD

Ocean Data Station

ADD

OE

Ocean Data Telecommand Station

Reasons :

To accommodate requirements for oceanographic communications in the exclusive HF maritime mobile bands.

Ref.

DNK/ISL/NOR/30(3)

Appendix 10

Service Document Symbols  
(See Article 20 and Appendix 9)

ADD




A ship which carries survival craft stations intended primarily as beacons to indicate the positions of survivors or the location of a mobile station in distress.

The letter(s) inside the square means:

- A The equipment is intended for operation on 2182 kc/s in accordance with No. 1476B<sup>\*)</sup>.
- B The equipment is intended for operation on 2182 kc/s in accordance with No. 1476C<sup>\*)</sup>.
- C The equipment is intended for operation on 121.5 Mc/s in accordance with No. 1476D<sup>\*)</sup>.
- D The equipment is intended for operation on 243 Mc/s in accordance with No. 1476D<sup>\*)</sup>.

The number following the letter(s) shows the number of apparatus of the various types on board the ship.

Example:

WXYZ Union A8 CD3  CP H16  
40 1) ABC xyz t

Meaning: 8 units of type L on 2182 kc/s  
3 units of equipment on 121.5  
and 243 Mc/s.

---

<sup>\*)</sup> Proposal DNK/ISL/NOR/30(2)

Reasons:

It is highly desirable to have available during distress situations or search and rescue operations information about which ships are carrying survival craft stations intended primarily as beacons to indicate the positions of survivors or the location of a mobile station in distress and the number of such apparatus on board the ships.

Proposals relating to  
Appendix 11

Documents with which Ship and Aircraft Stations shall be Provided

---

Section I. Ship Stations for which a Radiotelegraph  
Installation is Required by International  
Agreement

Point 8

Section III. Ship Stations for which a Radiotelephone  
Installation is Required by International  
Agreement

Point 5

APPENDIX 11

**Documents with which Ship and Aircraft Stations shall be Provided**

(See Articles 18, 20, 21, 23, 28, and Appendix 9)

**Section I. Ship Stations for which a Radiotelegraph Installation  
is Required by International Agreement**

These stations shall be provided with :

---

8. Radio Regulations and Additional Radio Regulations, also such provisions of the Convention as relate to the radiocommunication service on board ship ;

**Section III. Ship Stations for which a Radiotelephone Installation  
is Required by International Agreement**

These stations shall be provided with :

---

5. the provisions of the Radio Regulations and Additional Radio Regulations applicable to the maritime mobile radiotelephone service.

Ref.

Appendix 11

Section 1

G/62(70) MOD 8 Radio Regulations and Additional Radio Regulations, also such provisions of the Convention as relate to the radiocommunication service on board ship, or Manual for use by the Maritime Mobile Service.

Reasons :

To provide for the carriage of the Manual.

USA/28(64)

APPENDIX 11, Section I :

MOD

8. The Radio Regulations and Additional Radio Regulations, plus also such provisions of the Convention as relate to the radio communication service aboard ship, or the Manual for use by the maritime mobile service.

Section III

USA/28(65) MOD

5. The provisions of the Radio Regulations and Additional Regulations applicable to the maritime mobile radiotelephone service - or the manual for use by the maritime mobile service.

Reasons :

To permit use of a more compact and inexpensive publication for use by the maritime mobile service on board those ship stations where the Radio Regulations and additional Radio Regulations are required by Appendix 11.

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Proposals relating to  
Appendix 12

Hours of Service for Ship Stations in the Second Category

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Sections I and II

APPENDIX 12

Hours of Service for Ship Stations in the Second Category  
(See Articles 20 and 25)

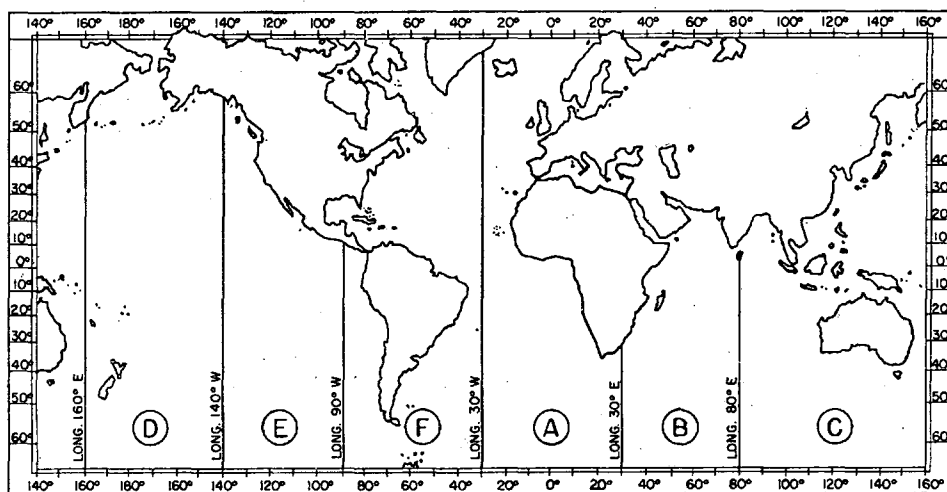
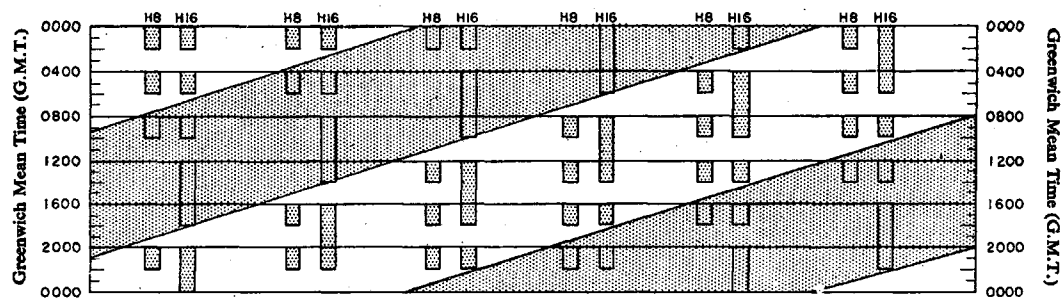
Section I. Table

Zones	Western limits	Eastern limits	Hours of Service (Greenwich Mean Time) (G.M.T.)	
			8 hours (H8)	16 hours (H16)
<b>A</b> Eastern Atlantic Ocean, Mediterranean, North Sea, Baltic.	Meridian of 30° W, Coast of Greenland.	Meridian of 30° E, to the South of the coast of Africa, Eastern limits of the Mediterranean, of the Black Sea, and of the Baltic, Meridian of 30° E northwards from the coastline of Norway.	from 8 h. to 10 h. 12 h. 14 h. 16 h. 18 h. 20 h. 22 h.	from 0 h. to 6 h. 8 h. 14 h. 16 h. 18 h. 20 h. 22 h.
<b>B</b> Western Indian Ocean, Eastern Arctic Ocean.	Eastern limit of Zone A.	Meridian of 80° E, Western Coast of Ceylon to Adam's Bridge, thence Westward round the coast of India, Meridian 80° E to northwards from the coastline of the U.S.S.R.	from 4 h. to 6 h. 8 h. 10 h. 12 h. 14 h. 16 h. 18 h.	from 0 h. to 2 h. 4 h. 10 h. 12 h. 14 h. 16 h. 18 h. 20 h. 24 h.
<b>C</b> Eastern Indian Ocean, China Sea, Western Pacific Ocean, Eastern Arctic Ocean.	Eastern limit of Zone B.	Meridian of 160° E, as far as the coast of Kamchatka, Meridian of 160° E northwards from the coastline of the U.S.S.R.	from 0 h. to 2 h. 4 h. 6 h. 8 h. 10 h. 12 h. 14 h.	from 0 h. to 6 h. 8 h. 10 h. 12 h. 14 h. 16 h. 22 h.
<b>D</b> Central Pacific Ocean.	Eastern limit of Zone C.	Meridian of 140° W.	from 0 h. to 2 h. 4 h. 6 h. 8 h. 10 h. 20 h. 22 h.	from 0 h. to 2 h. 4 h. 6 h. 8 h. 10 h. 12 h. 18 h. 20 h. 24 h.
<b>E</b> Eastern Pacific Ocean.	Eastern limit of Zone D.	Meridian of 90° W, as far as the coast of Central America, thence Western coast of Central America and of North America.	from 0 h. to 2 h. 4 h. 6 h. 16 h. 18 h. 20 h. 22 h.	from 0 h. to 2 h. 4 h. 6 h. 8 h. 14 h. 16 h. 22 h.
<b>F</b> Western Atlantic Ocean and Gulf of Mexico.	Meridian of 90° W, Gulf of Mexico, Eastern coast of North America.	Meridian of 30° W, coast of Greenland.	from 0 h. to 2 h. 12 h. 14 h. 16 h. 18 h. 20 h. 22 h.	from 0 h. to 2 h. 4 h. 10 h. 12 h. 18 h. 20 h. 22 h.



Proposals relating to  
Appendix 12  
(continuation)

Section II. Diagram



Ref.

Appendix 12

Amend heading to read :

G/64(75) MOD

Hours of Service for Ship Stations of the Second and Third Categories.

Reasons :

Consequent upon the separation of H16 and H8 ships into separate categories.

HOL/75(33)

Opinion : Hours of service for ship stations.

In the opinion of the Netherlands Administration the existing hours of service for ship stations are adequate and need not be changed.

Reasons :

1. The Netherlands Administration does not experience traffic congestion in the bands between 4000 and 27 500 kc/s during single operator watch periods, as referred to in Recommendation No. 27 of the Administrative Radio Conference, Geneva 1959.

2. Coast stations desiring to send messages of general interest to ship stations in different parts of the world, can reach these stations in four of the six zones at the same time.

If the hours of watchkeeping by single operator ships are staggered, as considered in Recommendation No. 27, the coast stations will have to increase the number of transmissions intended for all ships.

3. When eight hours listening watch is required by a radio officer, this watch shall be maintained during the hours of service as prescribed in Appendix 12 for ship stations placed in the second category.

For ship stations placed in the third category, administrations may choose other hours of listening or hours of service so long as the required eight hours listening watch by the radio officer is maintained.

As specified in No. 933, administrations are free to determine the category of service for their ship radiotelegraph stations and in this way may select a special system of watchkeeping which is not in accordance with Appendix 12.

Replace Section I by :

RFA/5(3)

8 hours

16 hours

(H 8)

(H 16)

08.00 - 12.00 ship's local time

08.00 - 24.00 ship's local time

16.00 - 18.00 " " "

20.00 - 22.00 " " "

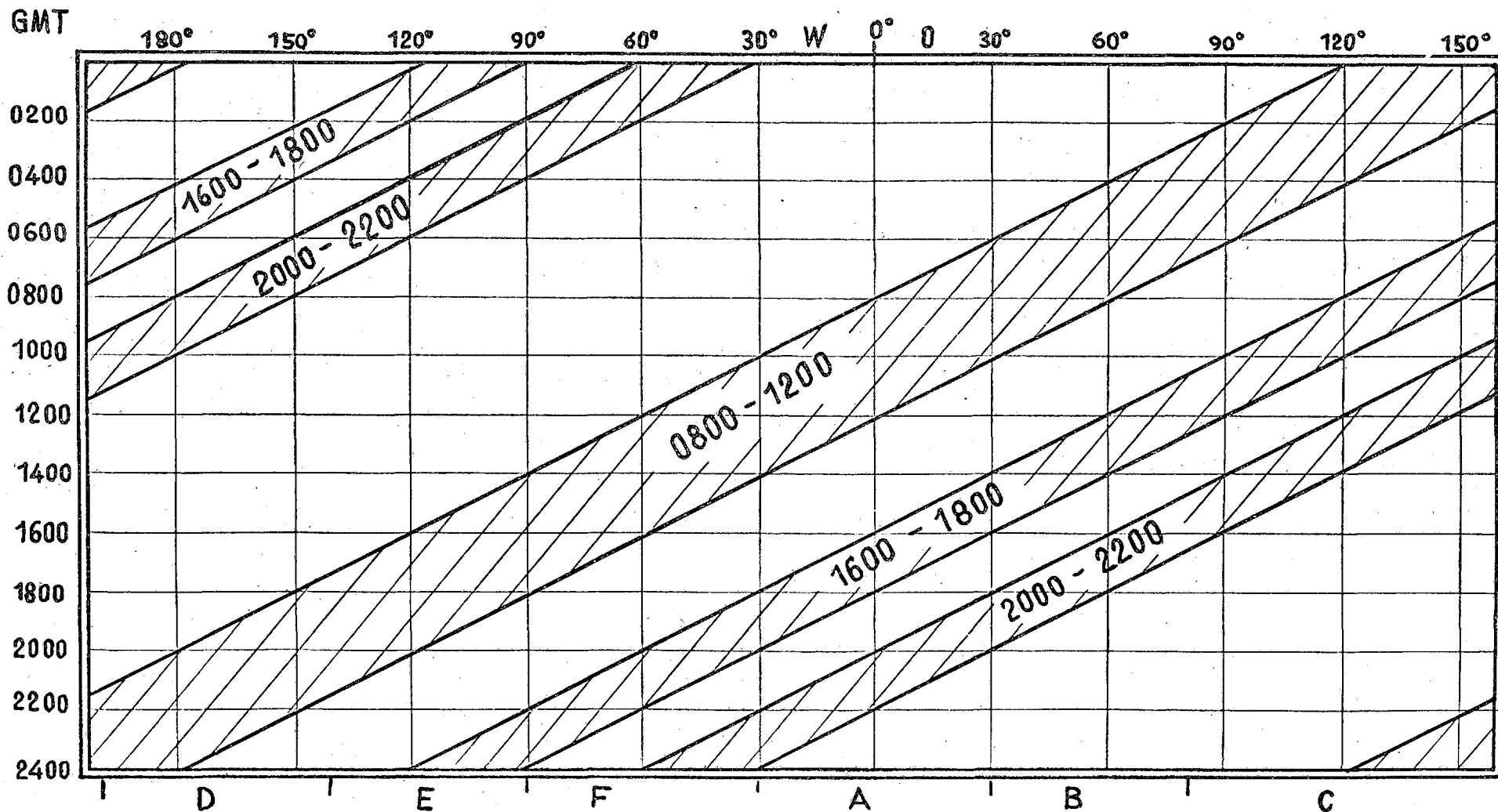
RFA/5(4)

Replace the upper part of Section II (diagram) by the diagrams which follow :

Ref.  
RFA/5(4)  
(contd.)

# H 8

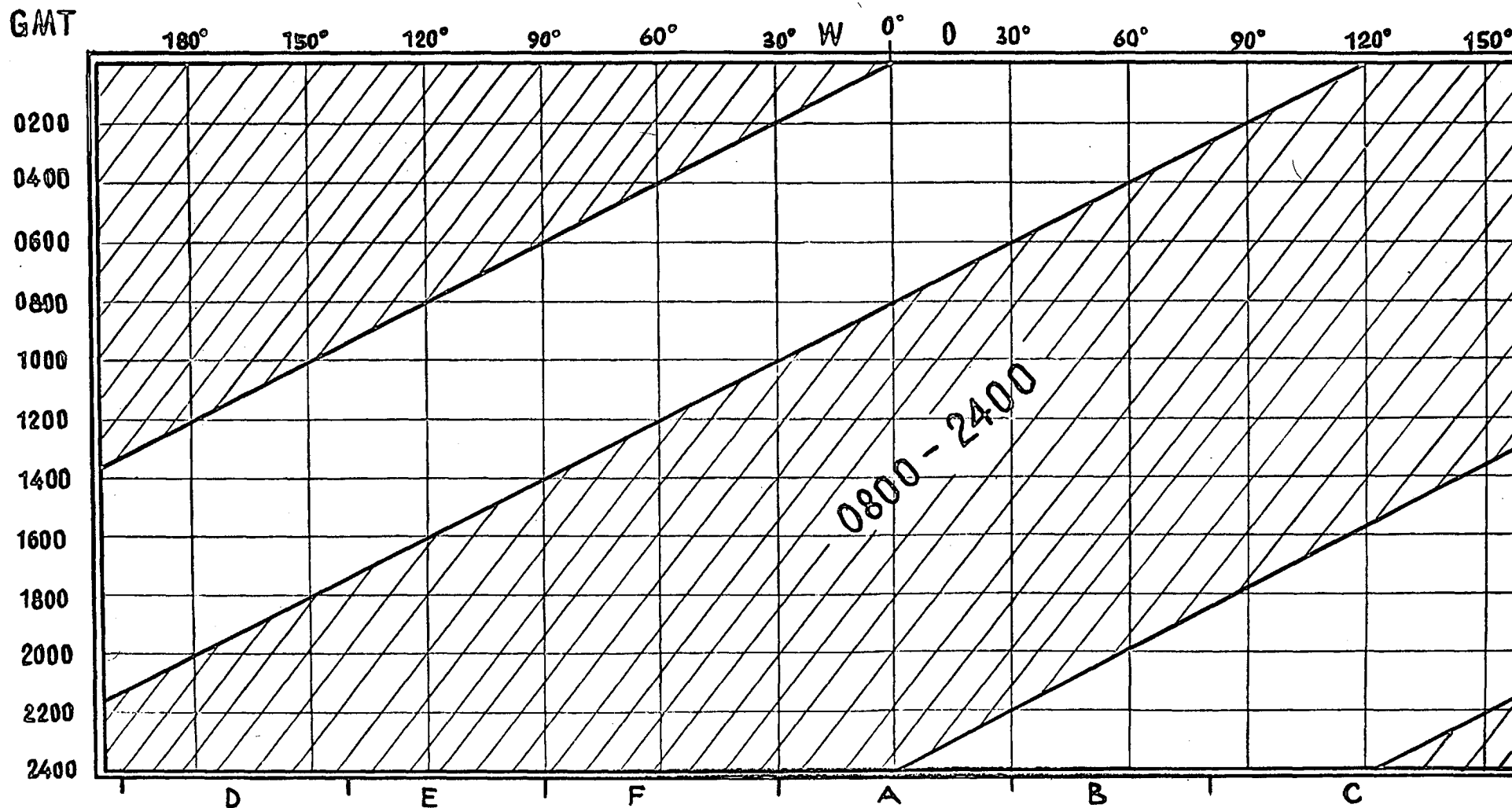
Hours of service for ship stations (0800-1200; 1600-1800; 2000-2200 ship's local time)  
Vacations des stations de navire (0800-1200; 1600-1800; 2000-2200 heure de bord)  
Horario de servicio de las estaciones de barco (0800-1200; 1600-1800; 2000-2200 hora local del barco)



Ref.  
RFA/5(4)  
(contd.)

# H16

Hours of service for ship stations (0800-2400 ship's local time)  
Vacations des stations de navire (0800-2400 heure de bord)  
Horario de servicio de las estaciones de barco (0800-2400 hora local del barco)



RFA/5(4)

(contd.)

Reasons:

1. A more even traffic loading of the bands between 4000 and 27 500 kHz as mentioned in Recommendation No. 27 of the Radio Regulations will be achieved to an optimum extent by the proposed regulation of service hours which ensures a nearly uninterrupted succession of service hours all over the world since the operation of the stations are based on ships' local time.
2. In any given sea area with a diameter of about 500 nautical miles, i.e. within the normal range of a medium-wave transmitter, all ship stations of the second category are on watch at the same time. For the north-south direction this is even the case at an unlimited distance.
3. Transmissions from coast stations of a regional character (meteorological bulletins, traffic lists, etc.), are mainly effected during the proposed service hours (and in most cases even to a larger extent than in the past). Supra-regional transmissions - propagated mainly on short waves - cannot be covered by any regulation of service hours whatsoever.
4. Special consideration has been given to hours of dusk, which are favourable for short-wave communications.
5. The proposed hours of service are compatible with the various operations on board ships and with the watchkeeping system of all other officers. They will ensure a longer break during the day (12-16 hours) for the radio officer and give the ship's command a clearer conception of the hours of radio service to be observed.

USSR/53(9)

Proposal

It is proposed that the existing arrangements for hours of service of ship stations be maintained.

Comments

With regard to the hours of service of ship radio stations, it is proposed that present arrangements be maintained. Years of experience in the application of these hours do not suggest that there is any need to change them. Moreover, it should be remembered that the operation of coast radio stations which provide a communications service with ships at sea is organized in the light of ships' hours of operation and that any change in the latter would involve changing the system of operation of coast stations; new working frequencies would also be needed and the existing distribution of frequencies among the coast stations of the world would be disturbed.

Ref.

USA/22(54)

Agenda Item 7.4 : Review of service hours for ship stations

U.S. Position :

The U.S. considers that the provisions now in the Radio Regulations concerning ships of the third category (No. 932) are appropriate, provided the optional provisions contained in No. 933 are maintained.

Background :

In the U.S., radiotelegraph equipped cargo ships which carry one radio officer, are licensed in the third category as specified in the Radio Regulations, No. 932. Such U.S. ships may select their own particular hours of watch or hours of service so long as the required eight hours watch by the radio officer is maintained. (This is permitted under No. 933). No set schedule can be specified, therefore, that is applicable to all ships. The generalization can be made, however, that, in implementing the Radio Regulations, U.S. ships normally maintain an aggregate of eight hours watch during the period 9 a.m. until 9 p.m. ship's local time.

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Proposals relating to

Appendix 13

Miscellaneous Abbreviations and Signals to be used  
in Radiotelegraphy Communications

## APPENDIX 13

### Miscellaneous Abbreviations and Signals to be used in Radiotelegraphy Communications

(See Article 29)

#### SECTION I. Q CODE

##### Introduction

1. The series of groups QRA to QVZ, listed in this Appendix, are for use by all services.

2. The QAA to QNZ series are reserved for the aeronautical service and the QOA to QQZ series are reserved for the maritime services. These series are not listed in these Regulations.

3. Certain Q code abbreviations may be given an affirmative or negative sense by sending YES or NO respectively, immediately following the abbreviation.

4. The meanings assigned to Q code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear shall be sent in the same order as shown in the text of the following tables.

5. Q code abbreviations are given the form of a question when followed by a question mark. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark should follow this information.

6. Q code abbreviations with numbered alternative significations shall be followed by the appropriate figure to indicate the exact meaning intended. This figure shall be sent immediately following the abbreviation.

7. All times shall be given in Greenwich Mean Time (G.M.T.) unless otherwise indicated in the question or reply.

# Abbreviations Available for All Services

## A. List of Abbreviations in Alphabetical Order

Abbreviation	Question	Answer or Advice
QRA	What is the name of your station?	The name of my station is ...
QRB	How far approximately are you from my station?	The approximate distance between our stations is... nautical miles (or kilometres)
QRC	By what private enterprise (or State Administration) are the accounts for charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ... (or State Administration).
QRD	Where are you bound for and where are you from?	I am bound for ... from ...
QRE	What is your estimated time of arrival at... (or over...) (place)?	My estimated time of arrival at... (or over...) (place) is... hours.
QRF	Are you returning to ... (place)?	I am returning to ... (place). or Return to ... (place).
QRG	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of ...) is ... kc/s (or Mc/s).
QRH	Does my frequency vary?	Your frequency varies.
QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad.
QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book.
QRK	What is the intelligibility of my signals (or those of ...)?	The intelligibility of your signals (or those of ...) is ... 1. bad 2. poor 3. fair 4. good 5. excellent.
QRL	Are you busy?	I am busy (or I am busy with ...). Please do not interfere.
QRM	Are you being interfered with?	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRN	Are you troubled by static?	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRO	Shall I increase transmitter power?	Increase transmitter power.
QRP	Shall I decrease transmitter power?	Decrease transmitter power.
QRQ	Shall I send faster?	Send faster (... words per minute).

Abbreviation	Question	Answer or Advice
QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at . . . words per minute.
QRS	Shall I send more slowly?	Send more slowly (. . . words per minute).
QRT	Shall I stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRW	Shall I inform . . . that you are calling him on . . . kc/s (or Mc/s)?	Please inform . . . that I am calling him on . . . kc/s (or Mc/s).
QRX	When will you call me again?	I will call you again at . . . hours (on . . . kc/s (or Mc/s)).
QRY	What is my turn? (Relates to communication)	Your turn is Number . . . (or according to any other indication). (Relates to communication).
QRZ	Who is calling me?	You are being called by . . . (on . . . kc/s (or Mc/s)).
QSA	What is the strength of my signals (or those of . . .)?	The strength of your signals (or those of . . .) is . . . 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good.
QSB	Are my signals fading?	Your signals are fading.
QSC	Are you a cargo vessel? (see Article 32, Section V)	I am a cargo vessel.
QSD	Is my keying defective?	Your keying is defective.
QSE	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is . . . (figures and units)
QSF	Have you effected rescue?	I have effected rescue and am proceeding to . . . base (with . . . persons injured requiring ambulance).
QSG	Shall I send . . . telegrams at a time?	Send . . . telegrams at a time.
QSH	Are you able to home on your D/F equipment?	I am able to home on my D/F equipment (on station . . .).
QSI		I have been unable to break in on your transmission.  or Will you inform . . . (call sign) that I have been unable to break in on his transmission (on . . . kc/s (or Mc/s)).
QSJ	What is the charge to be collected to . . . including your internal charge?	The charge to be collected to . . . including my internal charge is . . . francs.
QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.

Abbreviation	Question	Answer or Advice
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last telegram which I sent you ( <i>or</i> some previous telegram)?	Repeat the last telegram which you sent me ( <i>or</i> telegram(s) number(s) ...).
QSN	Did you hear me ( <i>or</i> ... ( <i>call sign</i> )) on ... kc/s ( <i>or</i> Mc/s)?	I did hear you ( <i>or</i> ... ( <i>call sign</i> )) on ... kc/s ( <i>or</i> Mc/s).
QSO	Can you communicate with ... direct ( <i>or</i> by relay)?	I can communicate with ... direct ( <i>or</i> by relay through ...).
QSP	Will you relay to ... free of charge?	I will relay to ... free of charge.
QSQ	Have you a doctor on board ( <i>or</i> is... ( <i>name of person</i> ) on board)?	I have a doctor on board ( <i>or</i> ... ( <i>name of person</i> ) is on board).
QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you ( <i>or</i> have interference).
QSS	What working frequency will you use?	I will use the working frequency ... kc/s ( <i>normally only the last three figures of the frequency need be given</i> ).
QSU	Shall I send or reply on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...)?	Send or reply on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...).
QSV	Shall I send a series of V's on this frequency ( <i>or</i> ... kc/s ( <i>or</i> Mc/s))?	Send a series of V's on this frequency ( <i>or</i> ... kc/s ( <i>or</i> Mc/s)).
QSW	Will you send on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...)?	I am going to send on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...).
QSX	Will you listen to ... ( <i>call sign (s)</i> ) on ... kc/s ( <i>or</i> Mc/s)?	I am listening to ... ( <i>call sign (s)</i> ) on ... kc/s ( <i>or</i> Mc/s).
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)).
QSZ	Shall I send each word or group more than once?	Send each word or group twice ( <i>or</i> ... times).
QTA	Shall I cancel telegram number ...?	Cancel telegram number ...
QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
QTC	How many telegrams have you to send?	I have ... telegrams for you ( <i>or</i> for ...).
QTD	What has the rescue vessel or rescue aircraft recovered?	... ( <i>identification</i> ) has recovered... 1. ... ( <i>number</i> ) survivors 2. wreckage 3. ... ( <i>number</i> ) bodies.

Abbreviation	Question	Answer or Advice
QTE	What is my TRUE bearing from you? <i>or</i>	Your TRUE bearing from me is ... degrees at ... hours. <i>or</i>
	What is my TRUE bearing from ... (call sign)? <i>or</i>	Your TRUE bearing from ... (call sign) was ... degrees at ... hours. <i>or</i>
	What is the TRUE bearing of ... (call sign) from ... (call sign)?	The TRUE bearing of ... (call sign) from ... (call sign) was ... degrees at ... hours.
QTF	Will you give me the position of my station according to the bearings taken by the D/F stations which you control?	The position of your station according to the bearings taken by the D/F stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours.
QTG	Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) (on ... kc/s (or Mc/s))? <i>or</i>	I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) (on ... kc/s (or Mc/s)). <i>or</i>
	Will you request ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s (or Mc/s)?	I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s (or Mc/s).
QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude ... longitude (or according to any other indication).
QTI	What is your TRUE track?	My TRUE track is ... degrees.
QTJ	What is your speed?	My speed is ... knots (or ... kilometres per hour or ... statute miles per hour).
	(Requests the speed of a ship or aircraft through the water or air respectively.)	(Indicates the speed of a ship or aircraft through the water or air respectively.)
QTK	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is ... knots (or ... kilometres per hour or ... statute miles per hour).
QTL	What is your TRUE heading?	My TRUE heading is ... degrees.
QTM	What is your MAGNETIC heading?	My MAGNETIC heading is ... degrees.
QTN	At what time did you depart from ... (place)?	I departed from ... (place) at ... hours.
QTO	Have you left dock (or port)? <i>or</i>	I have left dock (or port). <i>or</i>
	Are you airborne?	I am airborne.
QTP	Are you going to enter dock (or port)? <i>or</i>	I am going to enter dock (or port). <i>or</i>
	Are you going to alight (or land)?	I am going to alight (or land).
QTQ	Can you communicate with my station by means of the International Code of Signals?	I am going to communicate with your station by means of the International Code of Signals.
QTR	What is the correct time?	The correct time is ... hours.

Abbreviation	Question	Answer or Advice
QTS	Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kc/s (or Mc/s)?	I will send my call sign for tuning purposes or so that my frequency may be measured now (or at ... hours) on ... kc/s (or Mc/s).
QTT		The identification signal which follows is superimposed on another transmission.
QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
QTV	Shall I stand guard for you on the frequency of ... kc/s (or Mc/s) (from ... to ... hours)?	Stand guard for me on the frequency of ... kc/s (or Mc/s) (from ... to ... hours).
QTW	What is the condition of survivors?	Survivors are in ... condition and urgently need ...
QTX	Will you keep your station open for further communication with me until further notice (or until ... hours)?	I will keep my station open for further communication with you until further notice (or until ... hours).
QTY	Are you proceeding to the position of incident and if so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at ... hours (on ... date).
QTZ	Are you continuing the search?	I am continuing the search for ... (aircraft, ship, survival craft, survivors or wreckage).
QUA	Have you news of ... (call sign)?	Here is news of ... (call sign).
QUB	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at ... (place of observation)?	Here is the information requested : ... (The units used for speed and distances should be indicated.)
QUC	What is the number (or other indication) of the last message you received from me (or from ... (call sign))?	The number (or other indication) of the last message I received from you (or from ... (call sign)) is ...
QUD	Have you received the urgency signal sent by ... (call sign of mobile station)?	I have received the urgency signal sent by ... (call sign of mobile station) at ... hours.
QUE	Can you use telephony in ... (language), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... (language) on ... kc/s (or Mc/s).
QUF	Have you received the distress signal sent by ... (call sign of mobile station)?	I have received the distress signal sent by ... (call sign of mobile station) at ... hours.
QUG	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately.  or  I shall be forced to alight (or land) at ... (position or place) at ... hours.
QUH	Will you give me the present barometric pressure at sea level?	The present barometric pressure at sea level is ... (units).
QUI	Are your navigation lights working?	My navigation lights are working.

Abbreviation	Question	Answer or Advice
QUJ	Will you indicate the TRUE track to reach you ( <i>or ...</i> )?	The TRUE track to reach me ( <i>or ...</i> ) is ... degrees at ... hours.
QUK	Can you tell me the condition of the sea observed at ... ( <i>place or co-ordinates</i> )?	The sea at ... ( <i>place or co-ordinates</i> ) is ...
QUL	Can you tell me the swell observed at ... ( <i>place or co-ordinates</i> )?	The swell at ... ( <i>place or co-ordinates</i> ) is ...
QUM	May I resume normal working?	Normal working may be resumed.
QUN	Will vessels in my immediate vicinity ... <i>or</i> (in the vicinity of ... latitude ... longitude) <i>or</i> (in the vicinity of ...) please indicate their position, TRUE course and speed?	My position, TRUE course and speed are ...
QUO	Shall I search for ... 1. aircraft 2. ship 3. survival craft in the vicinity of ... latitude ... longitude ( <i>or according to any other indication</i> )?	Please search for ... 1. aircraft 2. ship 3. survival craft in the vicinity of ... latitude ... longitude ( <i>or according to any other indication</i> ).
QUP	Will you indicate your position by ... 1. searchlight 2. black smoke trail 3. pyrotechnic lights?	My position is indicated by ...  1. searchlight 2. black smoke trail 3. pyrotechnic lights.
QUQ	Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate your landing?	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate my landing.
QUR	Have survivors ... 1. received survival equipment 2. been picked up by rescue vessel 3. been reached by ground rescue party?	Survivors ... 1. are in possession of survival equipment dropped by ... 2. have been picked up by rescue vessel 3. have been reached by ground rescue party.
QUS	Have you sighted survivors or wreckage? If so, in what position?	Have sighted ... 1. survivors in water 2. survivors on rafts 3. wreckage in position ... latitude ... longitude ( <i>or according to any other indication</i> ).
QUT	Is position of incident marked?	Position of incident is marked by ... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. ... ( <i>specify other marking</i> ).



Abbreviation	Question	Answer or Advice
QUU	Shall I home ship or aircraft to my position?	Home ship or aircraft ... ( <i>call sign</i> ) ... 1. to your position by transmitting your call sign and long dashes on ... kc/s ( <i>or</i> Mc/s) 2. by transmitting on ... kc/s ( <i>or</i> Mc/s) TRUE track to reach you.
QUW	Are you in the search area designated as ... ( <i>designator or latitude and longitude</i> )?	I am in the ... ( <i>designation</i> ) search area.
QUY	Is position of survival craft marked?	Position of survival craft was marked at ... hours by... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. ... ( <i>specify other marking</i> ).

**B. Lists of Signals According to the Nature of Questions, Answer or Advice**

Abbreviation	Question	Answer or Advice
	<b>Name</b>	
QRA	What is the name of your station?	The name of my station is ...
	<b>Route</b>	
QRD	Where are you bound for and where are you from?	I am bound for ... from ...
	<b>Position</b>	
QRB	How far approximately are you from my station?	The approximate distance between our stations is ... nautical miles ( <i>or</i> kilometres).
QTH	What is your position in latitude and longitude ( <i>or according to any other indication</i> )?	My position is ... latitude ... longitude ( <i>or according to any other indication</i> ).
QTN	At what time did you depart from ... ( <i>place</i> )?	I departed from ... ( <i>place</i> ) at ... hours.
	<b>Quality of Signals</b>	
QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad.
QRK	What is the intelligibility of my signals ( <i>or those of ...</i> )?	The intelligibility of your signals ( <i>or those of ...</i> ) is ... 1. bad 2. poor 3. fair 4. good 5. excellent.

Abbreviation	Question	Answer or Advice
<b>Strength of Signals</b>		
QRO	Shall I increase transmitter power ?	Increase transmitter power.
QRP	Shall I decrease transmitter power ?	Decrease transmitter power.
QSA	What is the strength of my signals (or those of ...) ?	The strength of your signals (or those of ...) is ... 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good.
QSB	Are my signals fading ?	Your signals are fading.
<b>Keying</b>		
QRQ	Shall I send faster ?	Send faster (... words per minute).
QRR	Are you ready for automatic operation ?	I am ready for automatic operation. Send at ... words per minute.
QRS	Shall I send more slowly ?	Send more slowly (... words per minute).
QSD	Is my keying defective ?	Your keying is defective.
<b>Interference</b>		
QRM	Are you being interfered with ?	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRN	Are you troubled by static ?	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
<b>Adjustment of Frequency</b>		
QRG	Will you tell me my exact frequency (or that of ...) ?	Your exact frequency (or that of ...) is ... kc/s (or Mc/s).
QRH	Does my frequency vary ?	Your frequency varies.
QTS	Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kc/s (or Mc/s) ?	I will send my call sign for tuning purposes or so that my frequency may be measured now (or at ... hours) on ... kc/s (or Mc/s).
<b>Choice of Frequency and/or Class of Emission</b>		
QSN	Did you hear me (or ... (call sign)) on ... kc/s (or Mc/s) ?	I did hear you (or ... (call sign)) on ... kc/s (or Mc/s).
QSS	What working frequency will you use ?	I will use the working frequency ... kc/s (normally only the last three figures of the frequency need be given).
QSU	Shall I send or reply on this frequency (or on ... kc/s (or Mc/s)) (with emissions of class ...) ?	Send or reply on this frequency (or on ... kc/s (or Mc/s)) (with emissions of class ...).

Abbreviation	Question	Answer or Advice
QSV	Shall I send a series of V's on this frequency ( <i>or</i> ... kc/s ( <i>or</i> Mc/s))?	Send a series of V's on this frequency ( <i>or</i> ... kc/s ( <i>or</i> Mc/s)).
QSW	Will you send on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...)?	I am going to send on this frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)) (with emissions of class ...).
QSX	Will you listen to ... ( <i>call sign(s)</i> ) on ... kc/s ( <i>or</i> Mc/s)?	I am listening to ... ( <i>call sign(s)</i> ) on ... kc/s ( <i>or</i> Mc/s).
<b>Change of Frequency</b>		
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency ( <i>or</i> on ... kc/s ( <i>or</i> Mc/s)).
<b>Establishing Communication</b>		
QRL	Are you busy?	I am busy ( <i>or</i> I am busy with ...). Please do not interfere.
QRV	Are you ready?	I am ready.
QRX	When will you call me again?	I will call you again at ... hours (on ... kc/s ( <i>or</i> Mc/s)).
QRY	What is my turn? ( <i>Relates to communication.</i> )	Your turn is Number ... ( <i>or according to any other indication.</i> ) ( <i>Relates to communication.</i> )
QRZ	Who is calling me?	You are being called by ... (on ... kc/s ( <i>or</i> Mc/s)).
QSC	Are you a cargo vessel? ( <i>See Article 32, Section V.</i> )	I am a cargo vessel.
QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you ( <i>or</i> have interference).
QTQ	Can you communicate with my station by means of the International Code of Signals?	I am going to communicate with your station by means of the International Code of Signals.
QUE	Can you use telephony in ... ( <i>language</i> ), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... ( <i>language</i> ) on ... kc/s ( <i>or</i> Mc/s).
<b>Time</b>		
QTR	What is the correct time?	The correct time is ... hours.
QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
<b>Charges</b>		
QRC	By what private enterprise ( <i>or</i> State Administration) are the accounts for charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ... ( <i>or</i> State Administration).
QSI	What is the charge to be collected to ... including your internal charge?	The charge to be collected to ... including my internal charge is ... francs.
<b>Transit</b>		
QRW	Shall I inform ... that you are calling him on ... kc/s ( <i>or</i> Mc/s)?	Please inform ... that I am calling him on ... kc/s ( <i>or</i> Mc/s).
QSO	Can you communicate with ... direct ( <i>or</i> by relay)?	I can communicate with ... direct ( <i>or</i> by relay through ...).

Abbreviation	Question	Answer or Advice
QSP	Will you relay to ... free of charge?	I will relay to ... free of charge.
QSQ	Have you a doctor on board ( <i>or is... (name of person) on board</i> )?	I have a doctor on board ( <i>or... (name of person) is on board</i> ).
QUA	Have you news of ... ( <i>call sign</i> )?	Here is news of ... ( <i>call sign</i> ).
QUC	What is the number ( <i>or other indication</i> ) of the last message you received from me ( <i>or from ... (call sign)</i> )?	The number ( <i>or other indication</i> ) of the last message I received from you ( <i>or from ... (call sign)</i> ) is ...
Exchange of Correspondence		
QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book.
QRU	Have you anything for me?	I have nothing for you.
QSG	Shall I send ... telegrams at a time?	Send ... telegrams at a time.
QSI		I have been unable to break in on your transmission. <i>or</i> Will you inform ... ( <i>call sign</i> ) that I have been unable to break in on his transmission (on ... kc/s ( <i>or</i> Mc/s)).
QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last telegram which I sent you ( <i>or some previous telegram</i> )?	Repeat the last telegram which you sent me ( <i>or telegram(s) number(s) ...</i> ).
QSZ	Shall I send each word or group more than once?	Send each word or group twice ( <i>or ... times</i> ).
QTA	Shall I cancel telegram number ...?	Cancel telegram number ...
QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
QTC	How many telegrams have you to send?	I have ... telegrams for you ( <i>or for ...</i> ).
QTV	Shall I stand guard for you on the frequency of ... kc/s ( <i>or</i> Mc/s) (from ... to ... hours)?	Stand guard for me on the frequency of ... kc/s ( <i>or</i> Mc/s) (from ... to ... hours).
QTX	Will you keep your station open for further communication with me until further notice ( <i>or until ... hours</i> )?	I will keep my station open for further communication with you until further notice ( <i>or until ... hours</i> ).
Movement		
QRE	What is your estimated time of arrival at ... ( <i>or over</i> ) ... ( <i>place</i> )?	My estimated time of arrival at ... ( <i>or over ...</i> ) ( <i>place</i> ) is ... hours.
QRF	Are you returning to ... ( <i>place</i> )?	I am returning to ... ( <i>place</i> ). <i>or</i> Return to ... ( <i>place</i> ).

Abbreviation	Question	Answer or Advice
QSH	Are you able to home on your D/F equipment?	I am able to home on my D/F equipment (on station ...).
QTI	What is your TRUE track?	My TRUE track is ... degrees.
QTJ	What is your speed?  (Requests the speed of a ship or aircraft through the water or air respectively.)	My speed is ... knots (or ... kilometres per hour or ... statute miles per hour).  (Indicates the speed of a ship or aircraft through the water or air respectively.)
QTK	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is ... knots (or ... kilometres per hour or ... statute miles per hour).
QTL	What is your TRUE heading?	My TRUE heading is ... degrees.
QTM	What is your MAGNETIC heading?	My MAGNETIC heading is ... degrees.
QTN	At what time did you depart from ... (place)?	I departed from ... (place) at ... hours.
QTO	Have you left dock (or port)? or Are you airborne?	I have left dock (or port). or I am airborne.
QTP	Are you going to enter dock (or port)? or Are you going to alight (or land)?	I am going to enter dock (or port) or I am going to alight (or land).
QUG	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately. or I shall be forced to alight (or land) at ... (position or place) at ... hours.
QUJ	Will you indicate the TRUE track to reach you (or ...)?	The TRUE track to reach me (or...) is ... degrees at ... hours.
QUN	Will vessels in my immediate vicinity ... or (in the vicinity of ... latitude ... longitude) or (in the vicinity of ...) please indicate their position, TRUE course and speed?	My position, TRUE course and speed are ...
Meteorology		
QUB	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at ... (place of observation)?	Here is the information requested ... (The units used for speed and distances should be indicated.)
QUH	Will you give me the present barometric pressure at sea level?	The present barometric pressure at sea level is ... (units).
QUK	Can you tell me the condition of the sea observed at ... (place or co-ordinates)?	The sea at... (place or co-ordinates) is ...

Abbreviation	Question	Answer or Advice
QUL	Can you tell me the swell observed at ... ( <i>place or co-ordinates</i> )	The swell at ... ( <i>place or co-ordinates</i> ) is ...
	<b>Radio Direction-Finding</b>	
QTE	What is my TRUE bearing from you?	Your TRUE bearing from me is ... degrees at ... hours.
	<i>or</i> What is my TRUE bearing from ... ( <i>call sign</i> )?	<i>or</i> Your TRUE bearing from ... ( <i>call sign</i> ) was ... degrees at ... hours.
	<i>or</i> What is the TRUE bearing of ... ( <i>call sign</i> ) from ... ( <i>call sign</i> )?	<i>or</i> The TRUE bearing of ... ( <i>call sign</i> ) from ... ( <i>call sign</i> ) was ... degrees at ... hours.
QTF	Will you give me the position of my station according to the bearings taken by the D/F stations which you control?	The position of your station according to the bearings taken by the D/F stations which I control was ... latitude ... longitude ( <i>or other indication of position</i> ), class ... at ... hours.
QTG	Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) (on ... kc/s ( <i>or</i> Mc/s))?	I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) (on ... kc/s ( <i>or</i> Mc/s)).
	<i>or</i> Will you request ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s ( <i>or</i> Mc/s)?	<i>or</i> I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kc/s ( <i>or</i> Mc/s).
	<b>Suspension of Work</b>	
QRT	Shall I stop sending?	Stop sending.
QUM	May I resume normal working?	Normal working may be resumed.
	<b>Urgency</b>	
QUD	Have you received the urgency signal sent by ... ( <i>call sign of mobile station</i> )?	I have received the urgency signal sent by ... ( <i>call sign of mobile station</i> ) at ... hours.
QUG	Will you be forced to alight ( <i>or</i> land)?	I am forced to alight ( <i>or</i> land) immediately.
		<i>or</i> I shall be forced to alight ( <i>or</i> land) at ... ( <i>position or place</i> ) at ... hours.
	<b>Distress</b>	
QUF	Have you received the distress signal sent by ... ( <i>call sign of mobile station</i> )?	I have received the distress signal sent by ... ( <i>call sign of mobile station</i> ) at ... hours.
QUM	May I resume normal working?	Normal working may be resumed.
	<b>Search and Rescue</b>	
QSE	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is ... ( <i>figures and units</i> ).

Abbreviation	Question	Answer or Advice
QSF	Have you effected rescue?	I have effected rescue and am proceeding to . . . base (with . . . persons injured requiring ambulance).
QTD	What has the rescue vessel or rescue aircraft recovered?	. . . ( <i>identification</i> ) has recovered . . . 1. . . . ( <i>number</i> ) survivors 2. wreckage 3. . . . ( <i>number</i> ) bodies.
QTW	What is the condition of survivors?	Survivors are in . . . condition and urgently need . . .
QTY	Are you proceeding to the position of incident and if so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at . . . hours (on . . . date).
QTZ	Are you continuing the search?	I am continuing the search for . . . (aircraft, ship, survival craft, survivors or wreckage).
QUI	Are your navigation lights working?	My navigation lights are working.
QUN	Will vessels in my immediate vicinity . . . <i>or</i> (in the vicinity of . . . latitude longitude . . .) <i>or</i> (in the vicinity of . . .) please indicate their position, TRUE course and speed?	My position, TRUE course and speed are . . .
QUO	Shall I search for . . . 1. aircraft 2. ship 3. survival craft in the vicinity of . . . latitude . . . longitude ( <i>or according to any other indication</i> )?	Please search for . . . 1. aircraft 2. ship 3. survival craft in the vicinity of . . . latitude . . . longitude ( <i>or according to any other indication</i> ).
QUP	Will you indicate your position by . . . 1. searchlight 2. black smoke trail 3. pyrotechnic lights?	My position is indicated by . . .  1. searchlight 2. black smoke trail 3. pyrotechnic lights.
QUQ	Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate your landing?	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water ( <i>or land</i> ) to facilitate my landing.
QUR	Have survivors . . . 1. received survival equipment  2. been picked up by rescue vessel  3. been reached by ground rescue party?	Survivors . . . 1. are in possession of survival equipment dropped by . . . 2. have been picked up by rescue vessel 3. have been reached by ground rescue party.
QUS	Have you sighted survivors or wreckage? If so, in what position?	Have sighted . . . 1. survivors in water 2. survivors on rafts 3. wreckage in position . . . latitude . . . longitude ( <i>or according to any other indication</i> ).
QUT	Is position of incident marked?	Position of incident is marked by... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. . . . ( <i>specify other marking</i> ).

Abbreviation	Question	Answer or Advice
QUU	Shall I home ship or aircraft to my position?	Home ship or aircraft ... ( <i>call sign</i> ) ... 1. to your position by transmitting your call sign and long dashes on ... kc/s ( <i>or</i> Mc/s) 2. by transmitting on ... kc/s ( <i>or</i> Mc/s) TRUE track to reach you.
QUW	Are you in the search area designated as ... ( <i>designator or latitude and longitude</i> ) ?	I am in the ... ( <i>designation</i> ) search area.
QUY	Is position of survival craft marked?	Position of survival craft was marked at ... hours by ... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. ... ( <i>specify other marking</i> ).
QTT	Identification	The identification signal which follows is superimposed on another transmission.

## SECTION II. MISCELLANEOUS ABBREVIATIONS AND SIGNALS

Abbreviation or Signal	Definition
AA	All after ... ( <i>used after a question mark to request a repetition</i> ).
AB	All before ... ( <i>used after a question mark to request a repetition</i> ).
ADS	Address ( <i>used after a question mark to request a repetition</i> ).
AR	End of transmission (. _ . _ . to be sent as one signal).
AS	Waiting period (. _ . . . to be sent as one signal).
BK	Signal used to interrupt a transmission in progress.
BN	All between ... and ... ( <i>used after a question mark to request a repetition</i> ).
BQ	A reply to an RQ.
CFM	Confirm ( <i>or</i> I confirm).
CL	I am closing my station.
COL	Collate ( <i>or</i> I collate).
CP	General call to two or more specified stations ( <i>see Article 31</i> ).
CQ	General call to all stations ( <i>see Article 31</i> ).
CS	Call sign ( <i>used to request a call sign</i> ).
DDD	Used to identify the transmission of the distress message by a station not itself in distress ( <i>see No. 1459</i> ).
DE	From ( <i>used to precede the call sign of the calling station</i> ).
DF	Your bearing at ... hours was ... degrees, in the doubtful sector of this station, with a possible error of ... degrees.
DO	Bearing doubtful. Ask for another bearing later ( <i>or</i> at ... hours).
E	East (Cardinal).
ER	Here ...
ETA	Estimated time of arrival.
ITP	The punctuation counts.
K	Invitation to transmit.
KMH	Kilometers per hour.
KTS	Nautical miles per hour ( <i>Knots</i> ).
MIN	Minute ( <i>or</i> Minutes).



Abbreviation or Signal	Definition
MPH	Statute miles per hour.
MSG	Prefix indicating a message to or from the master of a ship concerning its operation or navigation.
N	North (Cardinal).
NIL	I have nothing to send to you.
NO	No ( <i>Negative</i> ).
NW	Now.
OK	We agree ( <i>or It is correct</i> ).
OL	Ocean Letter.
P	Prefix indicating a private radiotelegram.
PBL	Preamble ( <i>used after a question mark to request a repetition</i> ).
R	Received.
REF	Reference to ... ( <i>or Refer to ...</i> ).
RPT	Repeat ( <i>or I repeat</i> ) ( <i>or Repeat ...</i> ).
RQ	Indication of a request.
S	South (Cardinal).
SIG	Signature ( <i>used after a question mark to request a repetition</i> ).
SLT	Radiomaritime Letter.
SOS	Distress Signal (... to be sent as one signal).
SS	Indicator preceding the name of a ship station.
SVC	Prefix indicating a service telegram.
SYS	Refer to your service telegram.
TFC	Traffic.
TR	Used by a land station to request the position and next port of call of a mobile station ( <i>see No. 1083</i> ) ; used also as a prefix to the reply.
TTT	This group when sent three times constitutes the safety signal ( <i>see No. 1488</i> ).
TU	Thank you.
TXT	Text ( <i>used after a question mark to request a repetition</i> ).
VA	End of work (... to be sent as one signal).
W	West (Cardinal).
WA	Word after ... ( <i>used after a question mark to request a repetition</i> ).
WB	Word before ... ( <i>used after a question mark to request a repetition</i> ).
WD	Word(s) or Group(s).
XQ	Prefix used to indicate an operating communication in the fixed service.
XXX	This group when sent three times constitutes the urgency signal ( <i>see No. 1477</i> ).
YES	Yes ( <i>Affirmative</i> ).

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Ref.

APPENDIX 13

Miscellaneous abbreviations and signals  
to be used in radiotelegraphy communications

(See Article 29)

Replace the heading by :

DNK/38(13)

MOD

Miscellaneous abbreviations and signals  
to be used in radiocommunications

(See Articles 29 and 33)

Reasons :

To permit the use of the abbreviations in Appendix 13, Sections I and II also in radiotelephony. It is not found necessary to select certain abbreviations for the purpose of establishing an independent telephone code, since almost all abbreviations may be possible in telephony when language difficulties arise. To provide better coverage of the conditions of service in radiotelephony, the introduction of a number of new abbreviations has been proposed both in Section I (Q code) and in Section II (Miscellaneous abbreviations and signals). The abbreviations to be used in Section I may presumably be taken from the QV series.

On condition that all mobile stations are provided with the International Code of Signals, there will be no need for abbreviations in respect of safety of navigation, meteorology, and search and rescue in the International Radio Regulations. However, as long as the question as to the mobile stations in which the International Code of Signals is to be found has not been definitely settled, it may be appropriate to retain such abbreviations as relate to conditions of navigation and search and rescue of a more general nature, which will be applicable in rescue operations in which in particular small mobile stations are involved, and which in many cases will be sufficient. Hence it follows that the abbreviations : QSH, QTI, QTJ, QTK, QTL, QTM, QUB, QUH, QUI, QUJ, QUK, QUL, QUQ and QUU may presumably be deleted. It is not believed that the use of abbreviations having one meaning in the Radio Regulations and another in the International Code of Signals will cause any confusion. This point of view also applies to the abbreviations of Section II (Miscellaneous Abbreviations and Signals).

Recommendation No. 22 may now be considered superfluous.

Ref.

Section I. Q Code

Introduction. Replace the sub-paragraph 5 by :

---

DNK/38(14) MOD 5. Q code abbreviations are given the form of a question when followed by a question mark in radiotelegraphy and RQ (ROMEO QUEBEC) in radiotelephony. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark (or RQ) should follow this information.

Reasons :

To permit the use of the abbreviations in radiotelephony when language difficulties arise.

DNK/38(15)

Abbreviations available for all services

A. List of abbreviations in alphabetical order

	<u>Question</u>	<u>Answer or advice</u>
MOD QSN	Replace : (or ... (call sign)) by : (or ... (name and/or call sign)).	Replace : (or ... (call sign)) by : (or ... (name and/or call sign)).

Reasons :

To make the signal usable in radiotelephony in case of language difficulties.

MOD QSX	Replace : (call sign(s)) by : (name(s) and/or call (sign(s))).	Replace : (call sign(s)) by : (name(s) and/or call sign(s)).
---------	--	--

Reasons :

Same as for QSN.

MOD QTE	Replace : (call sign) by : (name and/or call sign).	Replace : (call sign) by : (name and/or call sign).
---------	---	---

Reasons :

Same as for QSN.

<u>Ref.</u>		<u>Question</u>	<u>Answer or advice</u>
DNK/38(15) (contd.)	MOD QUA	Read : Have you news of ... (name and/or call sign)?	Read : I have received the follow- ing from ... (name and/or call sign).

Reasons :

Same as for QSN. To widen the scope of the signal.

MOD QUC	Replace : (call sign) by : (name and/or call sign).	Replace : (call sign) by: (name and/or call sign).
---------	---	---

Reasons :

Same as for QSN.

MOD QUD	Replace : (call sign of the mobile station) by : (name and/or call sign).	Replace : (call sign) by : (name and/or call sign).
---------	--	--

Reasons :

Same as for QSN.

MOD QUF	Replace : (call sign of mobile station) by : (name and/or call sign).	Replace : (call sign of mobile station) by : (name and/or call sign).
---------	--	---

Reasons :

Same as for QSN.

New abbreviations

ADD Q..	Can you communicate by radiotelegraphy (500 kc/s)?	I can communicate by radiotelegraphy (500 kc/s).
---------	--	---

Reasons :

To provide new signals for use in radiotelephony in  
case of language difficulties.

<u>Ref.</u>	<u>Question</u>	<u>Answer or advice</u>
DNK/38(15) (contd.)	ADD Q.. Can you communicate by radiotelephony (2182 kc/s)?	I can communicate by radiotelephony (2182 kc/s).

Reasons :

To provide a signal for use in radiotelephony in case of language difficulties.

ADD Q.. Can you communicate by radiotelephony (channel 16-156.80 Mc/s)?	I can communicate by radiotelephony (channel 16-156.80 Mc/s).
---	---

Reasons :

To provide a signal for use in radiotelephony in case of language difficulties.

ADD Q.. Can you communicate in..	I can communicate in..
0. Dutch 5. Italian	0. Dutch 5. Italian
1. English 6. Japanese	1. English 6. Japanese
2. French 7. Norwegian	2. French 7. Norwegian
3. German 8. Russian	3. German 8. Russian
4. Greek 9. Spanish?	4. Greek 9. Spanish

Reasons :

To provide signals for use in radiotelephony in case of language difficulties. The figures have the same meaning as in the International Code of Signals for reasons of simplicity.

ADD Q..	The groups which follow are from the International Code of Signals.
---------	---

Reasons :

To permit the use of signals from the International Code of Signals.

ADD Q..	The words which follow are in plain language.
---------	---

Reasons :

To avoid confusion when using the spelling tables.

<u>Ref.</u>	<u>Question</u>	<u>Answer or advice</u>
DNK/38(15) (contd.)	ADD Q.. Have you received the security signal sent by ... (name and/or call sign)?	I have received the security signal sent by ... (name and/or call sign).
	<u>Reasons :</u>  To provide a signal for this situation.	
	ADD Q.. What is your ship charge?  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).	My ship charge is ... fr. per word/minute  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).
	<u>Reasons :</u>  To provide a signal for this situation.	
	ADD Q.. What is your coast station charge?  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).	My coast station charge is ... fr. per word/minute  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).
	<u>Reasons :</u>  To provide a signal for this situation.	
	ADD Q.. What is the land line charge?  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).	The land line charge is ... fr. per word/minute  (1. for radiotelegrams 2. for radiotelephone calls (if necessary)).
	<u>Reasons :</u>  To provide a signal for this situation.	
	ADD Q.. What is the charge for ... (the facility in question)?	The charge for ... (the facility in question) is ... fr.
	<u>Reasons :</u>  To provide a signal for this situation.	

<u>Ref.</u>	<u>Question</u>	<u>Answer or advice</u>
DNK/38(15) (contd.)	ADD Q.. How many minutes are you charging?	I am charging ... (minutes).
	<u>Reasons</u> :	
	To provide a signal for this situation in case of language difficulties.	
ADD Q..		I have a radiotelephone call for ... (name of the required person on board the ship).
	<u>Reasons</u> :	
	To provide a signal for this situation in radiotele- phony in case of language difficulties.	
ADD Q..		I have an ordinary radio- telephone call for ... (telephone number or name and exact address of the subscriber); or
		I have ...
		1. an urgent radiotelephone call for ... (telephone number);
		2. a préavis (personal) radiotelephone call for ... (telephone number) ... (name of the re- quired person);
		3. an avis d'appel (a messenger) radiotelephone call for ... (name and exact address of the required person) from ... (name of the caller);



Ref.

Question

Answer or Advice

DNK/38(15)  
(contd.)

4. a collect radiotelephone call from ... (name of the caller) for ... (telephone number) ... (name of the required person in case of an avis d'appel (a messenger) radiotelephone call).

Reasons :

To provide signals for these situations in radiotelephony.

ADD Q...

... (telephone number) ...

1. does not answer
2. is busy. I shall call you later
3. is out of order.

Reasons :

To provide signals for these situations in radiotelephony in case of language difficulties.

ADD Q...

... (name of the required person) ...

1. is expected at ... (hours)
2. is not present. Will call as soon as possible
3. has gone away without leaving his new address
4. has changed his residence
5. is on holiday
6. is unknown.

Reasons :

To provide signals for these situations in radiotelephony in case of language difficulties.

<u>Ref.</u>	<u>Question</u>	<u>Answer or advice</u>
DNK/38(15) (contd.)	ADD Q..	The collect radiotelephone call ... 1. has been accepted 2. has been refused.

Reasons :

To provide signals for these situations in radiotelephony in case of language difficulties.

ADD Q..	Shall I cancel? or	Cancel. or
	Shall I cancel ... (telephone number of the radiotelephone call)?	Cancel ... (telephone number of the radiotele- phone call).

Reasons :

To provide signals for this situation in radiotelephony in case of language difficulties.

DNK/38(16)

Section II. Miscellaneous abbreviations and signals

MOD AA, AB, ADS, BN, PBL, SIG, TXT, WA and WB

Replace : (used after a question mark to request a repetition) by :

(used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition.)

Reasons :

To make the signals usable in radiotelephony in case of language difficulties.

Ref.

DNK/38(16)  
(contd.)

MOD DE Replace : (used to precede the call-sign of the  
calling station) by :  
(used to precede the call sign (or name in case of  
language difficulties) of the calling station).

Reasons :

To make the signal usable in radiotelephony in case  
of language difficulties.

Add, in alphabetical order :

ADD BT Double hyphen (separation signal) (-...- to be sent  
as one signal).

Reasons :

To provide a separation signal to be used by the  
transmission of radiotelegrams and in other cases in radiotele-  
phony in case of language difficulties.

ADD KA Starting signal (-.-.- to be sent as one signal).

Reasons :

To provide a starting signal to be used by the trans-  
mission of radiotelegrams in radiotelephony in case of language  
difficulties.

Ref.

APPENDIX 13

G/59(10)

Amend heading to read :

MOD      Miscellaneous Abbreviations and Signals to be  
used in Radio Communications

(See Articles 29 and 33)

Reasons :

To extend the use of these abbreviations to radio-  
telephony. Consequential upon new 1216A.

SECTION I

Q Code

Introduction

NOC      1 to 7

ADD      8.      The Q code abbreviations marked "\*" are not  
used in the maritime mobile service.

Reasons :

To denote those abbreviations which are no longer used  
in the maritime mobile service.

Abbreviations available for all services

List A. Proposed additions, amendments and  
deletions.

MOD      Add "\*" to the following :

QRE, QRF, QSE, QSN, QSU, QTK, QTL, QTM,  
QTN, QUG, QUI, QUJ, QUK, QUL, QUQ and QUW.

Reasons :

Consequential upon new paragraph 8 in the introduction.

MOD      QRM      Insert :

(Maritime mobile service only)

Question :

Is my transmission being interfered with?

Answer or advice :

Your transmission is being interfered with :

- ( 1. Nil  
2. Slightly  
3. Moderately  
4. Severely  
5. Extremely )

Reasons :

Clarification.

Ref.

G/59(10)  
(contd.)

SUP QSC

Reasons :

Serves no useful purpose.

MOD QSD

Insert :

(maritime mobile service only)

Question :

Are my signals mutilated?

Answer or advice :

Your signals are mutilated.

Reasons :

To include defects additional to bad keying, e.g., defects in automatic transmission.

MOD QTI

Insert :

(Maritime mobile service only)

Question :

What is your TRUE course?

Answer or advice :

My TRUE course is ..... degrees.

Reasons :

The word "course" is more appropriate in maritime communications.

MOD QTQ

Question :

Can you communicate with my station by means of the International Code of Signals (INTERCO)?

Answer or advice :

I am going to communicate with your station by means of the International Code of Signals (INTERCO).

Reasons :

Consequential upon the introduction of the abbreviation INTERCO in Section II.

Ref.

G/59(10)  
(contd.)

MOD

QTS

Insert :

(Maritime mobile service only)

Question :

Will you send your call-sign for ..... seconds?

Answer or advice :

I will send my call-sign for ..... seconds,

Reasons :

To permit transmission of the call-sign for purposes other than for tuning or frequency measurement.

MOD

QUN

Question :

1. When directed to all stations :

Will vessels in my immediate vicinity  
..... or

(in the vicinity of ..... latitude  
..... longitude) or

(in the vicinity of .....)

Please indicate their position, TRUE  
course and speed?

2. When directed to a single station.

Please indicate your position TRUE course  
and speed.

Answer or advice :

My position, TRUE course and speed  
are .....

Reasons :

For clarification.

ADD

QUZ

Question :

What is your MAGNETIC course?

Answer or advice :

My MAGNETIC course is ..... degrees.

Reasons :

To differentiate between True and Magnetic course.

Ref.

G/59(10)  
(contd.)

ADD

QVA

Question :

What is the commercial value of my signals?

Answer or advice :

Your signals are :

- (1. Uncommercial
2. Commercial with difficulty
3. Commercial)

ADD

QVB

Question :

How many tapes have you to send?

Answer or advice :

I have ..... tapes to send.

ADD

QVC

Question :

Shall I send a phasing signal for ..... seconds?

Answer or advice :

Send a phasing signal for ..... seconds.

ADD

QVD

Question :

Shall I send my tape?

Answer or advice :

Send your tape.

Reasons :

To meet requirements of new services.

List B. Proposed additions, amendments and deletions.

MOD

Add "\*" to the following :

QTN, QSN, QSU, QRE, QRF, QTK, QTL, QTM, QTN,  
QUG, QUJ, QUK, QUL, QSE, QUI, QUQ and QUW.

Reasons :

Consequential upon new paragraph 8 in the Introduction.

Ref.

Quality of signals

G/59(10)  
(contd.)

ADD

QVA

Question :

What is the commercial value of my signals?

Answer or advice :

Your signals are :

- (1. Uncommercial
2. Commercial with difficulty
3. Commercial)

Reasons :

To meet requirements of new services.

Keying

MOD

QSD

Insert :

(Maritime mobile service only)

Question :

Are my signals mutilated?

Answer or advice :

Your signals are mutilated.

Reasons :

To include defects additional to bad keying, e.g., defects in automatic transmission.

Interference

MOD

QRM

Insert :

(Maritime mobile service only)

Question :

Is my transmission being interfered with?

Answer or advice :

Your transmission is being interfered with :

- (1. Nil
2. Slightly
3. Moderately
4. Severely
5. Extremely)

Reasons :

Clarification.



Ref.

Adjustment of frequency

G/59(10)  
(contd.)

MOD

QTS

Insert :

(Maritime mobile service only)

Question :

Will you send your call-sign for ..... seconds?

Answer or advice :

I will send my call-sign for ..... seconds

Reasons :

To permit transmission of the call-sign for purposes other than tuning or frequency adjustment.

ADD

QVC

Question :

Shall I send a phasing signal for ..... seconds?

Answer or advice :

Send a phasing signal for ..... seconds.

Reasons :

To meet requirements of new services.

Establishing communication

SUP

QSC

Reasons :

Serves no useful purpose.

MOD

QTQ

Question :

Can you communicate with my station by means of the International Code of Signals (INTERCO)?

Answer or advice :

I am going to communicate with your station by means of the International Code of Signals (INTERCO).

Reasons :

Consequential upon the introduction of the abbreviation INTERCO in Section II.

Ref.

G/59(10)  
(contd.)

Exchange of correspondence

ADD QVB

Question :

How many tapes have you to send?

Answer or advice :

I have ..... tapes to send.

ADD QVD

Question :

Shall I send my tape?

Answer or advice :

Send your tape.

Reasons :

To meet requirements of new services.

Movement

MOD QTI

Insert :

(Maritime Mobile Service only)

Question :

What is your true course?

Answer or advice :

My true course is ..... degrees.

Reasons :

The word "course" is more appropriate in maritime communications.

Ref.

G/59(10)  
(contd.)

MOD

QUN

Question :

1. When directed to all stations :  
Will vessels in my immediate vicinity  
..... or  
(in the vicinity of ..... latitude  
..... longitude) or  
(in the vicinity of .....)  
please indicate their position, TRUE  
course and speed?
2. When directed to a single station.  
Please indicate your position, TRUE  
course and speed.

Answer or advice :

My position, TRUE course and speed are .....

Reasons :

Clarification.

ADD

QUZ

Question :

What is your MAGNETIC course?

Answer or advice :

My MAGNETIC course is ..... degrees.

Reasons :

To differentiate between True and Magnetic course.

Ref.

G/59(10)  
(contd.)

Search and rescue

MOD

QUN

1. When directed to all stations :

Will vessels in my immediate vicinity  
..... or

(in the vicinity of ..... latitude  
..... longitude) or

(in the vicinity of .....)

please indicate their position, TRUE  
course and speed?

2. When directed to a single station :

Please indicate your position, TRUE  
course and speed.

Answer or advice :

My position, TRUE course and speed are .....

Reasons :

For clarification.

ADD

QUZ

Question :

What is your MAGNETIC course?

Answer or advice :

My MAGNETIC course is ..... degrees.

Reasons :

To differentiate between TRUE and MAGNETIC course.

SECTION II

Add "\*" to the following :

MOD

DF, DO, ER, MPH and NW.

Ref.

G/59(10)  
(contd.)

Reasons :

To indicate abbreviations no longer used in the Maritime Mobile Service - see Note 2.

MOD      AR      End of transmission.

Reasons :

To extend the use to radiotelephony - consequential upon proposed new 1216A.

MOD      AS      Waiting period.

Reasons :

Consequential upon new 1216A.

ADD      C      Affirmative - yes or "The significance of the previous group should be read in the affirmative".

Reasons :

Consequential upon its adoption in the International Code of Signals.

ADD      CORRECTION      Cancel my last word or group. The correct (KOR-REK-SHUN) word or group follows.

Reasons :

Consequential upon its adoption in the International Code of Signals.

MOD      CQ      General call to all stations (see Articles 31 and 33 (No. 1302)).

Reasons :

To extend the use to radiotelephony - consequential upon new 1216A.

SUP      DDD

Reasons :

Serves no useful purpose in this section.

Ref.

G/59(10)  
(contd.)

MOD DE "From ....." (used to precede the name  
or other identification of the calling station)  
- see No. 1216B.

Reasons :

To extend the use to radiotelephony - consequential  
upon new 1216A and 1216B.

ADD INTERCO The code expressions in the following message  
(IN-TER-CO) appear in the International Code of Signals  
(I.M.C.O.)

Reasons :

Consequential upon adoption by I.M.C.O. in the inter-  
national Code of Signals.

ADD I SPELL Indicates that the following word will be  
spelled out.

Reasons :

To provide a clear indication that the next word will  
be spelled out in accordance with Appendix 16.

ADD PDH Prefix indicating a private radiotelegram  
for a crew member.

Reasons :

In common use.

SUP SOS

Reasons :

Serves no useful purpose in this section.

SUP SS

Reasons :

Unnecessary.

Ref.

G/59(10)  
(contd.)

MOD      TR      Used by land station to request the position and next port of call of a mobile station (see Nos. 1083 and 1314); used also as a prefix to the reply.

Reasons :

To extend the use to radiotelephony - consequential upon proposed new 1216A.

SUP      TTT

Reasons :

Serves no useful purpose in this section.

MOD      VA      End of work.

Reasons :

To extend the use to radiotelephony - consequential upon new 1216A.

ADD      WX      Weather report follows.

Reasons :

In common use.

SUP      XXX

Reasons :

Serves no useful purpose in this section.

SUP      YES

Reasons :

No longer used (replaced by C).

ADD      Note 1 : When used in radiotelegraphy a bar over the letters composing a signal denotes that the letters are to be sent as one symbol.

Reasons :

Clarification.

ADD      Note 2 : The abbreviations marked "\*" are not used in the maritime mobile service.

Reasons :

To denote those abbreviations which are no longer used in the maritime mobile service.

Ref.

APPENDIX 13

HOL/74(19) MOD Miscellaneous abbreviations and signals to be used in  
radiotelegraphy and radiotelephony communications  
(see Articles 29 and 33)

Section I - Q code

- MOD 5. Q code abbreviations are given the form of a question when followed
- a) by a question mark in the case of radiotelegraphy communications;
  - b) by the letter T (spoken as TANGO) in the case of radiotelephony communications.

When an abbreviation is used as a question and is followed by additional or complementary information, the question mark or the letter T should follow this information.

Reasons :

To use the Q code for radiotelegraphy and radiotelephony communications.

In the opinion of the Netherlands Administration the Q code and abbreviations relating to safety of navigation and search and rescue should be retained in Appendix 13. It is not mandatory to carry the International Code of Signals, whereas it is compulsory to carry the Radio Regulations on all ships fitted with radiotelegraph equipment.

Amend Appendix 13 as follows :

J/88(62) MOD (Heading) Miscellaneous abbreviations and signals to be  
used in ~~radiotelegraphy communications~~  
radiocommunications  
(see Articles 29 and 33)

J/88(63) MOD Section I. Q CODE

(Introduction) 3. Certain Q code abbreviations may be given as an affirmative or negative sense by sending the following signal or abbreviation respectively, immediately following the abbreviation.

- a) In case of radiotelegraphy communications, "YES" or "NO".
- b) In case of radiotelephony communications, "C" (pronounced as CHAR LEE or SHAR LEE) or "NO" (pronounced as NO VEM BER OSS CAH).



Ref.

J/88(64)

MOD

(Introduction)

5. Q code abbreviations are given the form of a question when followed by a question mark (in case of radiotelegraphy communications) or T (in case of radiotelephony communications, pronounced as TANG GO). When an abbreviation is used as a question and is followed by additional or complementary information, the question mark or T should follow this information.

J/88(65)

SUP

(Q CODE)

Suppress the following Q codes :

QRF, QSE, QSF, QTD, QTN, QTW, QTY, QTZ, QUB, QUG, QUH, QUI, QUJ, QUK, QUL, QUN, QUO, QUP, QUQ, QUR, QUS, QUT, QUU, QUW and QUY.

J/88(66)

MOD

Abbreviation	Question	Answer or advice
QSC	Are you a low traffic ship station? (see Article 32, Section V)	<u>I am a low traffic ship station.</u>
QSQ	Is ... (name of person) on board?	... (name of person) is on board

J/88(67)

MOD

Put an asterisk \*) against the following abbreviations or signals given in SECTION II :

ADS AR AS BK BQ CFM CL COL CP DDD  
DF DO ER ETA ITP KMH KTS MIN MPH MSG  
NIL NW OL P PBL REF SIG SLT SOS SS  
SVC SYS TFC TR TIT TU TXT VA WD XQ  
XXX YES

Ref.

J/88(68)

ADD

Add the following abbreviations to SECTION II.  
MISCELLANEOUS ABBREVIATIONS AND SIGNALS :

<u>*) AHR</u>	<u>I have another message to send.</u>
<u>**) AR</u>	<u>End of transmission.</u>
<u>**) AS</u>	<u>Waiting period.</u>
<u>**) C</u>	<u>Yes (Affirmative).</u>
<u>**) CORRECTION</u>	<u>Cancel my last word or group. The correct word or group follows; (pronounced as KOR-REK-SHUN).</u>
<u>*) CUL</u>	<u>I will see you later.</u>
<u>*) HW</u>	<u>How?</u>
<u>**) INTERCO</u>	<u>International Code Group(s) follow(s); (pronounced as IN-TER-CO).</u>
<u>*) NM</u>	<u>No more for you.</u>
<u>*) PSE</u>	<u>Please.</u>
<u>**) YZ</u>	<u>The words which follow are in plain language.</u>

Add the following notes at the end of SECTION II :

- Notes :
- \*) This abbreviation or signal is used only in case of radiotelegraphy communications.
  - \*\*) This abbreviation or signal is used only in case of radiotelephony communications.

Reasons :

It is necessary to clarify what is to be used as one signal in case of radiotelegraphy communications, or the use of the same abbreviation different in meaning between the Radio Regulations and the revised International Code of Signals.

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Appendix 13 of the Radio Regulations

Ref.

RFA/6(6)

Title, read: Miscellaneous Abbreviations and Signals to be used in Radiotelegraphy and Radiotelephony Communications  
(See Articles 29 and 33)

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RFA/6(7)

Section I, number 3, read:

3. Certain Q code abbreviations may be given an affirmative or negative sense by sending, immediately following the abbreviation,

- a) YES or NO in the case of radiotelegraphy communications,
  - b) the letter C (spoken as CHARLIE) or NO (spoken as NOVEMBER OSCAR) in the case of radiotelephony communications.
- 

RFA/6(8)

Section I, number 5:

5. Q code abbreviations are given the form of a question when followed:

- a) by a question mark in the case of radiotelegraphy communications,
- b) by the letter T (spoken as TANGO) in the case of radiotelephone communications.

When an abbreviation is used as a question and is followed by additional or complementary information, the question mark or the letter T, as the case may be, should follow this information.

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Ref.

RFA/6(9)

A. List of Abbreviations in Alphabetical Order

(changes underlined)

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
MOD	QRA	What is the name of your <u>vessel (or station)</u> ?	The name of my <u>vessel (or station)</u> is .....
	QRC	By what private enterprise (or State Administration) are the accounts for the charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ..... (or State Administration).
	QRG	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of ...) is ... kHz (or ... MHz).
	QRH	Does my frequency vary?	Your frequency varies.
	QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad
	QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book.
MOD	QRK	What is the intelligibility of my <u>transmission (or that of ... (name or call sign))</u> ?	The intelligibility of your <u>transmission (or that of ... (name or call sign))</u> is ... 1. bad 2. poor 3. fair 4. good 5. excellent
MOD	QRL	Are you busy?	I am busy (or I am busy with ... (name or call sign)). Please do not interfere.
	QRM	Are you being interfered with ?	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.)	QRN	Are you troubled by static?	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
	QRO	Shall I increase transmitter power?	Increase transmitter power.
	QRP	Shall I decrease transmitter power?	Decrease transmitter power.
MOD	QRQ	Shall I send <u>(or speak)</u> faster?	Send <u>(or speak)</u> faster (... words per minute).
	QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at ... words per minute.
MOD	QRS	Shall I send <u>(or speak)</u> more slowly?	Send <u>(or speak)</u> more slowly.
MOD	QRT	Shall I stop <u>transmission</u> ?	Stop <u>transmission</u> .
	QRU	Have you anything for me?	I have nothing for you.
	QRV	Are you ready?	I am ready.
	QRW	Shall I inform ... (name or call sign) that you are calling him on ... kHz (or ... MHz)?	Please inform ... (name or call sign) that I am calling him on ... kHz (or ... MHz).
	QRX	When will you call me again?	I will call you again at ... hours (on ... kHz (or ... MHz)).
	QRY	What is my turn? (Relates to communication)	Your turn in Number ... (or according to any other indication). (Relates to communication)
	QRZ	Who is calling me?	You are called by ... (name or call sign) (on ... kHz (or ... MHz)).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.)	MOD QSA	What is the strength of my signals (or those of ... <u>(name or call sign)</u> )?	The strength of your signals (or those of ... <u>(name or call sign)</u> ) is ... 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good
	QSB	Are my signals fading?	Your signals are fading.
	QSD	Is my keying defective?	Your keying is defective.
	QSG	Shall I send ... telegrams at a time?	Send ... telegrams at a time.
MOD	QSH	Are you able to home on your direction-finding equipment?	I am able to home on my direction-finding equipment (on ... <u>(name or call sign)</u> ).
	QSJ	What is the charge to be collected to ... including your internal charge?	The charge to be collected to ... including my internal charge is ... francs.
	QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
	QSL	Can you acknowledge receipt?	I am acknowledging receipt.
MOD	QSO	Can you communicate with ... <u>(name or call sign)</u> ?	I can communicate with ... <u>(name or call sign)</u> .

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.) MOD	QSP	Will you relay to <u>(name or call sign)</u> free of charge?	I will relay to ... <u>(name or call sign)</u> free of charge.
	QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you (or have interference).
MOD	QSS	What working frequency will you use?	I will use the working frequency ... kHz (or ... MHz) <u>(when using A1 on high frequencies, normally only the last three figures of the frequency need be given).</u>
	QSU	Shall I send or reply on this frequency (or on ... kHz (or ... MHz)); (with emissions of class ...)?	Send or reply on this frequency (or on ... kHz (or ... MHz)); (with emissions of class ...).
MOD	QSV	Shall I send a series of V's <u>(or words)</u> for adjustment on this frequency (or ... kHz (or ... MHz))?	Send a series of V's <u>(or words)</u> for adjustment on this frequency (or ... kHz (or ... MHz)).
	QSW	Will you send on this frequency (or ... kHz (or ... MHz)) (with emissions of class ...)?	I am going to send on this frequency (or ... kHz (or ... MHz)) (with emissions of class ...).
MOD	QSX	Will you listen to ... <u>(name or call sign)</u> on ... kHz (or ... MHz)?	I am listening to ... <u>(name or call sign)</u> on ... kHz (or ... MHz).
	QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or ... kHz (or ... MHz)).
MOD	QSZ	Shall I send <u>(or speak)</u> each word or group more than once?	Send <u>(or speak)</u> each word or group twice (or ... times).
MOD	QTA	Shall I cancel telegram number ... <u>(or message or signal)</u> ?	Cancel telegram number ... <u>(or message or signal)</u> .

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.)	QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
MOD	QTC	How many telegrams have you to send?	I have ... telegrams for you (or for ... <u>(name or call sign)</u> ).
MOD	QTE	What is my TRUE bearing from you? or What is my TRUE bearing from ... <u>(name or call sign)</u> ? or What is the TRUE bearing of ... <u>(name or call sign)</u> from ... <u>(name or call sign)</u> ?	Your TRUE bearing from is ... degrees at ... hours. or Your TRUE bearing from ... <u>(name or call sign)</u> was ... degrees at ... hours. or The TRUE bearing of ... <u>(name or call sign)</u> from ... <u>(name or call sign)</u> was ... degrees at ... hours.
MOD	QTF	Will you give me <u>my position</u> according to the bearings taken by the direction-finding stations which you control?	Your position according to the bearings taken by the direction-finding stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours.
MOD	QTG	Will you send two dashes <u>(or carrier frequency)</u> of ten seconds each followed by your call sign <u>(or name)</u> (repeated ... times) (on ... kHz (or ... MHz)? or Will you request ... <u>(name or call sign)</u> to send two dashes <u>(or carrier frequency)</u> of ten seconds each followed by his call sign <u>(or name)</u> (repeated ... times) on ... kHz (or ... MHz)?	I am going to send two dashes <u>(or carrier frequency)</u> of ten seconds each followed by my call sign <u>(or name)</u> (repeated ... times) (on ... kHz (or ... MHz)). or I have requested ... <u>(name or call sign)</u> to send two dashes <u>(or carrier frequency)</u> of ten seconds each followed by his call sign <u>(or name)</u> (repeated ... times) on ... kHz (or ... MHz).



<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.)	QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude ... longitude (or according to any other indication).
	QTO	Have you left dock (or port)? or Are you airborne?	I have left dock (or port). or I am airborne.
	QTP	Are you going to enter dock (or port)? or Are you going to alight (or land)?	I am going to enter dock (or port). or I am going to alight (or land).
MOD	QTQ	Can you communicate with <u>me</u> by means of the International Code of Signals?	I am going to communicate with <u>you</u> by means of the International Code of Signals.
	QTR	What is the correct time?	The correct time is ... hours.
MOD	QTS	Will you send your call sign ( <u>or name</u> ) for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kHz (or ... MHz)?	I will send my call sign ( <u>or name</u> ) for tuning purposes or so that my frequency may be measured now (or at ... hours) on ... kHz (or ... MHz).
	QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
MOD	QTV	Shall I stand guard for you on ... kHz (or ... MHz) (from ... to ... hours)?	Stand guard for me on ... kHz (or ... MHz) (from ... to ... hours).
	QTX	Will you keep your station open for further communication with me until further notice (or until ... hours)?	I will keep my station open for further communication with you until further notice (or until ... hours).
MOD	QUA	Have you news of ... ( <u>name or call sign</u> )?	Here is news of ... ( <u>name or call sign</u> ).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(9) (cont.) MOD	QUD	Have you received the urgency signal sent by ... ( <u>name or call sign</u> )?	I have received the urgency signal sent by ... ( <u>name or call sign</u> ) at ... hours.
	QUE	Can you use telephony in ... (language), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... (language) on ... kHz (or ... MHz).
MOD	QUF	Have you received the distress signal sent by ... ( <u>name or call sign</u> )?	I have received the distress signal sent by ... ( <u>name or call sign</u> ) at ... hours.
	QUM	May I resume normal working?	Normal working may be resumed.

RFA/6(10)

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

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
	<u>Name</u>	
QRA	What is the name of your vessel (or station)?	The name of my vessel (or station) is ...
	<u>Position</u>	
QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude ... longitude (or according to any other indication).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)		<u>Quality of Signals</u>	
	QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad.
	QRK	What is the intelligibility of my transmission (or that of ... (name or call sign))?	The intelligibility of your transmission (or that of ... (name or call sign)) is ... 1. bad 2. poor 3. fair 4. good 5. excellent.
		<u>Strength of Signals</u>	
	QRO	Shall I increase transmitter power?	Increase transmitter power.
	QRP	Shall I decrease transmitter power?	Decrease transmitter power.
	QSA	What is the strength of my signals (or those of ... (name or call sign))?	The strength of your signals (or those of ... (name or call sign)) is ... 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good.
	QSB	Are my signals fading?	Your signals are fading.
		<u>Keying</u>	
	QRQ	Shall I send (or speak) faster?	Send (or speak) faster (... words per minute).
	QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at ... words per minute.

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)	QRS	Shall I send (or speak) more slowly?	Send (or speak) more slowly.
	QSD	Is my keying defective?	Your keying is defective.

Interference

QRM	Are you being interfered with?	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRN	Are you troubled by static?	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely).

Adjustment of frequency

QRC	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of ...) is ... kHz (or ... MHz).
QRH	Does my frequency vary?	Your frequency varies.
QTS	Will you send your call sign (or name) for tuning purposes or so that your frequency can be measured now (or at ... hours) on ... kHz (or ... MHz)?	I will send my call sign (or name) for tuning purposes or so that my frequency may be measured now (or at ... hours) on ... kHz (or ... MHz).

Choice of frequency and/or  
class of emission

QSS	What working frequency will you use?	I will use the working frequency ... kHz (or ... MHz) (using A1 on high frequencies normally only the last three figures of the frequency need be given).
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<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)	QSU	Shall I send or reply on this frequency (or on ... kHz (or ... MHz)); (with emissions of class ...)?	Send or reply on this frequency (or on ... kHz (or ... MHz)); (with emissions of class ...).
	QSV	Shall I send a series of V's (or words) for adjustment on this frequency (or ... kHz (or ... MHz))?	Send a series of V's (or words) for adjustment on this frequency (or ... kHz (or ... MHz)).
	QSW	Will you send on this frequency (or ... kHz (or ... MHz)) (with emissions of class ...)?	I am going to send on this frequency (or ... kHz (or ... MHz)) (with emissions of class ...).
	QSX	Will you listen to ... (name or call sign) on ... kHz (or ... MHz)?	I am listening to ... (name or call sign) on ... kHz (or ... MHz).

Change of frequency

QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or ... kHz (or ... MHz)).
-----	--	--

Establishing communication

QRL	Are you busy?	I am busy (or I am busy with ... (name or call sign)). Please do not interfere.
QRV	Are you ready?	I am ready.
QRX	When will you call me again?	I will call you again at ... hours (on ... kHz (or ... MHz)).
QRY	What is my turn? (Relates to communication)	Your turn is Number ... (or according to any other indication). (Relates to communication).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)	QRZ	Who is calling me?	You are called by ... (name or call sign) (on ... kHz (or ... MHz)).
	QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you (or have interference).
	QTQ	Can you communicate with me by means of the International Code of Signals?	I am going to communicate with you by means of the International Code of Signals.
	QUE	Can you use telephony in ... (language), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... (language) on ... kHz (or ... MHz).
<u>Time</u>			
	QTR	What is the correct time?	The correct time is ... hours.
	QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
<u>Charges</u>			
	QRC	By what private enterprise (or State Administration) are the accounts for the charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ... (or State Administration).
	QSJ	What is the charge to be collected to ... including your internal charge?	The charge to be collected to ... including my internal charge is ... francs.
<u>Transit</u>			
	QFW	Shall I inform ... (name or call sign) that you are calling him on ... kHz (or ... MHz)?	Please inform ... (name or call sign) that I am calling him on ... kHz (or ... MHz).

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)	QSO	Can you communicate with ... (name or call sign)?	I can communicate with ... (name or call sign).
	QSP	Will you relay to ... (name or call sign) free of charge?	I will relay to ... (name or call sign) free of charge.
	QUA	Have you news of ... (name or call sign)?	Here is news of ... (name or call sign).
<u>Exchange of correspondence</u>			
	QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book.
	QRU	Have you anything for me?	I have nothing for you.
	QSG	Shall I send ... telegrams at a time?	Send ... telegrams at a time.
	QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
	QSL	Can you acknowledge receipt?	I am acknowledging receipt.
	QSZ	Shall I send (or speak) each word or group more than once?	Send (or speak) each word or group twice (or ... times).
	QTA	Shall I cancel telegram number ... (or message or signal)?	Cancel telegram number ... (or message or signal).
	QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)	QTC	How many telegrams have you to send?	I have ... telegrams for you (or for ... (name or call sign)).
	QTV	Shall I stand guard for you on ... kHz (or ... MHz) (from ... to ... hours)?	Stand guard for me on ... kHz (or ... MHz) (from ... to ... hours).
	QTX	Will you keep your station open for further communication with me until further notice (or until ... hours)?	I will keep my station open for further communication with you until further notice (or until ... hours).
<u>Movement</u>			
	QSH	Are you able to home on your direction-finding equipment?	I am able to home on my direction-finding equipment (on ... (name or call sign)).
	QTO	Have you left dock (or port)?	I have left dock (or port).
		Are you airborne?	I am airborne.
	QTP	Are you going to enter dock (or port)?	I am going to enter dock (or port).
		Are you going to alight (or land)?	I am going to alight (or land).



<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)		<u>Radio direction-finding</u>	
	QTE	What is my TRUE bearing from you?	Your TRUE bearing from me is ... degrees at ... hours.
		or	or
		What is my TRUE bearing from ... (name or call sign)?	Your TRUE bearing from ... (name or call sign) was ... degrees at ... hours.
		or	or
		What is the TRUE bearing of ... (name or call sign) from ... (name or call sign)?	The TRUE bearing of ... (name or call sign) from ... (name or call sign) was ... degrees at ... hours.
	QTF	Will you give me my position according to the bearings taken by the direction-finding stations which you control?	Your position according to the bearings taken by the direction-finding stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours.
	QTG	Will you send two dashes (or carrier frequency) of ten seconds each followed by your call sign (or name) (repeated ... times) on ... kHz (or ... MHz)?	I am going to send two dashes (or carrier frequency) of ten seconds each followed by my call sign (or name) (repeated ... times) (on ... kHz (or ... MHz)).
		or	or
		Will you request ... (name or call sign) to send two dashes (or carrier frequency) of ten seconds each followed by his call sign (or name) (repeated ... times) on ... kHz (or ... MHz)?	I have requested ... (name or call sign) to send two dashes (or carrier frequency) of ten seconds each followed by his call sign (or name) (repeated ... times) on ... kHz (or ... MHz).

Suspension of work

QRT	Shall I stop transmission?	Stop transmission.
QUM	May I resume normal working?	Normal working may be resumed.

<u>Ref.</u>	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
RFA/6(10) (cont.)			<u>Urgency</u>
	QUD	Have you received the urgency signal sent by ... (name or call sign)?	I have received the urgency signal sent by ... (name or call sign) at ... hours.
			<u>Distress</u>
	QUF	Have you received the distress signal sent by ... (name or call sign)?	I have received the distress signal sent by ... (name or call sign) at ... hours.
	QUM	May I resume normal working?	Normal working may be resumed.

Reasons for proposals Nos. 6 to 10:

Recommendation No. 22 of the Radio Regulations provides that in the case of language difficulties in radiotelephony a code shall be used for the exchange of communications which should cover at least :

- a) distress, urgency, safety of navigation, search and rescue, and
- b) establishment of communications.

As regards a) the Recommendation provides for code groups which are taken from the International Code of Signals (parts 2 to 4 of Annex 2 of Recommendation No. 22).

As regards b) Q code abbreviations according to Appendix 13 of the Radio Regulations are provided for.

The signal groups relating to distress, urgency, safety of navigation, and search and rescue fall within the competence of I.M.C.O.

The groups required for the exchange of radiocommunications fall within the competence of the I.T.U. Recommendation No. 22 of the Radio Regulations indicates that in the opinion of I.T.U. uniform Q code abbreviations shall be used for the exchange of radiocommunications.

Ref.

The aforementioned proposals :

RFA/6(10)  
(cont.)

- 1) amend and complete the Q groups listed in Appendix 13 in such a way that they can be used for radiotelegraphy and radiotelephony communications;
- 2) delete the Q groups which can be dispensed with for the exchange of radiocommunications. Of the 40 deleted Q groups\*) 5 are not needed and the meaning of the remaining 35 groups relates to navigation, search and rescue.

In the opinion of the German Administration only such Q groups should be included in the Radio Regulations which are needed for the exchange of radiocommunications. The International Code of Signals revised by I.M.C.O. should continue to exist as a separate book and serve as a reference for the ship's command. The code groups for the exchange of communications contained in Section VII "Communications" of the revised International Code of Signals should only be used for flash lamp and flag signalling. In the opinion of the German Administration these code groups for the exchange of communications should not be used in radiotelephony the more so that about 25 important groups required for this purpose are not available. It is the opinion of the German Administration that the following arguments can be advanced against the use of the code groups for the exchange of communications listed in the International Code of Signals in radiotelephony communications :

- 1) The radiotelephonist is compelled to use both signal code groups and Q groups if there are no corresponding signal code groups for normal communications.
- 2) In some cases radiotelegraphists of coast and ship stations have to use signal code groups for communications with radiotelephonists although the usual Q groups with the same meaning are available.
- 3) Thus, two different service aids have to be used in the aforementioned cases. This is not expedient for the exchange of communications, and furthermore uniformity in radio communications is not preserved.

Uniform abbreviations for the exchange of communications in the radiotelegraph and radiotelephone services simplify radio operations.

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\*) See under Final Remarks, page 20, Doc. No. 6.

Ref.

APPENDIX 13

RFA/92(18)

ADD

New abbreviations

Abbreviation	Question	Answer or Advice
ADD Q ...	Listen on 2182 kc/s for signals of emergency position-indicating radio beacons.	
ADD Q ...	Have you received the signal of an emergency position-indicating radio beacon?	I have received the signal of an emergency position-indicating radio beacon.

Reasons :

To provide signals for use in radiotelegraphy and in case of language difficulties in radiotelephony (see proposal ADD 1476 I (RFA/94(27), Document No. 94).

Proposal

USSR/52(8)

It is proposed that the proposals prepared by I.M.C.O. for the amendment of the code of signals be adopted.

USA/21(42)

APPENDIX 13

SECTION I

Q CODE

SUP	QRD	QTH	QUA	QUP
	QRE	QTI	QUB	QUQ
	QRF	QTJ	QUG	QUR
	QSE	QTK	QUH	QUS
	QSF	QTL	QUI	QUT
	QSH	QTM	QUJ	QUU
	QSQ	QTN	QUK	QUW
	QTD	QTW	QUL	QUY
	QTE	QTY	QUN	
	QTF	QTZ	QUO	

SECTION II

Miscellaneous Abbreviations and signals

SUP	DF	ER	KPS	N	W
	DO	ETA	MLM	NW	
	E	KMH	MPH	S	

Reasons :

To amend pertinent portions of the Radio Regulations which are in conflict with the revised International Code of Signals adopted by the Inter-Governmental Maritime Consultative Organization (I.M.C.O.).

Proposals relating to  
Appendix 15

Table of Frequencies to be used by Ship Stations in the Bands  
between 4 and 27.5 Mc/s  
Allocated Exclusively to the Maritime Mobile Service

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## APPENDIX 15

**Table of Frequencies to be used by Ship Stations in the Bands  
between 4 and 27.5 Mc/s  
Allocated Exclusively to the Maritime Mobile Service  
(See Articles 32, 35 and Appendix 17)**

1. This Appendix contains two Sections, A and B.

For the use of frequencies in the Band 4 to 27.5 Mc/s for radiotelegraphy (Section A) see also Nos. **1174** to **1201** of Article 32.

For the use of frequencies in the Band 4 to 23 Mc/s for radiotelephony (Section B) see also Nos. **1352** to **1358** of Article 35.

2. *In the table in Section A :*

a) 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 kc/s being indicated in italics;

b) the vertical arrows indicate the harmonic relationship between the frequencies assigned in the different bands.

3. *In the table in Section B :*

the working frequencies (carrier waves) in a given band are:

- indicated by the lowest and highest frequency, in heavy type, in that band;
- regularly spaced, where there are more than two; the number of frequencies and the spacing in kc/s being indicated in italics.

## SECTION A

**Frequencies Assignable to Ship Radiotelegraph Stations using the  
Maritime Mobile Service Bands between 4 and 27.5 Mc/s**

BAND (Mc/s)	LIMITS	k c/s				LIMITS	
		Assignable Frequencies Wide-Band Telegraphy, Facsimile and Special Transmission Systems	Assignable Working Frequencies for High Traffic Ships	Calling Frequencies	Assignable Working Frequencies for Low Traffic Ships		
					GROUP A	GROUP B	
4	4 140	4 142- - - - -4 158 <i>5 Frequencies spaced 4</i>	4 161- - - - -4 176 <i>11 Frequencies spaced 1.5</i>	4 178- - - - -4 186 <i>9 Frequencies spaced 1</i>	4 188- - -4 212	4 212.5- -4 236.5 <i>98 Frequencies spaced 0.5</i>	4 238
6	6 211	6 213- - - - -6 237 <i>7 Frequencies spaced 4</i>	6 241.5- - - - -6 264 <i>11 Frequencies spaced 2.25</i>	6 267- - - - -6 279 <i>9 Frequencies spaced 1.5</i>	6 282- - -6 318	6 318.75- -6 354.75 <i>98 Frequencies spaced 0.75</i>	6 357
8	8 280	8 282- - - - -8 318 <i>10 Frequencies spaced 4</i>	8 322- - - - -8 352 <i>11 Frequencies spaced 3</i>	8 356- - - * - -8 372 <i>9 Frequencies spaced 2</i>	8 376- - -8 424	8 425- - -8 473 <i>98 Frequencies spaced 1</i>	8 476
12	12 421	12 424- - - - -12 468 <i>12 Frequencies spaced 4</i>	12 474 12 478.5 12 483- - - - -12 528 <i>11 Frequencies spaced 4.5</i>	12 534- - - - -12 558 <i>9 Frequencies spaced 3</i>	12 564- - -12 636	12 637.5- -12 709.5 <i>98 Frequencies spaced 1.5</i>	12 714
16	16 562	16 564- - - - -16 620 <i>15 Frequencies spaced 4</i>	16 626 16 632 16 638 16 644- - - - -16 704 <i>11 Frequencies spaced 6</i>	16 712- - - - -16 744 <i>9 Frequencies spaced 4</i>	16 752- - -16 848	16 850- - -16 946 <i>98 Frequencies spaced 2</i>	16 952
22	22 100	22 102- - - - -22 146 <i>12 Frequencies spaced 4</i>	22 151 22 157- - - - -22 217 <i>11 Frequencies spaced 6</i>	22 225- - - - -22 265 <i>9 Frequencies spaced 5</i>	22 272.5- -22 332.5	22 335- - -22 395 <i>50 Frequencies spaced 2.5</i>	22 400
25	25 070	Assignable Working Frequencies to Ships of all Categories					
		25 075- - - - -25 105 <i>11 Frequencies spaced 3</i>					
							25 110

\* For particular conditions concerning the use of 8364 kc/s see No. 1179.

APP 15

SECTION B

Carrier Frequencies in kc/s for Ship Radiotelephone Stations using the  
Maritime Mobile Service Bands between 4 and 23 Mc/s

LIMITS		kc/s		LIMITS
BAND (Mc/s)		Radiotelephone (Double sideband) Calling frequencies	Radiotelephone (Single sideband) Upper sideband carrier frequencies	
4	4 133		4 133 and 4 136.5	4 140
6	6 200		6 200.5 ---- * ----- 6 207.5 <i>3 Frequencies spaced 3.5</i>	6 211
8	8 265	8 269	8 273 and 8 276.5	8 280
12	12 400	12 403.5	12 407 ----- 12 417.5 <i>4 Frequencies spaced 3.5</i>	12 421
16	16 530	16 533.5	16 537 ----- 16 558 <i>7 Frequencies spaced 3.5</i>	16 562
22	22 070	22 074	22 078 ----- 22 095.5 <i>6 Frequencies spaced 3.5</i>	22 100

\* For particular conditions concerning the use of 6204 kc/s see No. 1353.



Ref.

CAN/107 (35)

Proposal

In each of the 4, 6, 8, 12, 16 and 22 Mc/s bands allocated to the Maritime Mobile Service, a channel 500 to 750 cycles/second in width in the "Assignable Working Frequencies for High Traffic Ships" be designated for selective calling of ships on an international basis.

Reasons

To provide spectrum space for the development and use of an international system of selective calling in each of the 4 - 22 Mc/s bands available to the Maritime Mobile Service.

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This proposal supersedes Canadian comments on Agenda Item 7.3 on page 2 of Document No. 45.

Considering,

- a) that it would be advantageous for stations of the Maritime Mobile Service to have the benefit of the use of selective calling devices in the HF bands for the purpose of establishing initial contact;
  - b) that congestion exists in the Maritime Mobile bands and it is therefore desirable that only the minimum amount of spectrum be utilized for selective calling;
  - c) that there is no suitable selective calling system available for operation in the HF bands on an international basis;
  - d) that the C.C.I.R. is continuing its study of selective calling systems for future operational requirements of the Maritime Mobile Service;
  - e) that this conference will be the only opportunity for some time to designate frequencies for this purpose;
- provisions should be made for a selective calling channel of the order of 500 to 750 cycles/second in width in each of the HF Maritime Mobile bands.
-

Ref.

CAN/41(15)

MOD

APPENDIX 15

Section B

Carrier (Reference) Frequencies in kc/s for Ship

Radiotelephone Stations using the Maritime

Mobile Service Bands between 4 and 23 Mc/s.

Band (Mc/s)	limits	kc/s		limits
		Radiotelephone (Double sideband) Calling frequencies	Radiotelephone (Single sideband) Upper sideband Carrier <u>reference</u> fre- quencies	
4	4133		4133	4136.5
6	6200		6200— <del>6204</del> *) 2 frequencies spaced 3.5	6207.5
8	8265	8269	8273	8276.5
12	12400	12403.5	12407— <del>12414</del> 3 frequencies spaced 3.5	12417.5
16	16530	16533.5	165537— <del>16554.5</del> 6 frequencies spaced 3.5	16558.5
22	22070	22074	22078— <del>22092</del> 5 frequencies spaced 3.5	22096.5

\*) For particular conditions concerning the use of 6204 kc/s  
see No. 1353.

Note - The single sideband frequencies above may be assigned to coast sta-  
tions in accordance with provisions contained in Article 7

Reasons: Consequential to Canadian proposal for Agenda Item 2.4 to allocate  
frequencies for the Ocean Data Service.

DNK/NOR/115(1)

Proposal concerning the use of calling frequencies  
in the HF maritime mobile radiotelephony service

1. Background

The Ordinary Administrative Radio Conference, Geneva, 1959, decided to introduce calling frequencies for ships in the HF maritime mobile radiotelephony service, and channels (double sideband) were allocated in the 8, 12, 16 and 22 Mc/s bands (ref. Appendix 15, Section B, to the Radio Regulations). Before the 1959 conference initial contacts between ships and coast stations had to be made by means of HF radiotelegraphy or direct on the HF telephony working frequencies. The heavy increase in traffic on the working frequencies and the fact that some ships were fitted only with radiotelephony on HF had made the usefulness of separate calling frequencies obvious.

2. Experience since 1959

During the years since 1959 the experience at coast stations shows that calling frequencies are of great value in a smooth handling of the radiotelephone traffic. However, it has caused difficulties that the coast stations had to use their normal working frequencies in replying to calls from ships. Therefore, the introduction of two-way calling channels appears to be essential.

During the years with low solar activity, experience has shown that calling frequencies are required also in the 4 and possibly in the 6 Mc/s bands.

3. Conclusion

On the basis of the foregoing the Administrations of Denmark and Norway propose to the W.A.R.C. that calling frequencies in the HF maritime mobile radiotelephony service be maintained.

It is considered necessary that calling frequencies be allocated in all the 6 frequency bands and made available for coast stations as well as ship stations. The actual selection of such frequencies, appropriate bandwidth, classes of emission to be used, and whether single frequency operation or a pair of associated frequencies for ship and coast stations should be used in each band, will have to be decided upon when the Conference revises Appendices 15, 17 and 25 to the Radio Regulations.

In considering this matter the possible introduction of a selective calling system in the maritime mobile HF service should be taken into account.

Appendix 15 - In the title, read as follows :

..... by ship radiotelegraph stations ...  
... (see Article 32) ...

Replace paragraph 1 by the following :

1. For the use of frequencies in bands between 4 and 27.5 Mc/s for radiotelegraphy, see also numbers 1174 to 1201 of Article 32.

Replace paragraph 2 by the following :

2. In the table appearing in the present appendix :

a) the assignable frequencies ..... (rest unchanged).....

Delete paragraph 3

Replace the table in Appendix 15A by the table for Appendix 15 attached hereto

Delete the table in Appendix 15B

Reasons :

Appendix 15B is deleted as a consequence of proposals F/8(5) and F/8(8) relative to Nos. 447 and 450. Appendix 15A is replaced by the new Appendix 15 as a consequence of proposed amendments to Nos. 452 and 453 (proposals F/8(10) and (11) - Document No. 8). See also the proposals made under Item 7.1 of the agenda (Document No. 14) as regards working frequencies to be assigned to high-traffic ships for data transmission and teleprinter links.

Appendix 15A

This question is solved by Proposal F/10(60) to replace the table in Appendix 15A by the new table in Appendix 15 (see Item 3 of the agenda, Document No. 10).

Reasons :

To permit sharing of the working frequency bands assigned to high traffic ships, in order to separate data and teleprinter transmissions from manual telegraph transmissions.

Frequency separations may be the subject of a subsequent proposal.

See Proposal F/8(11) relating to No. 453 (Item 1 of the agenda, Document No. 8).

Reasons :

Results from the proposal to amend Appendix 15.

Frequencies assignable to ship radiotelegraph stations using the  
maritime mobile service bands between 4 and 27.5 MHz

Limits		kHz				Limits	
Band MHz		Assignable frequencies - Wide-band telegraphy, facsimile and special transmission systems	Assignable Working Frequencies for High-Traffic Ships Teleprinters and data transmission	Manual telegraphy	Calling frequencies	Assignable Working Frequencies for Low-Traffic Ships	
						GROUP A      GROUP B	
4	4140	4142 ----- 4158 5 frequencies spaced 4	Limits 4160	Limits 4177	4178 ----- 4186 9 frequencies spaced 1	4188 ----- 4208,5 + 4209 ----- 4229,5 84 frequencies spaced 0.5	4231
6	6211	6213 ----- 6237 7 frequencies spaced 4	6240	6265,5	6267 ----- 6279 9 frequencies spaced 1.5	6282 ----- 6212,75 6213,5 ----- 6344,2 84 frequencies spaced 0.75	6346
8	8280	8282 ----- 8318 10 frequencies spaced 4	8320	8354	8356 ----- 8372 9 frequencies spaced 2	8376 ----- 8417 8418 ----- 8459 84 frequencies spaced 1	8462
12	12421	12424 ----- 12468 12 frequencies spaced 4	12471	12531	12534 ----- 12558 9 frequencies spaced 3	12564 ----- 12625,5 12627 ----- 12688,5 84 frequencies spaced 1.5	12693
16	16562	16564 ----- 16620 15 frequencies spaced 4	16622	16708	16712 ----- 16744 9 frequencies spaced 4	16752 ----- 16834 16836 ----- 16918 84 frequencies spaced 2	16924
22	22100	22102 ----- 22146 12 frequencies spaced 4	22148	22220	22225 ----- 22265 9 frequencies spaced 5	22272,5 ----- 22317,5 22320 ----- 22365 38 frequencies spaced 2.5	22370
		Assignable working frequencies to ships of all categories					
25	25070	25075 ----- 25105 11 frequencies spaced 3					

\* For particular conditions concerning the use of 8,364 kHz, see No. 1179.

Ref.

G/77(37)

APPENDIX 15

MOD Table of frequencies to be used by Ship Radiotelegraph  
Stations in the bands between 4 and 27.5 Mc/s  
allocated exclusively to the Maritime Mobile Service  
(See Article 32)

MOD 1. The following table indicates the frequencies to be used by ship stations in the bands allocated to the Maritime Mobile Radiotelegraph Service between 4 and 27.5 Mc/s - see also Nos. 1174 to 1201 of Article 32.

MOD 2. 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 kc/s being indicated in italics.

The vertical arrows indicate the harmonic relationship between the frequencies assigned in the different bands.

SUP 3.

Reasons :

Consequential upon the deletion of Section B following the inclusion of Section B frequencies in the revised bands allocated to the radiotelephone service.

SUP Section A (pages 427-428), and replace by attached table.

Reasons :

Consequential upon the proposals put forward in Article 32 (G/77(40)) and Article 35 (G/77(42)).

SUP Section B (page 429)

Reasons :

Consequential upon the inclusion of Section B frequencies in the revised bands allocated to the radiotelephone service.

Ref.

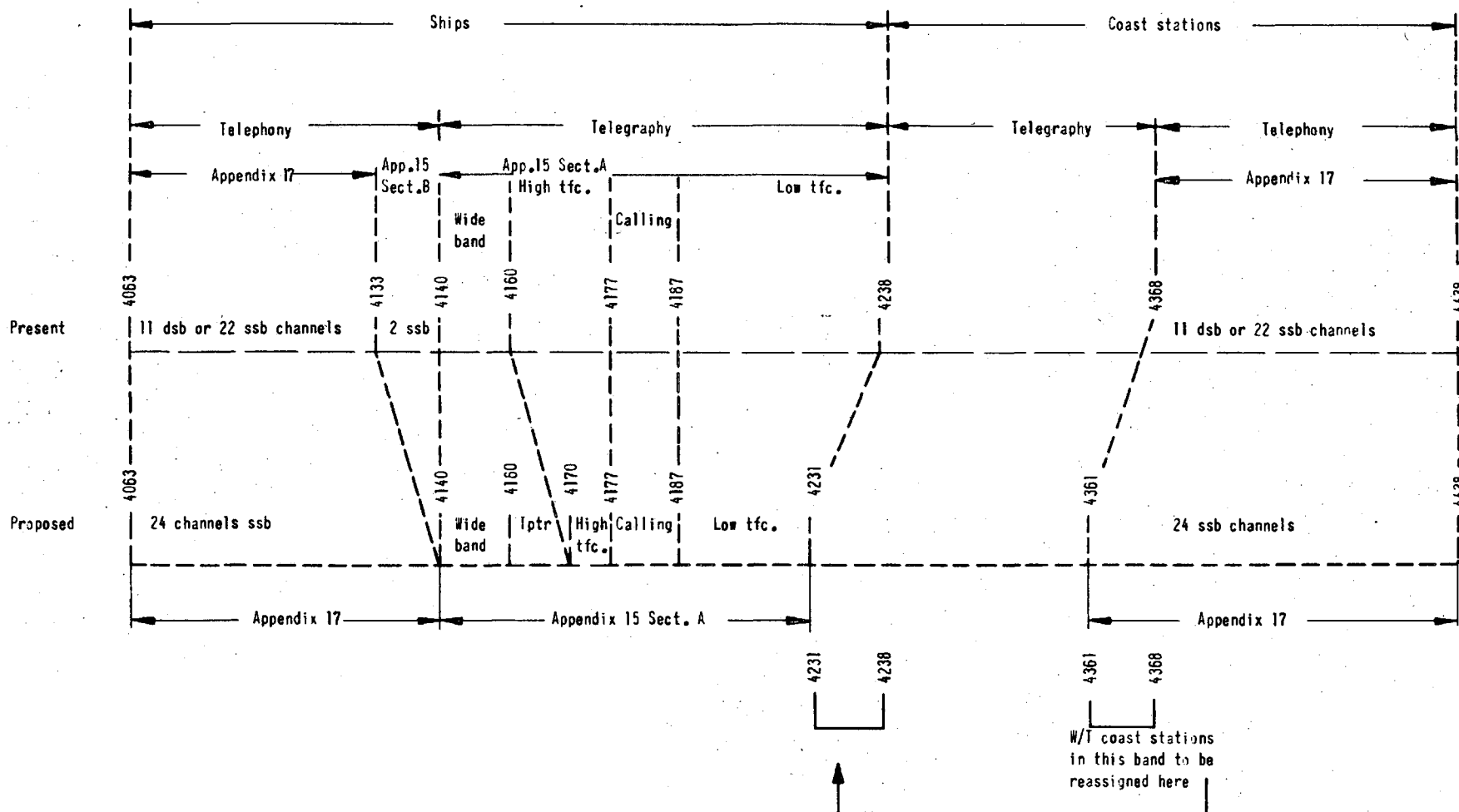
Frequencies assignable to Ship Radiotelegraph stations using the Maritime Mobile Service Band between 4 and 27.5 Mc/s

G/77(37)

(contd.)

Band Mc/s		Limits					Limits		
		Assignable frequencies wideband telegraphy facsimile & special transmission systems	Assignable frequencies direct printing telegraphy systems	Assignable working frequencies for high traffic ships	Calling frequencies	Assignable working frequencies for low traffic ships			
						Group A	Group B		
4	4140	4142 ----- 4158 5 Frequencies spaced 4	4150.25 ---- 4169.75 20 Frequencies spaced 0.5	4171 ----- 4176.5 12 Frequencies spaced 0.5	4178 ----- 4186 17 Frequencies spaced 0.5	4188 ----- 4208.5 84 Frequencies spaced 0.5	4209 ----- 4229.5	4231	
6	6211	6213 ----- 6237 7 Frequencies spaced 4	6240.25 ---- 6249.75 20 Frequencies spaced 0.5	6252 ----- 6256.5 6 Frequencies spaced 0.75	6267 ----- 6279 17 Frequencies spaced 0.75	6282 ----- 6312.75 84 Frequencies spaced 0.75	6313.5 ----- 6344.25	6346.5	
8	8280	8282 ----- 8318 10 Frequencies spaced 4	8320.25 ---- 8329.75 20 Frequencies spaced 0.5	8332 ----- 8342 10 Frequencies spaced 1.0	8356 ----- 8372 17 Frequencies spaced 1	8376 ----- 8417 84 Frequencies spaced 1	8418 ----- 8459	8462	
12	12421	12424 ----- 12468 12 Frequencies spaced 4	12471.25 ---- 12490.75 40 Frequencies spaced 0.5	12495 ----- 12513 12 Frequencies spaced 1.5	12534 ----- 12558 17 Frequencies spaced 1.5	12564 ----- 12625.5 84 Frequencies spaced 1.5	12627 ----- 12688.5	12693	
16	16562	16564 ----- 16620 15 Frequencies spaced 4	16622.25 ---- 16641.75 40 Frequencies spaced 0.5	16646 ----- 16684 19 Frequencies spaced 2	16712 ----- 16744 17 Frequencies spaced 2	16752 ----- 16834 84 Frequencies spaced 2	16836 ----- 16919	16924	
22	22100	22132 ----- 22146 12 Frequencies spaced 4	22149.25 ---- 22167.75 40 Frequencies spaced 0.5	22172.5 ----- 22220 20 Frequencies spaced 2.5	22225 ----- 22265 17 Frequencies spaced 2.5	22272.5 ----- 22317.5 38 Frequencies spaced 2.5	22320 ----- 22365	22370	
Assignable working frequencies to ships of all categories									
25	25070	25075 ----- 25105 13 Frequencies spaced 2.5						25110	

- 539 -

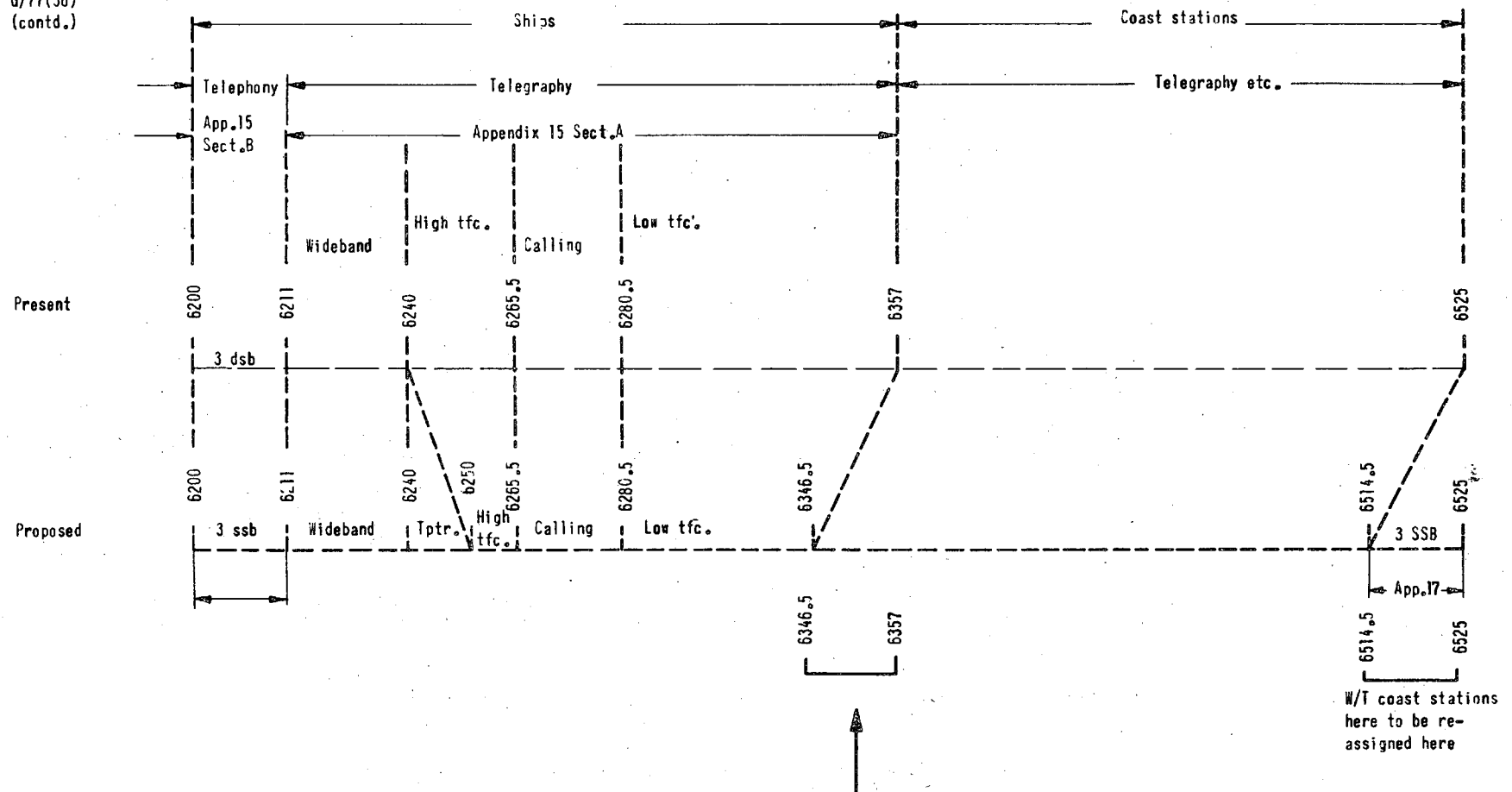




Ref.

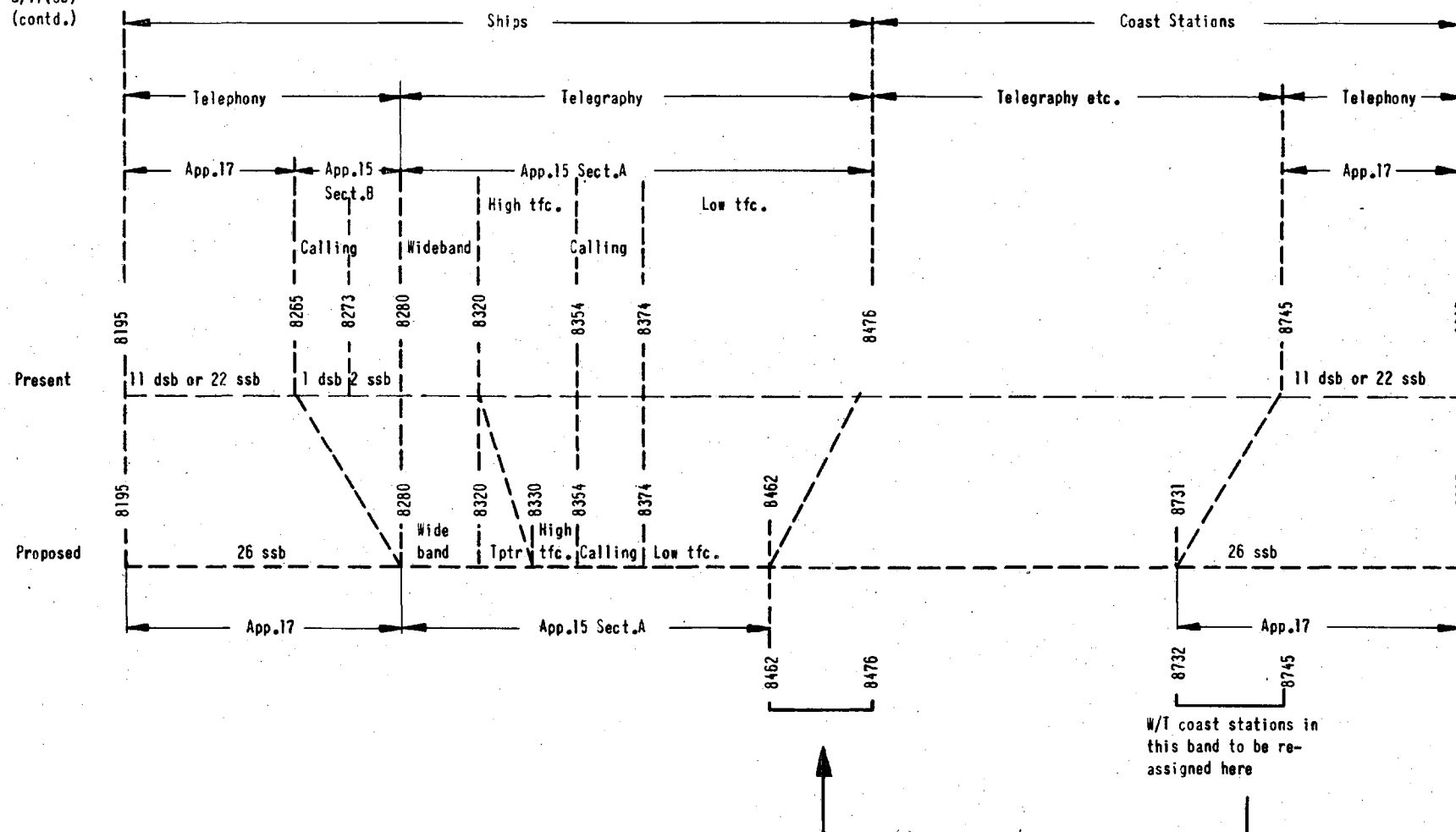
(6 Mc/s)

G/77(36)  
(contd.)



G/77(36)  
(contd.)

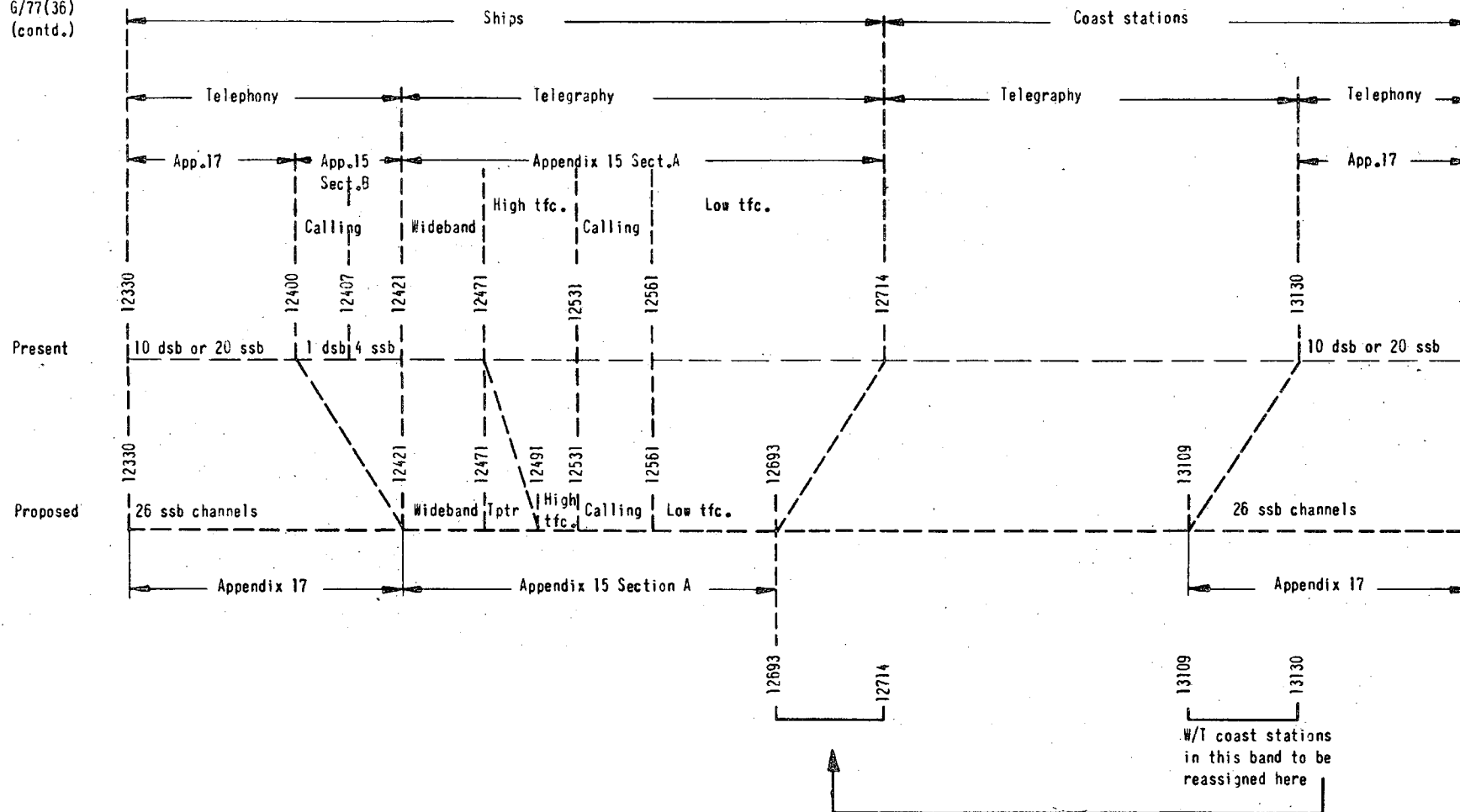
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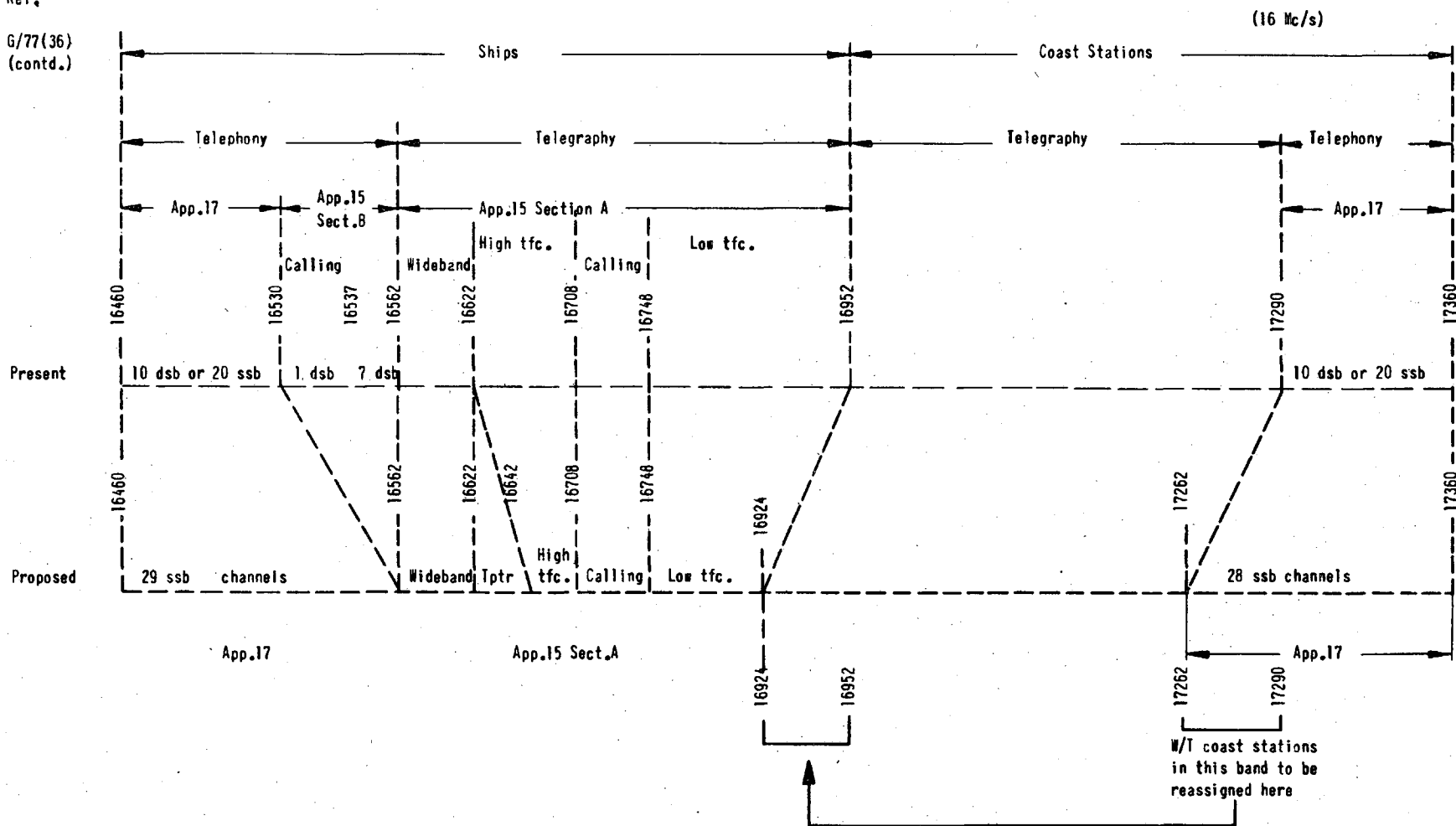
6/77(36)  
(contd.)

(12 Mc/s)



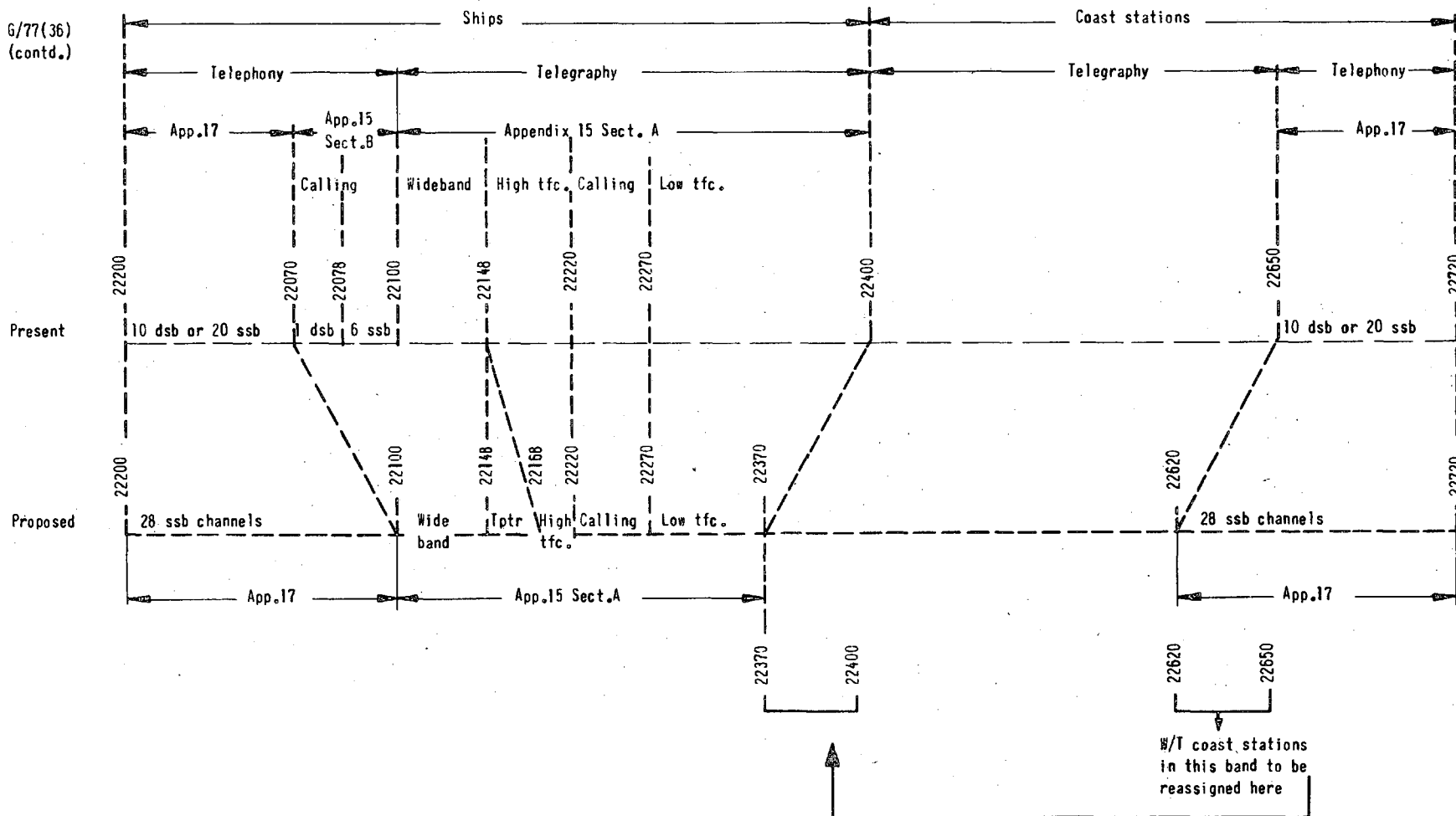
Ref.

G/77(36)  
(contd.)



Ref.  
G/77(36)  
(contd.)

(22 Mc/s)



Ref.

Agenda Item 2.1 :

Frequency bands for coast and ship radiotelephone stations  
in the 6 Mc/s band

HOL/71(30)

Proposal

Amend Appendices 15 and 17 to provide a number of frequencies for coast and ship radiotelephone stations in the 6 Mc/s band.

See proposals relating to Agenda Item 3, Nos. 447, 448 and 449 (HOL/72(9), Document No. 72).

Reasons :

To meet the increasing requirements of the maritime mobile radiotelephone service.

Agenda Item 2.2 :

Frequencies for intership radiotelephone traffic

HOL/71(31)

Proposal

The working frequencies listed in Appendix 15, Section B (revised), may be used for intership radiotelephone traffic.

See proposals relating to Agenda Item 3, Nos. 449 (HOL/72(9)) and 1357 (HOL/72(11), Document No. 72).

Reasons :

In accordance with No. 1255, the ship-shore working frequencies listed in Appendix 17 may be used for intership radiotelephone communications.

This provision has proved to be very unsatisfactory, due to interference caused to the public correspondence service. To meet the requirements for intership radiotelephony in the HF maritime mobile bands, the present provision under No. 1357 should be retained.

# APPENDIX 15

Ref.

HOL/72(12)

MOD

## Section A

Frequencies assignable to Ship Radiotelegraph Stations using the  
Maritime Mobile Service Bands between 4 and 27.5 Mc/s

Limits		kc/s					Limits	
Band (Mc/s)		Assignable frequencies wide-band telegraphy facsimile and special transmission systems	Assignable frequencies teleprinter and data transmission	Assignable working frequencies for high traffic ships	Calling frequencies	Assignable working frequencies for low traffic ships		
						Group A	Group B	
4	4144	4146 ----- 4162 5 frequencies spaced 4	4166.....4169.75	4171.....4176 11 frequencies spaced 0.5	4178 ----- 4186 17 frequencies spaced 0.5	4188.....4208.5	4209.....4229.5 84 frequencies spaced 0.5	4231
6	6215	6217 ----- 6241 7 frequencies spaced 4	6246.75....6254.625	6256.5.....6264 11 frequencies spaced 0.75	6267 ----- 6279 17 frequencies spaced 0.75	6282.....6312.75	6313.5...6344.25 84 frequencies spaced 0.75	6346
8	8288	8290 ----- 8326 10 frequencies spaced 4	8329.....8339.5	8342.....8352 11 frequencies spaced 1	8356 ----- 8372 17 frequencies spaced 1	8376.....8417	8418.....8459 84 frequencies spaced 1	8461
12	12434	12436 ----- 12480 12 frequencies spaced 4	12484.5....12509.25	12513.....12528 11 frequencies spaced 1.5	12534 ----- 12558 17 frequencies spaced 1.5	12564.....12625.5	12627....12688.5 84 frequencies spaced 1.5	12693
16	16578	16580 ----- 16636 15 frequencies spaced 4	16640.....16679	16684.....16704 11 frequencies spaced 2	16712 ----- 16744 17 frequencies spaced 2	16752.....16834	16836....16918 84 frequencies spaced 2	16924
22	22100	22102 ----- 22146 12 frequencies spaced 4	22150.....22189	22192.....22217 11 frequencies spaced 2.5	22225.....22265 17 frequencies spaced 2.5	22272.5...22322.5	22325....22375 42 frequencies spaced 2.5	22378
25	25 070	Assignable working frequencies to ships of all categories						25 110
		25 075 ----- 25 105 13 frequencies spaced 2.5						

\* For particular conditions concerning the use of 8364 kc/s see No. 1179.

APPENDIX 15

Ref.

Section 8

HOL/72(12)  
(contd.)

MOD Carrier frequencies in kc/s for Ship Radiotelephone stations using  
the Maritime Mobile Service Bands between 4 and 23 Mc/s

Limits		kc/s		Limits
Band Mc/s		Radiotelephone single sideband working frequencies*	Radiotelephone single sideband calling frequencies	
4	4140	-----	4140.5	4144
6	6211	6211.5	-----	6215
8	8280	8281	8284.5	8288
12	12421	12422 and 12425.5	12429	12434
16	16558	16559.....16569.5 4 frequencies spaced 3.5	16573	16578
22	22092	22092.5	22096	22100

\* Frequencies in this category may be assigned also to coast stations in accordance with the provisions of No. 1357.



I/32(13)

To insert in an appropriate Section of Appendix 15 the channelling of frequency bands for oceanographic communications transmission (see Proposal No. I/33(15) Document No. 33).

---

FOREWORD

I/33

a) Revision of Appendix 15

As a consequence of the conversion of maritime mobile service telephony to single sideband, it is deemed that Section B of Appendix 15 should no longer be maintained, since its provisions aimed to promote the use of the single sideband technique.

In view of the fact that all frequencies specified in this Section are included among those employed for telephony and telegraphy by ship stations, the frequencies may be used to allocate oceanographic communications and to extend - at the same time - the available band for ship telephony.

Of course, the extension of the ship telephony band also involves a corresponding extension of the coast stations telephony band, in order to associate a ship frequency with a coast station frequency.

This implies that the lower limit of the band utilized by coast stations for telephony be moved downwards and carved out of the band utilized by these stations for telegraphy. Furthermore, since it is not suitable to restrict the latter band, the lower limit thereof must consequently be moved downwards, thus reducing the band available for ship stations.

Accordingly, some radiotelegraph coast stations shall be otherwise allocated and new directions shall be issued so that their frequency assignments maintain the recording date in the master register.

The restricted availability of frequencies for ship telephony can be balanced by a better sharing of traffic between high traffic and low traffic bands as well as by adopting narrower channel spacing.

As regards the division of ship telegraphy bands, the Italian Administration is of the opinion that it would be more suitable to adopt the following criteria :

- keep unchanged the band for wide-band telegraphy, facsimile and special transmission systems;

Ref.

I/33  
(contd.)

- sub-divide the band for high traffic ships separating the tele-printer and data transmission systems from manual ones, thus reducing the spacing between the frequencies of the latter in order to obtain the same number of frequencies in a narrower band;
- leave unchanged the bands and the spacing of calling frequencies in view of the fact that a narrower spacing would make more difficult the duty of coast station operators charged with watch in the calling bands;
- reduce the number of frequencies available to low traffic ships, as this reduction can be balanced by the better sharing of traffic due to modification of No. 1156 of the Radio Regulations (see proposal No. I/32(11), Document No. 32).

It is not deemed advisable to establish a channelling of tele-printer and data transmission systems while waiting for the results of the C.C.I.R. studies on their technical characteristics.

Bandwidths of 3.5 kc/s are believed to be sufficient for oceanographic communications, and the spacing between the relative frequencies can be limited to 300 c/s.

I/33(15)

Modify Appendix 15 as follows :

#### APPENDIX 15

Table of Frequencies to be used by ship stations in  
the bands between 4 and 27.5 Mc/s  
Allocated exclusively to the Maritime Mobile  
Service

(see Articles 32 and 35)

1. This Appendix contains two Sections, A and B. For the use of frequencies in the band between 4 and 27.5 Mc/s for radiotelegraphy (Section A), see also Nos. 1174 through 1201 of Article 32.

For the use of frequencies for ocean data transmissions (Section B), see also Article 7 No. 449 AA (Proposal No. I/33(18)).

2. In the Table in Section A :

- a) the assignable frequencies in a given band for each usage are,
  - indicated by the lowest and the highest frequency, in heavy type, assigned in that band;
  - regularly spaced, the number of assignable frequencies and the spacing in kc/s being indicated in italics;

Ref.

I/33(15)  
(cont.)

- b) the vertical arrows indicate the harmonic relationship between the frequencies assigned in the different bands.

3. In the Table in Section B :

The frequencies in a given band are :

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

## SECTION A

Frequencies Assignable to Ship Radiotelegraph Stations using the  
Maritime Mobile Service Bands between 4 and 27.5 Mc/s

APP.15

LIMITS		Kc/s						LIMITS
BAND (Mc/s)		Assignable Frequencies Wide-Band Telegraphy Facsimile and Special Transmission Systems	Assignable Working Frequencies for High Traffic Ships		Calling Frequencies	Assignable Working Frequencies for Low Traffic Ships		
			Printer & Data	Manual		GROUP A	GROUP B	
4	4140	4142-----4158 5 Frequencies spaced 4	4160 ---- 4168	4168.5 --- 4176 11 Frequencies spaced 0.75	4178-----4186 9 Frequencies spaced 1	4188-42085 84 Frequencies spaced 0.5	4209-4229.5	4231
6	6211	6213-----6237 7 Frequencies spaced 4	6240 ---- 6252	6252.75 -- 6264 11 Frequencies spaced 1.125	6267-----6279 9 Frequencies spaced 1.5	6282-6312.75 84 Frequencies spaced 0.75	6313.5-6344.25	6346
8	8280	8282-----8318 10 Frequencies spaced 4	8320 ---- 8336	8337 ----- 8352 11 Frequencies spaced 1.5	8356-----8372 9 Frequencies spaced 2	8376-8417 84 Frequencies spaced 1	8418-8459	8461
12	12421	12424-----12468 12 Frequencies spaced 4	12471----12504	12505.5---12528 11 Frequencies spaced 7.25	12534-----12558 9 Frequencies spaced 3	12564-12625.5 84 Frequencies spaced 1.5	12627-12688.5	12692
16	16562	16564-----16620 15 Frequencies spaced 4	16622----16672	16674 --- 16704 11 Frequencies spaced 3	16712-----16744 9 Frequencies spaced 4	16752-16834 84 Frequencies spaced 2	16836-16918	16922
22	22100	22102-----22146 12 Frequencies spaced 4	22148 ---22185	22187 --- 22217 11 Frequencies spaced 3	22.225 -----22.265 9 Frequencies spaced 5	22272.5-223175 38 Frequencies spaced 2.5	22320-22365	22368
Assignable Working Frequencies to Ships of all Categories								
25	25070	25075 ----- 25105 13 Frequencies spaced 2.5						25110

\*) For particular conditions concerning the use of 8364 Kc/s see No. 1179

Ref.

I/33(15)  
(contd.)

SECTION. B

APP. 15

Frequencies assignable for Ocean Data transmissions  
in the bands between 4 and 27.5 Mc/s

Limits		kc/s		Limits
Band Mc/s		Assignable Frequencies		
4	4136.5	4136.9- - - - -	4139.6	4140
		10 frequencies spaced 0.3		
6	6207.5	6207.9- - - - -	6210.6	6211
		10 frequencies spaced 0.3		
8	8276.5	8276.9- - - - -	8279.6	8280
		10 frequencies spaced 0.3		
12	12417.5	12417.9- - - - -	12420.6	12421
		10 frequencies spaced 0.3		
16	16558.5	16558.9- - - - -	16561.6	16562
		10 frequencies spaced 0.3		
22	22096.5	22096.9- - - - -	22099.6	22100
		10 frequencies spaced 0.3		

J/86(34)

MOD (Heading)

## APPENDIX 15

Table of frequencies to be used by Ship  
Radiotelegraph Stations in the bands  
between 4 and 27.5 Mc/s  
allocated exclusively to the Maritime Mobile Service  
 (See Articles 32, 35 and Appendix-17)

J/86(35)

MOD

1. ~~This Appendix contains two Sections, A and B.~~

For the use of frequencies in the band 4 to 27.5 Mc/s for radiotelegraphy (~~Section A~~) see also Nos. 1174 to 1201 of Article 32.

~~For the use of frequencies in the band 4 to 23 Mc/s for radiotelephony (Section B) see also Nos. 1352 to 1358 of Article 35.~~

J/86(36)

MOD

2. In the table : ~~in Section A.~~

(the rest unchanged)

J/86(37)

SUP

- 3.

J/86(38)

MOD (Heading)

## SECTION A

Frequencies assignable to ship radiotelegraph stations  
 using the Maritime Mobile Service bands between  
 4 and 27.5 Mc/s

(the rest unchanged)

J/86(39)

Delete Section B of Appendix 15.

Reasons :

The table in Section B of Appendix 15 will be changed into the table in Section B of Appendix 17 given in Annex II, Document No. 86.

Ref.

Proposal

USSR/50(6)

It is proposed that Appendix 15 be revised taking into account the higher frequency stability obtained with radio equipment, and that the spacing between radiotelegraph channels be slightly reduced (1.5 - 2 times). For the allocation of new telegraph channels, the frequency limits should be equal to 100 c/s. It is also proposed that the possibility be examined of allocating channels for radiotelephone stations of the maritime mobile service from the AF portions of the frequency bands assigned to ships for wideband telegraphy, facsimile, and special transmissions.

Ref.

USA/18

Agenda Item 3 : Revision of Appendix 15

- U.S. Proposal :
- a) Revise Section A, Appendix 15, in respect of frequencies assignable to high traffic ships; and see proposal in response to Agenda Item 7.1, (Document No. 22)
  - b) Revise Section B, Appendix 15, by footnote, to permit coast station use of SSB ship frequencies; and see proposal No. USA/16(9) in response to Agenda Item 1, particularly No. 1357 MOD
  - c) Revise Section B, Appendix 15, to accommodate the requirements of ocean data communications. see proposal No. USA/17(17)-(24) in response to Agenda Item 2.4
  - d) Revise Article 9, No. 488, to exempt from technical examination by the Board coast stations referred to paragraph b) above.

USA/18(26)

APPENDIX 15

MOD            Table of Frequencies to be used by  
                 Ship, Ocean Data and Ocean Data Telecommand  
                 Stations in the Bands between 4 and 27.5 Mc/s  
                 Allocated Exclusively to the Maritime Mobile Service  
                 (See Articles 32, 35 and Appendix 17)

MOD    1.   This Appendix contains ~~two~~ three Sections A, ~~and~~ B  
                 and C.

NOC            For the use of frequencies ... for radiotelegraphy  
                 (Section A) ... etc.

NOC            For the use of frequencies ... for radiotelephony  
                 (Section B) ... etc.

ADD            For the use of frequencies in the Band 4 to 27.5 Mc/s for  
                 radiotelegraphy (Section C) see also Nos. 1206A to 1206C  
                 of Article 32 (proposal No. USA/17(23),  
                 Document No. 23)

NOC    2.

NOC    3.



Ref.

USA/18(26)  
(cont.)

ADD 4. In the table of Section C :

the assignable frequencies in a given band 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 kc/s being indicated in italics.

Ref.

USA/18(26)  
(contd.)

## SECTION A

Frequencies Assignable to Ship Radiotelegraph Stations using the  
Maritime Mobile Service Bands between 4 and 27.5 Mc/s

APP 15

Limits		kc/s				Limits	
Band (Mc/s)		Assignable frequencies wide-band telegraphy, facsimile and special transmission systems	Assignable working frequencies for high traffic ships		Calling frequencies	Assignable working frequencies for low traffic ships	
			teleprinter and data transmission	manual transmission		GROUP A	GROUP B
4	4140	4142-----4158 5 Frequencies spaced 4	4161-----4167.75 **)	4168.5-----4176 11 Frequencies spaced 0.75	4178-----4186 9 Frequencies spaced 1	4188-----4212 98 Frequencies spaced 0.5	4212.5-----4236.5
6	6211	6213-----6237 7 Frequencies spaced 4	6241.5-----6251.625 **)	6252.75-----6264 11 Frequencies spaced 1.125	6267-----6279 9 Frequencies spaced 1.5	6282-----6318 98 Frequencies spaced 0.75	6318.75-----6354.75
8	8280	8282-----8318 10 Frequencies spaced 4	8322-----8335.5 **)	8337-----8352 11 Frequencies spaced 1.5	8356-----*)-----8372 9 Frequencies spaced 2	8376-----8424 98 Frequencies spaced 1	8425-----8473
12	12421	12424-----12468 12 Frequencies spaced 4	12474-----12503.25 **)	12505.5-----12528 11 Frequencies spaced 2.25	12534-----12558 9 Frequencies spaced 3	12564-----12636 98 Frequencies spaced 1.5	12637.5-----12709.5
16	16562	16564-----16620 15 Frequencies spaced 4	16626-----16671 **)	16674-----16704 11 Frequencies spaced 3	16712-----16744 9 Frequencies spaced 4	16752-----16848 98 Frequencies spaced 2	16850-----16946
22	22100	22102-----22146 12 Frequencies spaced 4	22151-----22184 **)	22187-----22217 11 Frequencies spaced 3	22225-----22265 9 Frequencies spaced 5	22272.5-----22332.5 50 Frequencies spaced 2.5	22335-----22395
		Assignable working frequencies to ships of all categories					
25	25070	25075-----25105 11 Frequencies spaced 3					

\*) For particular conditions concerning the use of 8364 kc/s see No. 1179.

\*\*) The spacing between assignable frequencies is under study.

Ref.

Document No. 18-E

Page 5

USA/18(26)  
(contd.)

APP 15

SECTION B

Carrier Frequencies in kc/s for Ship Radiotelephone Stations using the  
Maritime Mobile Service Bands between 4 and 23 Mc/s

Band (Mc/s)	Limits		kc/s		Limits
			Radiotelephone (double-sideband) calling frequencies	Radiotelephone (single sideband) ** upper sideband carrier frequencies	
4	4133			4133 and 4136.5	4140 4136.5
6	6200			6200.5 and 6207.5 6204 *)  2 3 Frequencies spaced 3.5	6211 6207.5
8	8265		8269	8273 8276.5 8266-----8273 3 frequencies spaced 3.5	8280 8276.5
12	12400		12403.5	12400 12414 12407-----12417.5  5 4 Frequencies spaced 3.5	12421 12417.5
16	16530		16533.5	16530 16554.5 16537-----16558  8 2 Frequencies spaced 3.5	16562 16558.5
22	22070		22074	22070 22091 22078-----22095.5  7 6 Frequencies spaced 3.5	22100 22096.5

\*) For particular conditions concerning the use of 6204 kc/s see No. 1353.

\*\*) Frequencies in this category may be assigned also to coast stations in accordance with the provisions of No. 1357 (proposal No. USA/16(9))

Ref.

USA/18(26)  
(cont.)

AED

SECTION C

APP 15

Frequencies assignable to Ocean Data and Ocean Data  
Telecommand Stations using the Maritime Mobile  
Service Bands between 4 and 27.5 Mc/s

		kc/s			
Band Mc/s	Limits ↓	Assignable frequencies*)		Limits ↓	
4	4136.5	4136.9	4139.6 10 frequencies spaced 0.3	4140	
6	6207.5	6207.9	6210.6 10 frequencies spaced 0.3	6211	
8	8276.5	8276.9	8279.6 10 frequencies spaced 0.3	8280	
12	12417.5	12417.9	12420.6 10 frequencies spaced 0.3	12421	
16	16558.5	16558.9	16561.6 10 frequencies spaced 0.3	16562	
22	22096.5	22096.9	22099.6 10 frequencies spaced 0.3	22100	

\*) For use of other frequencies within these band limits see No. 1206C  
(Proposal No. USA/17(23)).

Proposals relating to  
Appendix 16

Phonetic Alphabet and Figure Code

# APPENDIX 16

## Phonetic Alphabet and Figure Code

(See Article 33)

1. When it is necessary to spell out call signs, service abbreviations and words, the following table shall be used:

Figure or mark to be transmitted *	Letter to be transmitted	Word to be used	Spoken as **
1	A	Alfa	<u>AL</u> FAH
2	B	Bravo	<u>BRAH</u> VOH
3	C	Charlie	<u>CHAR</u> LEE <i>or</i> <u>SHAR</u> LEE
4	D	Delta	<u>DELL</u> TAH
5	E	Echo	<u>ECK</u> OH
6	F	Foxtrot	<u>FOKS</u> TROT
7	G	Golf	<u>GOLF</u>
8	H	Hotel	<u>HOH</u> TELL
9	I	India	<u>IN</u> DEE AH
0	J	Juliett	<u>JEW</u> LEE <u>ETT</u>
Comma	K	Kilo	<u>KEY</u> LOH
Fraction bar	L	Lima	<u>LEE</u> MAH
Break signal	M	Mike	<u>MIKE</u>
Full stop (period)	N	November	<u>NO</u> <u>VEM</u> BER
	O	Oscar	<u>OSS</u> CAH
	P	Papa	<u>PAH</u> <u>PAH</u>
	Q	Quebec	<u>KEH</u> <u>BECK</u>
	R	Romeo	<u>ROW</u> ME OH
	S	Sierra	<u>SEE</u> <u>AIR</u> RAH
	T	Tango	<u>TANG</u> GO
	U	Uniform	<u>YOU</u> NEE <u>FORM</u> <i>or</i> <u>OO</u> NEE <u>FORM</u>
	V	Victor	<u>VIK</u> TAH
	W	Whiskey	<u>WISS</u> KEY
	X	X-ray	<u>ECKS</u> <u>RAY</u>
	Y	Yankee	<u>YANG</u> KEY
	Z	Zulu	<u>ZOO</u> LOO

2. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

\* Each transmission of figures or marks is preceded and followed by the words "as a number" or "as a mark" respectively, spoken twice, e.g., the number 1959 will read: "as a number, as a number Alfa, India, Echo, India, as a number, as a number".

\*\* The syllables to be emphasized are underlined.

APPENDIX 16

Phonetic alphabet and figure code

(see Article 33)

Ref.

CAN/44(23) MOD

1. When it is necessary to spell out call signs, service abbreviations and words, and in cases of language difficulties, the following table shall be used :

<u>Letter to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as *)</u>
A	Alfa	<u>AL</u> FAH
B	Bravo	<u>BRAN</u> VOH
C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
D	Delta	<u>DELL</u> TAH
E	Echo	<u>ECK</u> OH
F	Foxtrot	<u>FOKS</u> TROT
G	Golf	<u>GOLF</u>
H	Hotel	<u>HON</u> TELL
I	India	<u>IN</u> DEE AH
J	Juliett	<u>JEW</u> LEE <u>ETT</u>
K	Kilo	<u>KEY</u> LOH
L	Lima	<u>LEE</u> MAH
M	Mike	<u>MIKE</u>
N	November	<u>NO</u> VEN BER
O	Oscar	<u>OSS</u> CAH
P	Papa	<u>PAH</u> PAH
Q	Quebec	<u>KEH</u> BECK
R	Romeo	<u>ROW</u> DE OH
S	Sierra	<u>SEE</u> AIR RAH
T	Tango	<u>TANG</u> GO
U	Uniform	<u>YOU</u> DEE FORM or <u>OO</u> DEE FORM
V	Victor	<u>VIK</u> TAH
W	Whiskey	<u>WISS</u> KEY
X	X-ray	<u>ECKS</u> RAY
Y	Yankee	<u>YANG</u> KEY
Z	Zulu	<u>ZOO</u> LOO

\*) The syllables to be emphasized are underlined.

Ref.

CAN/44(23) MOD  
(cont.)

2. When it is necessary to use figure spelling and there is no language difficulty, the following table shall be used :

<u>Figure to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as *)</u>
<u>0</u>	<u>Zero</u>	<u>ZE RO</u>
<u>1</u>	<u>One</u>	<u>WUN</u>
<u>2</u>	<u>Two</u>	<u>TOO</u>
<u>3</u>	<u>Three</u>	<u>TREE</u>
<u>4</u>	<u>Four</u>	<u>FOU er</u>
<u>5</u>	<u>Five</u>	<u>FIFE</u>
<u>6</u>	<u>Six</u>	<u>SIX</u>
<u>7</u>	<u>Seven</u>	<u>SEV en</u>
<u>8</u>	<u>Eight</u>	<u>ATT</u>
<u>9</u>	<u>Nine</u>	<u>NIH er</u>
<u>Decimal point</u>	<u>Decimal</u>	<u>DAY SEE MAL</u>

3. The following figure spelling table shall be used in cases of language difficulties :

<u>Figure to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as **)</u>
<u>0</u>	<u>Nadazero</u>	<u>NAH DAH ZAY ROH</u>
<u>1</u>	<u>Unaone</u>	<u>OO NAH WUN</u>
<u>2</u>	<u>Bissotwo</u>	<u>BEEES SO TOO</u>
<u>3</u>	<u>Terrathree</u>	<u>TAY RAH TREE</u>
<u>4</u>	<u>Kartefour</u>	<u>KAR TAY FOWER</u>
<u>5</u>	<u>Pantafive</u>	<u>PAN TAH FIFE</u>
<u>6</u>	<u>Soxisix</u>	<u>SOK SEE SIX</u>
<u>7</u>	<u>Setteseven</u>	<u>SAY TAY SEVEN</u>
<u>8</u>	<u>Oktoeight</u>	<u>OK TOH ATT</u>
<u>9</u>	<u>Novenine</u>	<u>NO VAY NINER</u>
<u>1000</u>	<u>Thousand</u>	<u>TOU SAND</u>
<u>Decimal point</u>	<u>Decimal</u>	<u>DAY SEE MAL</u>

\*) The syllables to be emphasized are underlined.

\*\*) Each syllable should be equally emphasized.



Ref.

CAN/44(23) MOD 4. However, stations of the same country may use, when  
(cont.) communicating between themselves, any other table recognized  
by their administrations.

Reasons :

To accommodate the figure spelling table contained in the revised International Code of Signals and at the same time to resolve the differences between the maritime mobile and aeronautical mobile services where figure spelling is concerned.

---

APPENDIX 16

DNK/38(17)

Phonetic alphabet and figure code

(See Article 33)

SUP 1. Delete first column : Figure or mark to be transmitted\*)  
and footnote\*).

2. Read :

MOD 2. When it is necessary to use figure spelling, the following table shall be used :

<u>Figure to be transmitted</u>	<u>Code word</u>	<u>Spoken as</u>
0	NADAZERO	NAH-DAH-ZAY-ROH
1	UNAONE	OO-NAH-WUN
2	BISSOTWO	BEEES-SOH-TOO
3	TERRATHREE	TAY-RAH-TREE
4	KARTEFOUR	KAR-TAY-FOWER
5	PANTAFIVE	PAN-TAH-FIVE
6	SOXISIX	SOK-SEE-SIX
7	SETTESEVEN	SAY-TAY-SEVEN
8	OKTOEIGHT	OK-TOH-AIT
9	NOVENINE	NO-VAY-NINER
Decimal point	DECIMAL	DAY-SEE-MAL

3. However, stations of the same country may, when communicating between themselves, use any other table recognized by their administration.

---

Note : Each syllable should be equally emphasized.

Reasons :

To introduce the new phonetic figure table proposed by I.M.C.O. It follows that Recommendation No. 30 will thereby be superfluous.

Ref.      Appendix 16

F/13(79)    Replace Appendix 16 by the following :

Phonetic Alphabet and Figure Code (see Article 33).

1.      When it is necessary to spell out call signs, service abbreviations and words, the following table shall be used :

A.    Phonetic Alphabet Code

<u>Letter to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as *)</u>
A	Alfa	<u>AL</u> FAH
B	Bravo	<u>BRA</u> VO
C	Charlie	<u>TCHAH</u> LI or <u>CHAR</u> LI
D	Delta	<u>DEL</u> TAH
E	Echo	<u>ÉK</u> O
F	Foxtrot	<u>FOX</u> TROTT
G	Golf	<u>GOLF</u>
H	Hotel	HO <u>TELL</u>
I	India	<u>IN</u> DI AH
J	Juliett	<u>DJOU</u> LI <u>ETT</u>
K	Kilo	<u>KI</u> LO
L	Lima	<u>LI</u> MAH
M	Mike	<u>HA</u> <u>IK</u>
N	November	NO <u>VEMM</u> BER
O	Oscar	<u>OSS</u> KAR
P	Papa	PAH <u>PAH</u>
Q	Quebec	<u>KE</u> <u>BEK</u>
R	Romeo	<u>RO</u> MI O
S	Sierra	SI <u>ÉR</u> RAH
T	Tango	<u>TANG</u> GO
U	Uniform	<u>YOU</u> NI FORM or <u>OU</u> NI FORM
V	Victor	<u>VIK</u> TAR

---

\*) The syllables to be stressed are underlined.

<u>Ref.</u>	<u>Letter to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as *)</u>
F/13(79) (cont.)	W	Whiskey	<u>OUISS</u> KI
	X	X-ray	<u>ÉKSS</u> <u>RE</u>
	Y	Yankee	<u>YANG</u> KI
	Z	Zoulou	<u>ZOU</u> LOU

B. Phonetic Figure Code

<u>Figure to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as</u>
0	Nadazero	NAH-DAH-ZERO
1	Unaone	OO-NA-ONE
2	Bissotwo	BIS-SO-TWO
3	Terrathree	TEH-RAH-THREE
4	Kartefour	KAH-TEH-FOUR
5	Pantafive	PAN-TAH-FIVE
6	Soxisix	SO-XI-SIX
7	Settoseven	SEH-TEH-SEVEN
8	Oktocight	OK-TO-EIGHT
9	Novenine	NO-VEH-NINE
comma		
decimal	Decimal	DEH-SI-MAL

Note. Each syllable should be given an equal stress. The second half of each code word is the code word used by the Aeronautical Mobile Service.

2. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

Reasons :

To adopt the figure code appearing in the I.M.C.O. revised International Code of Signals.

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\*) The syllables to be stressed are underlined.

Ref.

APPENDIX 16

G/59(11) MOD Paragraph 1 - Delete column 1.

SUP Footnote "\*" on page 430.

Reasons :

Covered by new paragraph 1 bis.

ADD Paragraph 1 bis. When it is necessary to transmit **figures** the following table shall be used :

<u>Figure</u>	<u>Code word</u>	<u>Pronunciation</u>
0	NADAZERO	NAH-DAH-ZAY-ROH
1	UNAONE	OO-NAH-WUN
2	BISSOTWO	BEE\$-SOH-TOO
3	TERRATHREE	TAY-RAH-TREE
4	KARTEFOUR	KAR-TAY-POWER
5	PANTAFIVE	PAN-TAH-FIVE
6	SOXISIX	SOK-SEE-SIX
7	SETTESEVEN	SAY-TAY-SEVEN
8	OKTOEIGHT	OK-TOH-AIT
9	NOVENINE	NO-VAY-NINER
Decimal point	DECIMAL	DAY-SEE-MAL
Full stop	STOP	STOP

Note : Each syllable should be equally emphasised.  
The second component of each code word is the code word used in the Aeronautical Mobile Service.

Reasons :

To provide an improved figure spelling table for use in radiotelephony.

## APPENDIX 16

HOL/74(22)

MOD

Phonetic alphabet and figure code

(see Article 33)

1. When it is necessary to spell out call signs, service abbreviations and words, the following table shall be used :

## A. Phonetic Alphabet Code

Letter to be trans- mitted	Word to be used	Spoken as *)
A	Alfa	<u>AL</u> FAH
B	Bravo	<u>BRAH</u> VOH
C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
D	Delta	<u>DELL</u> TAH
E	Echo	<u>ECK</u> OH
F	Foxtrot	<u>FOKS</u> TROT
G	Golf	GOLF
H	Hotel	HOH <u>TELL</u>
I	India	<u>IN</u> DEE AH
J	Juliett	<u>JEW</u> LEE <u>ETT</u>
K	Kilo	<u>KEY</u> LOH
L	Lima	<u>LEE</u> MAH
M	Mike	MIKE
N	November	NO <u>VEM</u> BER
O	Oscar	<u>OSS</u> CAH
P	Papa	PAH <u>PAH</u>
Q	Quebec	KEH <u>BECK</u>
R	Romeo	<u>ROW</u> ME OH
S	Sierra	<u>SEE</u> <u>AIR</u> RAH
T	Tango	<u>TANG</u> GO
U	Uniform	<u>YOU</u> NEE FORM or <u>OO</u> NEE FORM
V	Victor	<u>VIK</u> TAH
W	Whiskey	<u>WISS</u> KEY
X	X-ray	<u>ECKS</u> RAY
Y	Yankee	<u>YANG</u> KEY
Z	Zulu	<u>ZOO</u> LOO

\*) The syllables to be emphasized are underlined.

Ref.

HOL/74(22)  
(cont.)

B. Phonetic Figure Code

Figure to be trans- mitted	Word to be used	Spoken as
0	NADAZERO	NAH-DAH-ZAY-ROH
1	UNACONE	OO-NAH-WUN
2	BISSOTWO	BEEES-SOH-TOO
3	TERRATHREE	TAY-RAH-TREE
4	KARTEFOUR	KAR-TAY-POWER
5	PANTAFIVE	PAN-TAH-FIVE
6	SOXISIX	SOK-SEE-SIX
7	SETTESEVEN	SAY-TAY-SEVEN
8	OKTOEIGHT	OK-TOH-AIT
9	NOVENINE	NO-VAY-NINER
Decimal point	DECIMAL	DAY-SEE-MAL

Note : Each syllable should be equally emphasized.  
The second component of each code word is the code word  
used in the Aeronautical Mobile Service.

2. However, stations of the same country may use, when  
communicating between themselves, any other table  
recognized by their administration.

Reasons :

To use the phonetic figure table contained in the  
revised International Code of Signals.

Ref.

APPENDIX 16

J/88(69)

Phonetic alphabet and figure code

(see Article 33)

1. When it is necessary to spell out call signs, service abbreviations and words, the following table shall be used :

Figure or mark to be transmitted	Letter to be transmitted	Word to be used	Spoken as *)
1	A	Alfa	<u>AL</u> FAH
2	B	Bravo	<u>BRAH</u> VOH
3	C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
4	D	Delta	<u>DELL</u> TAH
5	E	Echo	<u>ECK</u> OH
6	F	Foxtrot	<u>FOKS</u> TROT
7	G	Golf	<u>GOLF</u>
8	H	Hotel	<u>HOH</u> <u>TELL</u>
9	I	India	<u>IN</u> DEE AH
0	J	Juliett	<u>JEW</u> LEE <u>ETT</u>
<del>Gomma</del>	K	Kilo	<u>KEY</u> LOH
<del>Fraction bar</del>	L	Lima	<u>LEE</u> MAH
<del>Break signal</del>	M	Mike	<u>MIKE</u>
<del>Full stop (period)</del>	N	November	NO <u>VEM</u> BER
	O	Oscar	<u>OSS</u> CAH
	P	Papa	PAH <u>PAH</u>
	Q	Quebec	KEH <u>BECK</u>
	R	Romeo	<u>ROW</u> ME OH
	S	Sierra	SEE <u>AIR</u> RAH
	T	Tango	<u>TANG</u> GO
	U	Uniform	<u>YOU</u> NEE FORM or <u>OO</u> NEE FORM
	V	Victor	<u>VIK</u> TAH
	W	Whiskey	<u>WISS</u> KEY
	X	X-ray	<u>ECKS</u> <u>RAY</u>
	Y	Yankee	<u>YANG</u> KEY
	Z	Zulu	<u>ZOO</u> LOO
<u>Full stop (period)</u>		Stop	<u>STOP</u>

\*) The syllables to be emphasized are underlined.

~~\*) Each transmission of figures or marks is preceded and followed by the words "as a number" or "as a mark" respectively, spoken twice, e.g., the number 1959 will read, "as a number, as a number Alfa, India, Echo, India, as a number, as a number".~~

Ref.

J/88(70)

ADD

2. When it is necessary to spell out figures, the following table shall be used :

Figure to be transmitted	Word to be used	Spoken as
<u>0</u>	<u>NADAZERO</u>	<u>NAH-DAH-ZAY-ROH</u>
<u>1</u>	<u>UNACONE</u>	<u>OO-NAH-WUN</u>
<u>2</u>	<u>BISSOTWO</u>	<u>BEES-SOH-TOO</u>
<u>3</u>	<u>TERRATHREE</u>	<u>TAY-RAH-TREE</u>
<u>4</u>	<u>KARTEFOUR</u>	<u>KAR-TAY-FOWER</u>
<u>5</u>	<u>PANTAFIVE</u>	<u>PAN-TAH-FIVE</u>
<u>6</u>	<u>SOXISIX</u>	<u>SOK-SEE-SIX</u>
<u>7</u>	<u>SETTESEVEN</u>	<u>SAY-TAY-SEVEN</u>
<u>8</u>	<u>OKTOEIGHT</u>	<u>OK-TOH-AIT</u>
<u>9</u>	<u>NOVENINE</u>	<u>NO-VAY-NINER</u>
<u>Decimal or Point</u>	<u>DECIMAL</u>	<u>DAY-SEE-MAL</u>

Note : Each syllable should be equally emphasized. The second component of each code word is the code word used in the Aeronautical Mobile Service.

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J/88(71)

MOD

2 3. (No change in text).

Reasons :

In the conceptions that the I.T.U. bears the responsibility for the signals in the radiocommunication procedure and, on the other hand, the I.M.C.O. is responsible for the signals concerning navigation, search and rescue activities, it is necessary to secure coordination with the revised International Code of Signals prepared by the I.M.C.O.

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Proposal concerning Appendix 16 of the Radio Regulations

Ref.

RFA/7(16) Delete under 1 the column "Figure or mark to be transmitted" and the corresponding footnote.

RFA/7(17) Add as new number 2 :

<u>Figure or mark to be transmitted</u>	<u>Word to be used</u>	<u>Spoken as</u>
0	NADAZERO	NAH-DAH-ZAY-ROH
1	UNAONE	OO-NAH-WUN
2	BISSOTWO	BEES-SOH-TOO
3	TERRATHREE	TAY-RAH-TREE
4	KARTEFOUR	KAR-TAY-POWER
5	PANTAFIVE	PAN-TAH-FIVE
6	SOXISIX	SOK-SEE-SIX
7	SETTESEVEN	SAY-TAY-SEVEN
8	OKTOEIGHT	OK-TOH-AIT
9	NOVENINE	NO-VAY-NINER
Decimal point	DECIMAL	DAY-SEE-MAL

The compound words should be spoken without interruption.

RFA/7(18) Change number 2 into 3.

Reasons:

This phonetic figure table was recommended by I.M.C.O. It offers considerable advantages over the method used so far.

RFA/7(19) Delete Recommendation No. 30 of the Radio Regulations.

Phonetic Alphabet and Figure Code

(See Article 33)

MOD

1. When it is necessary to spell out call signs, service abbreviations and words, the following letter spelling table shall be used :

<del>Figure-or-Mark-to</del> <del>be-transmitted--*)</del>	Letter to be transmitted	Word to be used	Spoken as**)
-1-	A	Alfa	<u>AL</u> FAH
-2-	B	Bravo	<u>BRAH</u> VOH
-3-	C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
-4-	D	Delta	<u>DELL</u> TAH
-5-	E	Echo	<u>ECK</u> OH
-6-	F	Foxtrot	<u>FOKS</u> TROT
-7-	G	Golf	GOLF
-8-	H	Hotel	HOH <u>TELL</u>
-9-	I	India	<u>IN</u> DEE AH
-0-	J	Juliett	<u>JEW</u> LEE <u>ETT</u>
<del>Cemna</del>	K	Kilo	<u>KEY</u> LOH
<del>Fraction-Bar</del>	L	Lima	<u>LEE</u> MAH
<del>Break-Signal</del>	M	Mike	MIKE
<del>Full-Stop-(period)</del>	N	November	NO <u>DEM</u> BER
	O	Oscar	<u>OSS</u> CAH
	P	Papa	PAH <u>PAH</u>
	Q	Quebec	KEH <u>BECK</u>
	R	Romeo	<u>ROW</u> ME OH
	S	Sierra	SEE <u>AIR</u> RAH
	T	Tango	<u>TANG</u> GO
	U	Uniform	<u>YOU</u> NEE FORM or <u>OO</u> NEE FORM
	V	Victor	<u>VIK</u> TAH
	W	Whiskey	<u>WISS</u> KEY
	X	X-ray	<u>ECKS</u> <u>RAY</u>
	Y	Yankee	<u>YANG</u> KEY
	Z	Zulu	<u>ZOO</u> LOO

\*) Each transmission of figures or marks is preceded and followed by the words "as a number" or "as a mark" respectively, spoken twice; e.g., the number 1959 will read: "as a number, as a number Alfa, India, Echo, India, as a number, as a number."

\*\*) The syllables to be emphasized are underlined.

Ref.

USA/21(43)  
(contd.)

ADD

2. When it is necessary to use figure spelling, the following table shall be used :

<u>Figure to be transmitted</u>	<u>Code Word</u>	<u>Spoken as</u>
<u>0</u>	<u>NADAZERO</u>	<u>NAH-DAH-ZAY-ROH</u>
<u>1</u>	<u>UNAONE</u>	<u>OO-NAH-WUN</u>
<u>2</u>	<u>BISSOTWO</u>	<u>BEES-SOH-TOO</u>
<u>3</u>	<u>TERRATHREE</u>	<u>TAY-RAH-TREE</u>
<u>4</u>	<u>KARTEFOUR</u>	<u>KAR-TAY-POWER</u>
<u>5</u>	<u>PANTAFIVE</u>	<u>PAN-TAH-FIVE</u>
<u>6</u>	<u>SOXISIX</u>	<u>SOK-SEE-SIX</u>
<u>7</u>	<u>SETTESEVEN</u>	<u>SAY-TAY-SEVEN</u>
<u>8</u>	<u>OKTOEIGHT</u>	<u>OK-TOH-AIT</u>
<u>9</u>	<u>NOVENINE</u>	<u>NO-VAY-NINER</u>
<u>Decimal point</u>	<u>DECIMAL</u>	<u>DAY-SEE-MAL</u>

Note : Each syllable should be equally emphasized. The second component of each code word is the code word used in the Aeronautical Mobile Service.

MOD

2. 3. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

USA/21(44)

(2) Adopt a Resolution Relating to Responsibility for International Signals.

Reasons :

To amend pertinent portions of the Radio Regulations which are in conflict with the revised International Code of Signals adopted by the Inter-Governmental Maritime Consultative Organization (I.M.C.O.).

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Proposals relating to

Appendix 17

Duplex Channelling of the Maritime Mobile Radiotelephone Bands  
between 4000 and 23000 kc/s

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## APPENDIX 17

### Duplex Channelling of the Maritime Mobile Radiotelephone Bands between 4 000 and 23 000 kc/s

(See Article 35)

1. The following Table (page 166) indicates the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radiotelephone service between 4 000 and 23 000 kc/s.

2. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprises 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.

3. Assignments to stations utilizing single sideband or independent sideband emissions shall be considered to be in accordance with the Table if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double sideband emissions in accordance with the Table.

3.1. Stations employing double sideband emissions (A3) or two channel independent sideband emissions (A3B) should operate with assigned frequencies at the values listed in the Table.

3.2. Stations using single sideband single channel emissions (A3A, A3H or A3J) should operate either in the upper half or in the lower half of the channels designated by the centre frequencies in the Table.

3.2.1. A station operating in the upper half of the channel should use upper sideband emissions with its carrier frequency at a value listed in the Table; its assigned frequency would then be 1 400 cycles per second higher than that listed in the Table.

3.2.2. A station operating in the lower half of the channel should use upper sideband emission, its carrier frequency being the appropriate following amounts below the midband frequency of the channel as listed in the Table:

Band	Carrier frequency relative to midband frequency of channel as listed in Table
4 and 8 Mc/s	— 3 100 c/s
12, 16 and 22 Mc/s	— 3 300 c/s

The frequencies assigned to such stations should be 1 400 cycles per second higher than the value indicated above for their carrier frequencies.

4. If an administration assigns frequencies other than those indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with this Appendix.

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**Table of Transmitting Frequencies (in kc/s)**

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast Station Frequency	Ship Station 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	4 371.1	4 066.1	8 748.1	8 198.1	13 133.5	12 333.5	17 293.5	16 463.5	22 653.5	22 003.5
2	4 377.4	4 072.4	8 754.4	8 204.4	13 140.5	12 340.5	17 300.5	16 470.5	22 660.5	22 010.5
3	4 383.8	4 078.8	8 760.8	8 210.8	13 147.5	12 347.5	17 307.5	16 477.5	22 667.5	22 017.5
4	4 390.2	4 085.2	8 767.2	8 217.2	13 154.5	12 354.5	17 314.5	16 484.5	22 674.5	22 024.5
5	4 396.6	4 091.6	8 773.6	8 223.6	13 161.5	12 361.5	17 321.5	16 491.5	22 681.5	22 031.5
6	4 403.0	4 098.0	8 780.0	8 230.0	13 168.5	12 368.5	17 328.5	16 498.5	22 688.5	22 038.5
7	4 409.4	4 104.4	8 786.4	8 236.4	13 175.5	12 375.5	17 335.5	16 505.5	22 695.5	22 045.5
8	4 415.8	4 110.8	8 792.8	8 242.8	13 182.5	12 382.5	17 342.5	16 512.5	22 702.5	22 052.5
9	4 422.2	4 117.2	8 799.2	8 249.2	13 189.5	12 389.5	17 349.5	16 519.5	22 709.5	22 059.5
10	4 428.6	4 123.6	8 805.6	8 255.6	13 196.5	12 396.5	17 356.5	16 526.5	22 716.5	22 066.5
11	4 434.9	4 129.9	8 811.9	8 261.9						



Ref.

APPENDIX 17

CAN/39(2)

Duplex channelling of the Maritime Mobile Radiotelephone bands between 4000 and 23 000 kc/s.

MOD (See Articles 7 and 35).

NOC 1.

NOC 2.

NOC 3.

NOC 3.1

SUP 3.2

SUP 3.2.1

SUP 3.2.2

SUP 4.

Reasons :

The provisions proposed for deletion are contained in the Canadian proposal for revision of Article 7.

DNK/ISL/NOR/S/37(1)

Point 3 of the Agenda : Revision of Appendix 17 to the Radio Regulations

Duplex channelling of the maritime mobile radiotelephone bands between 4000 and 23000 kc/s.

In the present Appendix 17 to the Radio Regulations the Table of Transmitting Frequencies indicates the carrier frequencies for double sideband operation. Stations operating in the upper half of the channels, when using single sideband emission, are in accordance with the appendix when the carrier frequencies used are the same as those indicated for double sideband operation. When the lower half of the present double sideband channels are used for single sideband operation, carrier frequencies to be selected should, according to Appendix 17, be 3100 c/s lower than the double sideband carrier frequencies in the bands of 4 and 8 Mc/s, and 3300 c/s lower than the double sideband carrier frequencies in the bands of 12, 16 and 22 Mc/s.

The channel separation in the present DSB frequency table is in general 6.4 kc/s in the 4 and 8 Mc/s bands and 7.0 kc/s in the bands 12, 16 and 22 Mc/s (between the two lower channels and the two higher channels in the 4 and 8 Mc/s bands the separation is 6.3 kc/s).

Ref.

DNK/ISL/NOR/S/37(1)  
(cont.)

When the double sideband channels eventually are split and single sideband operation becomes obligatory it seems operationally and technically advantageous to have an even distribution of the channels.

It is therefore suggested that Appendix 17 to the Radio Regulations be altered in order to obtain an equal separation between the carrier frequencies of the new SSB channels.

In the 12, 16 and 22 Mc/s bands this can be obtained simply by choosing carrier frequencies for the lower half of the present DSB channels 3.5 kc/s below the midband frequencies listed in the table.

In the 4 and 8 Mc/s bands an even distribution with a minimum of amendments of the present frequencies is obtained by changing the carrier frequencies of the lowest and highest DSB channels in each of the bands 100 c/s downwards and 100 c/s upwards respectively. The carrier frequencies of the new SSB channels could then be evenly distributed with a spacing of 3.2 kc/s.

In the annex a revised "Table of Transmitting Frequencies" is proposed, indicating the upper sideband carrier frequencies (A3A/A3J). As a result of the proposed adjustment the carrier frequencies of the lowest 4 and 8 Mc/s SSB channels will be situated 200 c/s outside the limits of the respective maritime mobile bands. However, taking into account that the emission on the said two carrier frequencies will be reduced or suppressed, it is felt that this solution should be considered.

With regard to the text of the present Appendix 17, it is proposed to maintain the two first paragraphs and delete the rest.

Annex : 1

# A N N E X

Ref.

DNK/ISL/NOR/S/37(1)

(continuation)

## TABLE OF TRANSMITTING FREQUENCIES (IN KC/S)

(Single sideband) Upper sideband carrier frequencies

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast Station Frequency	Ship Station 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	4367.8	4062.8	8744.8	8194.8	13130.0	12330.0	17290.0	16460.0	22650.0	22000.0
2	4371.0	4066.0	8748.0	8198.0	13133.5	12333.5	17293.5	16463.5	22653.0	22003.5
3	4374.2	4069.2	8751.2	8201.2	13137.0	12337.0	17297.0	16467.0	22657.0	22007.0
4	4377.4	4072.4	8754.4	8204.4	13140.5	12340.5	17300.5	16470.5	22660.5	22010.5
5	4380.6	4075.6	8757.6	8207.6	13144.0	12344.0	17304.0	16474.0	22664.0	22014.0
6	4383.8	4078.8	8760.8	8210.8	13147.5	12347.5	17307.5	16477.5	22667.5	22017.5
7	4387.0	4082.0	8764.0	8214.0	13151.0	12351.0	17311.0	16481.0	22671.0	22021.0
8	4390.2	4085.2	8767.2	8217.2	13154.5	12354.5	17314.5	16484.5	22674.5	22024.5
9	4393.4	4088.4	8770.4	8220.4	13158.0	12358.0	17318.0	16488.0	22678.0	22028.0
10	4396.6	4091.6	8773.6	8223.6	13161.5	12361.5	17321.5	16491.5	22681.5	22031.5
11	4399.8	4094.8	8776.8	8226.8	13165.0	12365.0	17325.0	16495.0	22685.0	22035.0
12	4403.0	4098.0	8780.0	8230.0	13168.5	12368.5	17328.5	16498.5	22688.5	22038.5
13	4406.2	4101.2	8783.2	8233.2	13172.0	12372.0	17332.0	16502.0	22692.0	22042.0
14	4409.4	4104.4	8786.4	8236.4	13175.5	12375.5	17335.5	16505.5	22695.5	22045.5
15	4412.6	4107.6	8789.6	8239.6	13179.0	12379.0	17339.0	16509.0	22699.0	22049.0
16	4415.8	4110.8	8792.8	8242.8	13182.5	12382.5	17342.5	16512.5	22702.5	22052.5
17	4419.0	4114.0	8796.0	8246.0	13186.0	12386.0	17346.0	16516.0	22706.0	22056.0
18	4422.2	4117.2	8799.2	8249.2	13189.5	12389.5	17349.5	16519.5	22709.5	22059.5
19	4425.4	4120.4	8802.4	8252.4	13193.0	12393.0	17353.0	16523.0	22713.0	22063.0
20	4428.6	4123.6	8805.6	8255.6	13196.5	12396.5	17356.5	16526.5	22716.5	22066.5
21	4431.8	4126.8	8808.8	8258.8						
22	4435.0	4130.0	8812.0	8262.0						

Ref.

Appendix 17

F/10(61) Appendix 17

- Paragraph 1 : (unchanged)
- Paragraph 2 : (unchanged)
- Paragraph 3 : delete
- Paragraph 4 : replace this paragraph by the following text:

4. If an administration assigns frequencies other than those indicated in the table below, its radiotelephone services shall not cause ..... (rest unchanged).

- Replace the table in Appendix 17 by the attached table.

Reasons :

A consequence of the use of SSB. See also proposals F/8(5) to (8) and F/8(30) relative to Nos. 447 to 450 and 1321a (Item 1 of the agenda); Document No. 8.

The table of transmitting frequencies in Appendix 17 has been drawn up in such a way as to keep an equal distance between adjacent frequencies: 3.2 kc/s in the 4 and 8 Mc/s bands; 3.5 kc/s in the 6, 12, 16 and 22 Mc/s.

The three pairs of frequencies of the 6 Mc/s band could, for allotment purposes, form a single group of 27 pairs with the 4 Mc/s band.

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## Two-way radiotelephone channels in Maritime Mobile Service Bands

between 4,000 and 23,000 kc/s

Document No. 10-E

page- 7

### Table of Transmitting Frequencies (kc/s)

Series No.	4 Mc/s		6 Mc/s		8 Mc/s		12 Mc/s		16 Mc/s		22 Mc/s	
	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship
1	4 362,65 (4 361,3 )	4 064,65 (4 063,3 )	6 515,85 (6 514,5 )	6 201,85 (6 200,5 )	8 732,65 (8 731,3 )	8 196,65 (8 195,3 )	13 110,65 (13 109,3 )	12 331,65 (12 330,3 )	17 263,65 (17 262,3 )	16 461,65 (16 460,3 )	22 621,65 (22 620,3 )	22 001,65 (22 000,3 )
2	4 365,85 (4 364,5 )	4 067,85 (4 066,5 )	6 519,35 (6 518 )	6 205,35 (6 204 )	8 735,85 (8 734,5 )	8 199,85 (8 198,5 )	13 114,15 (13 112,8 )	12 335,15 (12 333,8 )	17 267,15 (17 265,8 )	16 465,15 (16 463,8 )	22 625,15 (22 623,8 )	22 005,15 (22 003,8 )
3	4 369,05 (4 367,7 )	4 071,05 (4 069,7 )	6 522,85 (6 521,5 )	6 208,85 (6 207,5 )	8 739,05 (8 737,7 )	8 203,05 (8 201,7 )	13 117,65 (13 116,3 )	12 338,65 (12 337,3 )	17 270,65 (17 269,3 )	16 468,65 (16 467,3 )	22 628,65 (22 627,3 )	22 008,65 (22 007,3 )
4	4 372,25 (4 370,9 )	4 074,25 (4 072,9 )			8 742,25 (8 740,9 )	8 206,25 (8 204,9 )	13 121,15 (13 119,8 )	12 342,15 (12 340,8 )	17 274,15 (17 272,8 )	16 472,15 (16 470,8 )	22 632,15 (22 630,8 )	22 012,65 (22 010,8 )
5	4 375,45 (4 374,1 )	4 077,45 (4 076,1 )			8 745,45 (8 744,1 )	8 209,45 (8 208,1 )	13 124,65 (13 123,3 )	12 345,65 (12 344,3 )	17 277,65 (17 276,3 )	16 475,65 (16 474,3 )	22 635,65 (22 634,3 )	22 015,65 (22 014,3 )
6	4 378,65 (4 377,3 )	4 080,65 (4 079,3 )			8 748,65 (8 747,3 )	8 212,65 (8 211,3 )	13 128,15 (13 126,8 )	12 349,15 (12 347,8 )	17 281,15 (17 279,8 )	16 479,15 (16 477,8 )	22 639,15 (22 637,8 )	22 019,15 (22 017,8 )
7	4 381,85 (4 380,5 )	4 083,85 (4 082,5 )			8 751,85 (8 750,5 )	8 215,85 (8 214,5 )	13 131,65 (13 130,3 )	12 352,65 (12 351,3 )	17 284,65 (17 283,3 )	16 482,65 (16 481,3 )	22 642,65 (22 641,3 )	22 022,65 (22 021,3 )
8	4 385,05 (4 383,7 )	4 087,05 (4 085,7 )			8 755,05 (8 753,7 )	8 219,05 (8 217,7 )	13 135,15 (13 133,8 )	12 356,15 (12 354,8 )	17 288,15 (17 286,8 )	16 486,15 (16 484,8 )	22 646,15 (22 644,8 )	22 026,15 (22 024,8 )
9	4 388,25 (4 386,9 )	4 090,25 (4 088,9 )			8 758,25 (8 756,9 )	8 222,25 (8 220,9 )	13 138,65 (13 137,3 )	12 359,65 (12 358,3 )	17 291,65 (17 290,3 )	16 489,65 (16 488,3 )	22 649,65 (22 648,3 )	22 029,65 (22 028,3 )
10	4 391,45 (4 390,1 )	4 093,45 (4 092,1 )			8 761,45 (8 760,1 )	8 225,45 (8 224,1 )	13 142,15 (13 140,8 )	12 363,15 (12 361,8 )	17 295,15 (17 293,8 )	16 493,15 (16 491,8 )	22 653,15 (22 651,8 )	22 033,15 (22 031,8 )
11	4 394,65 (4 393,3 )	4 096,65 (4 095,3 )			8 764,65 (8 763,3 )	8 228,65 (8 227,3 )	13 145,65 (13 144,3 )	12 366,65 (12 365,3 )	17 298,65 (17 297,3 )	16 496,65 (16 495,3 )	22 656,65 (22 655,3 )	22 036,65 (22 035,3 )
12	4 397,85 (4 396,5 )	4 099,85 (4 098,5 )			8 767,85 (8 766,5 )	8 231,85 (8 230,5 )	13 149,15 (13 147,8 )	12 370,15 (12 368,8 )	17 302,15 (17 300,8 )	16 500,15 (16 498,8 )	22 660,15 (22 658,8 )	22 040,15 (22 038,8 )
13	4 401,05 (4 399,7 )	4 103,05 (4 101,7 )			8 771,05 (8 769,7 )	8 235,05 (8 233,7 )	13 152,65 (13 151,3 )	12 373,65 (12 372,3 )	17 305,65 (17 304,3 )	16 503,65 (16 502,3 )	22 663,65 (22 662,3 )	22 043,65 (22 042,3 )
14	4 404,25 (4 402,9 )	4 106,25 (4 104,9 )			8 774,25 (8 772,9 )	8 238,25 (8 236,9 )	13 156,15 (13 154,8 )	12 377,15 (12 375,8 )	17 309,15 (17 307,8 )	16 507,15 (16 505,8 )	22 667,15 (22 665,8 )	22 047,15 (22 045,8 )
15	4 407,45 (4 406,1 )	4 109,45 (4 108,1 )			8 777,45 (8 776,1 )	8 241,45 (8 240,1 )	13 159,65 (13 158,3 )	12 380,65 (12 379,3 )	17 312,65 (17 311,3 )	16 510,65 (16 509,3 )	22 670,65 (22 669,3 )	22 050,65 (22 049,3 )
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Series	4 Mc/s		6 Mc/s		8 Mc/s		12 Mc/s		16 Mc/s		22 Mc/s	
	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship
16	4 410,65 (4 409,3 )	4 112,65 (4 111,3 )			8 780,65 (8 779,3 )	8 244,65 (8 243,3 )	13 163,15 (13 161,8 )	12 384,15 (12 382,8 )	17 316,15 (17 314,8 )	16 514,15 (16 512,8 )	22 674,15 (22 672,8 )	22 054,15 (22 052,8 )
17	4 413,85 (4 412,5 )	4 115,85 (4 114,5 )			8 783,85 (8 782,5 )	8 247,85 (8 246,5 )	13 166,65 (13 165,3 )	12 387,65 (12 386,3 )	17 319,65 (17 318,3 )	16 517,65 (16 516,3 )	22 677,65 (22 676,3 )	22 057,65 (22 056,3 )
18	4 417,05 (4 415,7 )	4 119,05 (4 117,7 )			8 787,05 (8 785,7 )	8 251,05 (8 249,7 )	13 170,15 (13 168,8 )	12 391,15 (12 389,8 )	17 333,15 (17 321,8 )	16 521,15 (16 519,8 )	22 681,15 (22 679,8 )	22 061,15 (22 059,8 )
19	4 420,25 (4 418,9 )	4 122,25 (4 120,9 )			8 790,25 (8 788,9 )	8 254,25 (8 252,9 )	13 173,65 (13 172,3 )	12 394,65 (12 393,3 )	17 326,65 (17 325,3 )	16 524,65 (16 523,3 )	22 684,65 (22 683,3 )	22 064,65 (22 063,3 )
20	4 423,45 (4 422,1 )	4 125,45 (4 124,1 )			8 793,45 (8 792,1 )	8 257,45 (8 256,1 )	13 177,15 (13 175,8 )	12 398,15 (12 396,8 )	17 330,15 (17 328,8 )	16 528,15 (16 526,8 )	22 688,15 (22 686,8 )	22 068,15 (22 066,8 )
21	4 426,65 (4 425,3 )	4 128,65 (4 127,3 )			8 796,65 (8 795,3 )	8 260,65 (8 259,3 )	13 180,65 (13 179,3 )	12 401,65 (12 400,3 )	17 333,65 (17 332,3 )	16 531,65 (16 530,3 )	22 691,65 (22 690,3 )	22 071,65 (22 070,3 )
22	4 429,85 (4 428,5 )	4 131,85 (4 130,5 )			8 799,85 (8 798,5 )	8 263,85 (8 262,5 )	13 184,15 (13 182,8 )	12 405,15 (12 403,8 )	17 337,15 (17 335,8 )	16 535,15 (16 533,8 )	22 695,15 (22 693,8 )	22 075,15 (22 073,8 )
23	4 433,05 (4 431,7 )	4 135,05 (4 133,7 )			8 803,05 (8 801,7 )	8 267,05 (8 265,7 )	13 187,65 (13 186,3 )	12 408,65 (12 407,3 )	17 340,65 (17 339,3 )	16 538,65 (16 537,3 )	22 698,65 (22 697,3 )	22 078,65 (22 077,3 )
24	4 436,25 (4 434,9 )	4 138,25 (4 136,9 )			8 806,25 (8 804,9 )	8 270,25 (8 268,9 )	13 191,15 (13 189,8 )	12 412,15 (12 410,8 )	17 344,15 (17 342,9 )	16 542,15 (16 540,8 )	22 702,15 (22 700,8 )	22 082,15 (22 080,8 )
25					8 809,45 (8 808,1 )	8 273,45 (8 272,1 )	13 194,65 (13 193,3 )	12 415,65 (12 414,3 )	17 347,65 (17 346,3 )	16 545,65 (16 544,3 )	22 705,65 (22 704,3 )	22 085,65 (22 084,3 )
26					8 812,65 (8 811,3 )	8 276,65 (8 275,3 )	13 198,15 (13 196,8 )	12 419,15 (12 417,8 )	17 351,15 (17 349,8 )	16 549,15 (16 547,8 )	22 709,15 (22 707,8 )	22 089,15 (22 087,8 )
27									17 354,65 (17 353,3 )	16 552,65 (16 551,3 )	22 712,65 (22 711,3 )	22 092,65 (22 091,3 )
28									17 358,15 (17 356,8 )	16 556,15 (16 554,8 )	22 716,15 (22 714,8 )	22 096,15 (22 094,8 )

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Ref.

G/77(38)

APPENDIX 17

Duplex channelling of the Maritime Mobile Radiotelephone

bands between 4,000 and 23 000 kc/s

(See Article 35)

- NOC 1.
- NOC 2.
- MOD 3. (a) Stations utilizing single sideband emissions shall be considered to be in accordance with Section B if the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for single sideband emissions in accordance with the table.
- (b) Stations employing double sideband emissions (A3) should operate with assigned frequencies listed in the table of Section A.
- (c) Stations using single sideband channel emissions (A3A, A3H or A3J) shall operate on the upper sideband derived from the normal carrier frequencies listed in the table of Section B.

Reasons :

To provide for the introduction of single sideband operation.

- NOC 4.
-

Ref.

SECTION A

G/77(38)  
(contd.)

Table of double-sideband transmitting frequencies (in kc/s)

Series No.	4 Mc/s band		8 Mc/s band		12 Mc/s band		16 Mc/s band		22 Mc/s band	
	Coast Station Frequency	Ship Station 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	4 371.1	4 066.1	8 748.1	8 198.1	13 133.5	12 333.5	17 293.5	16 463.5	22 653.5	22 003.5
2	4 377.4	4 072.4	8 754.4	8 204.4	13 140.5	12 340.5	17 300.5	16 470.5	22 660.5	22 010.5
3	4 383.8	4 078.8	8 760.8	8 210.8	13 147.5	12 347.5	17 307.5	16 477.5	22 667.5	22 017.5
4	4 390.2	4 085.2	8 767.2	8 217.2	13 154.5	12 354.5	17 314.5	16 484.5	22 674.5	22 024.5
5	4 396.6	4 091.6	8 773.6	8 223.6	13 161.5	12 361.5	17 321.5	16 491.5	22 681.5	22 031.5
6	4 403.0	4 098.0	8 780.0	8 230.0	13 168.5	12 368.5	17 328.5	16 498.5	22 688.5	22 038.5
7	4 409.4	4 104.4	8 786.4	8 236.4	13 175.5	12 375.5	17 335.5	16 505.5	22 695.5	22 045.5
8	4 415.8	4 110.8	8 792.8	8 242.8	13 182.5	12 382.5	17 342.5	16 512.5	22 702.5	22 052.5
9	4 422.2	4 117.2	8 799.2	8 249.2	13 189.5	12 389.5	17 349.5	16 519.5	22 709.5	22 059.5
10	4 428.6	4 123.6	8 805.6	8 255.6	13 196.5	12 396.5	17 356.5	16 526.5	22 716.5	22 066.5
11	4 434.9	4 129.9	8 811.9	8 261.9						

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast Station Frequency	Ship Station 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	4368.0	4063.0	8745.0	8195.0	13130.2	12330.2	17290.2	16460.2	22650.2	22000.2
2	4371.1	4066.1	8748.1	8198.1	13135.5	12333.5	17293.5	16463.5	22653.5	22003.5
3	4374.3	4069.3	8751.3	8201.3	13137.2	12337.2	17297.2	16467.2	22657.2	22007.2
4	4377.4	4072.4	8754.4	8204.4	13140.5	12340.5	17300.5	16470.5	22660.5	22010.5
5	4380.7	4075.7	8757.7	8207.7	13144.2	12344.2	17304.2	16474.2	22664.2	22014.2
6	4383.8	4078.8	8760.8	8210.8	13147.5	12347.5	17307.5	16477.5	22667.5	22017.5
7	4387.1	4082.1	8764.1	8214.1	13151.2	12351.2	17311.2	16481.2	22671.2	22021.2
8	4390.2	4085.2	8767.2	8217.2	13154.5	12354.5	17314.5	16484.5	22674.5	22024.5
9	4393.5	4088.5	8770.5	8220.5	13158.2	12358.2	17318.2	16488.2	22678.2	22028.2
10	4396.6	4091.6	8773.6	8223.6	13161.5	12361.5	17321.5	16491.5	22681.5	22031.5
11	4399.9	4094.9	8776.9	8226.9	13165.2	12365.2	17325.2	16495.2	22685.2	22035.2
12	4403.0	4098.0	8780.0	8230.0	13168.5	12368.5	17328.5	16498.5	22688.5	22038.5
13	4406.3	4101.3	8783.3	8233.3	13172.2	12372.2	17332.2	16502.2	22692.2	22042.2
14	4409.4	4104.4	8786.4	8236.4	13175.5	12375.5	17335.5	16505.5	22695.5	22045.5
15	4412.7	4107.7	8789.7	8239.7	13179.2	12379.2	17339.2	16509.2	22699.2	22049.2
16	4415.8	4110.8	8792.8	8242.8	13182.5	12382.5	17342.5	16512.5	22702.5	22052.5
17	4419.1	4114.1	8796.1	8246.1	13186.2	12386.2	17346.2	16516.2	22706.2	22056.2
18	4422.2	4117.2	8799.2	8249.2	13189.5	12389.5	17349.5	16519.5	22709.5	22059.5
19	4425.5	4120.5	8802.5	8252.5	13193.2	12393.2	17353.2	16523.2	22713.2	22063.2
20	4428.6	4123.6	8805.6	8255.6	13196.5	12396.5	17356.5	16526.5	22716.5	22066.5
21	4431.8	4126.8	8808.8	8258.8						
22	4434.9	4129.9	8811.9	8261.9						
23	4361.7	4133.1	8732.4	8265.1	13109.2	12400.2	17262.2	16530.2	22622.3	22070.2
24	4364.8	4136.2	8735.5	8268.2	13112.5	12403.5	17265.5	16533.5	22625.5	22073.5
25			8738.7	8271.4	13116.2	12407.2	17269.2	16537.2	22619.2	22077.2
26			8741.8	8274.5	13119.5	12410.5	17272.5	16540.5	22632.5	22080.5
27					13123.2	12414.2	17276.2	16544.2	22636.2	22084.2
28					13126.5	12417.5	17279.5	16547.5	22639.5	22087.5
29							17283.2	16551.2	22643.2	22091.2
							17286.5	16554.5	22646.5	22094.5
6 Mc/s Band										
	Coast Station Frequency	Ship Station Frequency								
31	6514.5	6203.5								
32	6518	6204								
33	6521.5	6207.5								

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Agenda Item 2.1 :

Frequency bands for coast and ship radiotelephone stations  
in the 6 Mc/s band

HOL/71(30)

Proposal

Amend Appendices 15 and 17 to provide a number of frequencies for coast and ship radiotelephone stations in the 6 Mc/s band.

See proposals relating to Agenda Item 3, Nos. 447, 448 and 449 (HOL/72(9), Document No. 72).

Reasons :

To meet the increasing requirements of the maritime mobile radio-telephone service.

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Ref.

HOL/72(13)

APPENDIX 17

Duplex channelling of the Maritime Mobile Radiotelephone

Bands between 4000 and 23000 kc/s

(see Article 35)

MOD 1. The following Table (page-434) indicates the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radio-telephone service between 4000 and 23000 kc/s.

NOC 2.

SUP 3.

SUP 4.

Reasons :

a) The technical characteristics contained in Appendix 17 are transferred to Appendix 17A.

See also proposal relating to Agenda Item 1 (HOL/70(6), Document No. 70).

b) To include in the revised Table of Appendix 17 the frequencies transferred from the present Appendix 15, Section B.

See also proposal relating to Agenda Item 3, Nos. 447 and 448 (HOL/72(9)).

c) A number of coast and ship station frequencies in the 4 and 8 Mc/s bands are changed so as to obtain a uniform frequency spacing in these bands.

d) In consequence of the conversion from double sideband to single sideband operation, it is desirable to include in the revised Table both the assigned and carrier frequencies for single sideband operation, as well as the carrier frequencies for double sideband operation.

Ref.

HOL/72(13)  
(contd.)

MOD

APPENDIX 17

Table of transmitting frequencies (in kc/s)

4 Mc/s band

Series No	Coast Station Frequency					Ship Station Frequency				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	4362.8	4361.4				4134.6	4133.2			
2	4366.0	4364.6				4137.8	4136.4			
3	4369.2	4367.8	4371.0	4371.0	4372.4	4064.4 +	4063.0 +	4066.0	4066.0	4067.4
4	4375.6	4374.2	4377.4	4377.4	4378.8	4070.6	4069.2	4072.4	4072.4	4073.8
5	4382.0	4380.6	4383.8	4383.8	4385.2	4077.0	4075.6	4078.8	4078.8	4080.2
6	4388.4	4387.0	4390.2	4390.2	4391.6	4083.4	4082.0	4085.2	4085.2	4086.6
7	4394.8	4393.4	4396.6	4396.6	4398.0	4089.8	4088.4	4091.6	4091.6	4093.0
8	4401.2	4399.8	4403.0	4403.0	4404.4	4096.2	4094.8	4098.0	4098.0	4099.4
9	4407.6	4406.2	4409.4	4409.4	4410.8	4102.6	4101.2	4104.4	4104.4	4105.8
10	4414.0	4412.6	4415.8	4415.8	4417.2	4109.0	4107.6	4110.8	4110.8	4112.2
11	4420.4	4419.0	4422.2	4422.2	4423.6	4115.4	4114.0	4117.2	4117.2	4118.6
12	4426.8	4425.4	4428.6	4428.6	4430.0	4121.8	4120.4	4123.6	4123.6	4125.0
13	4433.2	4431.8	4435.0	4435.0	4436.4	4128.2	4126.8	4130.0	4130.0	4131.4

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Ref.

APPENDIX 17

HOL/72(13)  
(contd.)

MOD

Table of transmitting frequencies (in kc/s) (contd.)

6 Mc/s band

Series No	Coast Station Frequency					Ship Station Frequency				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	6516.4	6515.0				6202.4	6201.0			
2	6519.6	6518.2				6205.6	6204.2			
3	6522.8	6521.4				6208.8	6207.4			

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Ref.

APPENDIX 17

HOL/72(13)  
(contd.)

MOD

Table of transmitting frequencies (in kc/s) (contd.)

8 Mc/s band

Series No	Coast Station Frequency					Ship Station Frequency				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	8733.4	8732.0				8266.6	8265.2			
2	8736.6	8735.2				8269.8	8268.4			
3	8739.8	8738.4				8273.0	8271.6			
4	8743.0	8741.6				8276.2	8274.8			
5	8746.2	8744.8	8748.0	8748.0	8749.4	8196.4 <sup>+</sup>	8195.0 <sup>+</sup>	8198.0	8198.0	8199.4
6	8752.6	8751.2	8754.4	8754.4	8755.8	8202.6	8201.2	8204.4	8204.4	8205.8
7	8759.0	8757.6	8760.8	8760.8	8762.2	8209.0	8207.6	8210.8	8210.8	8212.2
8	8765.4	8764.0	8767.2	8767.2	8768.6	8215.4	8214.0	8217.2	8217.2	8218.6
9	8771.8	8770.4	8773.6	8773.6	8775.0	8221.8	8220.4	8223.6	8223.6	8225.0
10	8778.2	8776.8	8780.0	8780.0	8781.4	8228.2	8226.8	8230.0	8230.0	8231.4
11	8784.6	8783.2	8786.4	8786.4	8787.8	8234.6	8233.2	8236.4	8236.4	8237.8
12	8791.0	8789.6	8792.8	8792.8	8794.2	8241.0	8239.6	8242.8	8242.8	8244.2
13	8797.4	8796.0	8799.2	8799.2	8800.6	8247.4	8246.0	8249.2	8249.2	8250.6
14	8803.8	8802.4	8805.6	8805.6	8807.0	8253.8	8252.4	8255.6	8255.6	8257.0
15	8840.2	8808.8	8812.0	8812.0	8813.4	8260.2	8258.8	8262.0	8262.0	8263.4

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APPENDIX 17

Table of transmitting frequencies (in kc/s) (contd.)

12 Mc/s band

Series No	Coast Station Frequency					Ship Station Frequency				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	13110.4 <sup>+</sup>	13109.0 <sup>+</sup>				12401.4	12400.0			
2	13113.9	13112.5				12404.9	12403.5			
3	13117.4	13116.0				12408.4	12407.0			
4	13120.9	13119.5				12411.9	12410.5			
5	13124.4	13123.0				12415.4	12414.0			
6	13127.9	13126.5				12418.9	12417.5			
7	13131.4	13130.0	13133.5	13133.5	13134.9	12331.4 <sup>+</sup>	12330.0 <sup>+</sup>	12333.5	12333.5	12334.9
8	13138.4	13137.0	13140.5	13140.5	13141.9	12338.4	12337.0	12340.5	12340.5	12341.9
9	13145.4	13144.0	13147.5	13147.5	13148.9	12345.4	12344.0	12347.5	12347.5	12348.9
10	13152.4	13151.0	13154.5	13154.5	13155.9	12352.4	12351.0	12354.5	12354.5	12355.9
11	13159.4	13158.0	13161.5	13161.5	13162.9	12359.4	12358.0	12361.5	12361.5	12362.9
12	13166.4	13165.0	13168.5	13168.5	13169.9	12366.4	12365.0	12368.5	12368.5	12369.9
13	13173.4	13172.0	13175.5	13175.5	13176.9	12373.4	12372.0	12375.5	12375.5	12376.9
14	13180.4	13179.0	13182.5	13182.5	13183.9	12380.4	12379.0	12382.5	12382.5	12383.9
15	13187.4	13186.0	13189.5	13189.5	13190.9	12387.4	12386.0	12389.5	12389.5	12390.9
16	13194.4	13193.0	13196.5	13196.5	13197.9	12394.4	12393.0	12396.5	12396.5	12397.9

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APPENDIX 17

Table of transmitting frequencies (in kc/s) (contd.)

16 Mc/s band

Series No	Coast Station Frequency				
	Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)
1	17263.4 +	17262.0 +			
2	17266.9	17265.5			
3	17270.4	17269.0			
4	17273.9	17272.5			
5	17277.4	17276.0			
6	17280.9	17279.5			
7	17284.4	17283.0			
8	17287.9	17286.5			
9	17291.4	17290.0	17293.5	17293.5	17294.9
10	17298.4	17297.0	17300.5	17300.5	17301.9
11	17305.4	17304.0	17307.5	17307.5	17308.9
12	17312.4	17311.0	17314.5	17314.5	17315.9
13	17319.4	17318.0	17321.5	17321.5	17322.9
14	17326.4	17325.0	17328.5	17328.5	17329.9
15	17333.4	17332.0	17335.5	17335.5	17336.9
16	17340.4	17339.0	17342.5	17342.5	17343.9
17	17347.4	17346.0	17349.5	17349.5	17350.9
18	17354.4	17353.0	17356.5	17356.5	17357.9

Ship Station Frequency				
Single Sideband		Double Sideband	Single Sideband	
Assigned	Carrier		Carrier	Assigned
(7)	(8)	(9)	(10)	(11)
16531.4	16530.0			
16534.9	16533.5			
16538.4	16537.0			
16541.9	16540.5			
16545.4	16544.0			
16548.9	16547.5			
16552.4	16551.0			
16555.9	16554.5			
16461.4 +	16460.0 +	16463.5	16463.5	16464.9
16468.4	16467.0	16470.5	16470.5	16471.9
16475.4	16474.0	16477.5	16477.5	16478.9
16482.4	16481.0	16484.5	16484.5	16485.9
16489.4	16488.0	16491.5	16491.5	16492.9
16496.4	16495.0	16498.5	16498.5	16499.9
16503.4	16502.0	16505.5	16505.5	16506.9
16510.4	16509.0	16512.5	16512.5	16513.9
16517.4	16516.0	16519.5	16519.5	16520.9
16524.4	16523.0	16526.5	16526.5	16527.9

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APPENDIX 17

Table of transmitting frequencies (in kc/s) (contd.)

22 Mc/s band

Series No	Coast Station Frequency					Ship Station Frequency				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Carrier	Assigned	Assigned	Carrier		Carrier	Assigned
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	22630.4	22629.0				22071.4	22070.0			
2	22633.9	22632.5				22074.9	22073.5			
3	22637.4	22636.0				22078.4	22077.0			
4	22640.9	22639.5				22081.9	22080.5			
5	22644.4	22643.0				22085.4	22084.0			
6	22647.9	22646.5				22088.9	22087.5			
7	22651.4	22650.0	22653.5	22653.5	22654.9	22001.4 +	22000.0 +	22003.5	22003.5	22004.9
8	22658.4	22657.0	22660.5	22660.5	22661.9	22008.4	22007.0	22010.5	22010.5	22011.9
9	22665.4	22664.0	22667.5	22667.5	22668.9	22015.4	22014.0	22017.5	22017.5	22018.9
10	22672.4	22671.0	22674.5	22674.5	22675.9	22022.4	22021.0	22024.5	22024.5	22025.9
11	22679.4	22678.0	22681.5	22681.5	22682.9	22029.4	22028.0	22031.5	22031.5	22032.9
12	22686.4	22685.0	22688.5	22688.5	22689.9	22036.4	22035.0	22038.5	22038.5	22039.9
13	22693.4	22692.0	22695.5	22695.5	22696.9	22043.4	22042.0	22045.5	22045.5	22046.9
14	22700.4	22699.0	22702.5	22702.5	22703.9	22050.4	22049.0	22052.5	22052.5	22053.9
15	22707.4	22706.0	22709.5	22709.5	22710.9	22057.4	22056.0	22059.5	22059.5	22060.9
16	22714.4	22713.0	22716.5	22716.5	22717.9	22064.4	22063.0	22066.5	22066.5	22067.9

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FOREWORD

I/33

Revision of Appendix 17

In view of the fact that after the conversion to single sideband the present provisions of Appendix 17 for single sideband systems must be more numerous and important, it is deemed more desirable and convenient to insert them in the appropriate place of the Radio Regulations themselves.

Proposals Nos. I/31(4) and (8) listed under Agenda Item 1 (Document No. 31) are based on this principle.

It will be noted that in the present distribution of coast and ship station frequencies in the 4 and 8 Mc/s bands there is no uniform spacing which is desirable.

In order to achieve this it is necessary to change as follows the frequencies listed below :

coast stations	4371.1 kc/s into 4371.0 kc/s
	4434.9 kc/s into 4435.0 kc/s
	8748.1 kc/s into 8748.0 kc/s
	8811.9 kc/s into 8812.0 kc/s
ship stations	4066.1 kc/s into 4066.0 kc/s
	4129.9 kc/s into 4130.0 kc/s
	8198.1 kc/s into 8198.0 kc/s
	8261.9 kc/s into 8262.0 kc/s

No difficulties are foreseen as these are only minor changes; as for the frequency assignments to coast stations the recording date could be maintained in the master register according to the provisions of No. 534 of the Radio Regulations.

1/33(16)

APPENDIX 17

Duplex channelling of the maritime mobile  
radiotelephone band between 4000 and 23000 kc/s

(see Article 35)

- NOC 1. The following Table indicates the frequencies to be used by coast stations in the bands allocated to the maritime mobile radiotelephone service between 4000 and 23 000 kc/s.
- NOC 2. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprises a transmitting and 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.

SUP 3, 3.1, 3.2, 3.2.1, 3.2.2 and 4

Ref.

I/33(16)  
(contd.)

APPENDIX 17

Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
4			4369.2	4367.8	4064.4*)	4063.0*)
	4371.0	4066.0	4372.4	4371.0	4067.4	4066.6
			4375.6	4374.2	4070.6	4069.2
	4377.4	4072.4	4378.8	4377.4	4073.8	4072.4
			4382.0	4380.6	4077.0	4075.6
	4383.8	4078.8	4385.2	4383.8	4080.2	4078.8
			4388.4	4387.0	4083.4	4082.0
	4390.2	4085.2	4391.6	4390.2	4086.6	4085.2
			4394.8	4393.4	4089.8	4088.4
	4396.6	4091.6	4398.0	4396.6	4093.0	4091.6
			4401.2	4399.8	4096.2	4094.8
	4403.0	4098.0	4404.4	4403.0	4099.4	4098.0
			4407.6	4406.2	4102.6	4101.2
	4409.4	4104.4	4410.8	4409.4	4105.8	4104.4
			4414.0	4412.6	4109.0	4107.6
	4415.8	4110.8	4417.2	4415.8	4112.2	4110.8
			4420.4	4419.0	4115.4	4114.0
	4422.2	4117.2	4423.6	4422.2	4118.6	4117.2
			4426.8	4425.4	4121.8	4120.4
	4428.6	4123.6	4430.0	4428.6	4125.0	4123.6
			4432.2	4431.8	4128.2	4126.8
	4435.0	4130.0	4436.4	4435.0	4131.4	4130.0
			4366.0	4364.6	4134.6	4133.2

\*) A3J only

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Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
6			6519.9 6523.1	6518.5 6521.7	6202.4 6205.7	6201.0 6204.3
8	8748.0	8198.0	8746.2 8749.4 8752.6 8755.8 8759.0 8762.2 8765.4 8768.6 8771.8 8775.0 8778.2 8781.4 8784.6 8787.8 8791.0 8794.2 8797.4 8800.6 8803.8 8807.0 8810.2	8744.8 8748.0 8751.2 8754.4 8757.6 8760.8 8764.0 8767.2 8770.4 8773.6 8776.8 8780.0 8783.2 8786.4 8789.6 8792.8 8796.0 8799.2 8802.4 8805.6 8808.8	8196.4*) 8199.4 8202.6 8205.8 8209.0 8212.2 8215.4 8218.6 8221.8 8225.0 8228.2 8231.4 8234.6 8237.8 8241.0 8244.2 8247.4 8250.6 8253.8 8257.0 8260.2	8195.0*) 8198.0 8201.2 8204.4 8207.6 8210.8 8214.0 8217.2 8220.4 8223.6 8226.8 8230.0 8233.2 8236.4 8239.6 8242.8 8246.0 8249.2 8252.4 8255.6 8258.8

\*) A3J only

Ref.  
I/33(16)  
(cont.)

Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
8	8812.0	8262.0	8813.4	8812.0	8263.4	8262.0
			8736.6	8735.2	8266.6	8265.2
			8739.8	8738.4	8269.8	8268.4
			8743.0	8741.6	8273.0	8271.6
12	13133.5	12333.5	13131.4	13130.0	12331.4	12330.0
			13134.9	13133.5	12334.9	12333.5
			13138.4	13137.0	12338.4	12337.0
	13140.5	12340.5	13141.9	13140.5	12341.9	12340.5
			13145.4	13144.0	12345.4	12344.0
			13148.9	13147.5	12348.9	12347.5
	13147.5	12347.5	13152.4	13151.0	12352.4	12351.0
			13155.9	13154.5	12355.9	12354.5
			13159.4	13158.0	12359.4	12358.0
	13161.5	12361.5	13162.9	13161.5	12362.9	12361.5
			13166.4	13165.0	12366.4	12365.0
			13169.9	13168.5	12369.9	12368.5
	13168.5	12368.5	13173.4	13172.0	12373.4	12372.0
			13176.9	13175.5	12376.9	12375.5
			13180.4	13179.0	12380.4	12379.0
	13182.5	12382.5	13183.9	13182.5	12383.9	12382.5
			13187.4	13186.0	12387.4	12386.0
			13190.9	13189.5	12390.9	12389.5
	13189.5	12389.5	13194.6	13193.0	12394.4	12393.0

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I/33(16)  
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Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
12	13196.5	12396.5	13197.9	13196.5	12397.9	12396.5
			13113.9	13112.5	12401.4	12400.0
			13117.4	13116	12404.9	12403.5
			13120.9	13119.5	12408.4	12407.0
			13124.4	13123	12411.9	12410.5
			13127.9	13126.5	12415.4	12414.0
16	17293.5	16463.5	17291.4	17290.0	16461.4	16460.0
			17294.9	17293.5	16464.9	16463.5
			17298.4	17297.0	16468.4	16467.0
	17300.5	16470.5	17301.9	17300.5	16471.9	16470.5
			17305.4	17304.0	16475.4	16474.0
	17307.5	16477.5	17308.9	17307.5	16478.9	16477.5
			17312.4	17311.0	16482.4	16481.0
	17314.5	16484.5	17315.9	17314.5	16485.9	16484.5
			17319.4	17318.0	16489.4	16488.0
	17321.5	16491.5	17322.9	17321.5	16492.9	16491.5
			17326.4	17325.0	16496.4	16495.0
	17328.5	16498.5	17329.9	17328.5	16499.9	16498.5
			17333.4	17332.0	16503.4	16502.0
	17335.5	16505.5	17336.9	17335.5	16506.9	16505.5
			17340.4	17339.0	16510.4	16509.0
	17342.5	16512.5	17343.9	17342.5	16513.9	16512.5
			17367.4	17346.0	16517.4	16516.0

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Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
16	17349.5	16519.5	17350.9	17349.5	16520.9	16519.5
			17354.4	17353.0	16524.4	16523.0
	17356.5	16526.5	17357.9	17356.5	16527.9	16526.5
			17263.4	17262.0	16531.4	16530.0
			17266.9	17265.5	16534.9	16533.5
			17270.4	17269.0	16538.4	16537.0
			17273.9	17272.5	16541.9	16540.5
			17277.4	17276.0	16545.4	16544.0
			17280.9	17279.5	16548.9	16547.5
			17284.4	17283.0	16552.4	16551.0
			17287.9	17286.5	16555.9	16554.5
22	22653.5	22003.5	22651.4	22650.0	22001.4	22000.0
			22654.9	22653.5	22004.9	22003.5
	22660.5	22010.5	22658.4	22657.0	22008.4	22007.0
			22661.9	22660.5	22011.9	22010.5
	22667.5	22017.5	22665.4	22664.0	22015.4	22014.0
			22668.9	22667.5	22018.9	22017.5
	22674.5	22024.5	22672.4	22671.0	22022.4	22021.0
			22675.9	22674.5	22025.9	22024.5
	22681.5	22031.5	22679.4	22678.0	22029.4	22028.0
			22682.9	22681.5	22032.9	22031.5
	22688.5	22038.5	22686.4	22685.0	22036.4	22035.0
			22689.9	22688.5	22039.9	22038.5
			22693.4	22692.0	22043.4	22042.0



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Band Mc/s	A3 Emission		A3A, A3H, A3J Emissions			
	Coast	Ship	Coast		Ship	
	Carrier frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s	Assigned frequency kc/s	Carrier frequency kc/s
22	22695.5	22045.5	22696.9	22695.5	22046.9	22045.5
			22700.4	22699.0	22050.4	22049.0
	22702.5	22052.5	22703.9	22702.5	22053.9	22052.5
			22707.4	22706.0	22057.4	22056.0
	22709.5	22059.5	22710.9	22709.5	22060.9	22059.5
			22714.4	22713.0	22064.4	22063.0
	22716.5	22066.5	22717.9	22716.5	22067.9	22066.5
			22626.9	22625.5	22071.4	22070.0
			22630.4	22629.0	22074.9	22073.5
			22633.9	22632.5	22078.4	22077.0
			22637.4	22636.0	22081.9	22080.5
			22640.9	22639.5	22085.4	22084.0
			22644.4	22643.0	22088.9	22087.5
			22647.9	22646.5	22092.4	22091.0

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## APPENDIX 17

Technical standards of single sideband equipments used for the Maritime Mobile Radiotelephone Service in the bands 1605 to 4000 kc/s and 4000 to 23 000 kc/s and table of frequencies to be used in the bands 4000 to 23 000 kc/s (see Articles 28, 33 and 35)

1. Technical standards applicable to radiotelephone coast and ship stations using the frequency bands between 1605 and 23 000 kc/s :
  - (1) The upper sideband emissions shall always be used.
  - (2) Assigned frequencies to stations using single sideband emissions shall be 1500 c/s higher than carrier frequencies.
  - (3) The carrier power for classes of single sideband emissions shall be as follows :
    - a) For class A3H emissions, the carrier power shall be reduced not more than 6 db below peak envelope power of the emission;
    - b) For class A3J emissions, the carrier power shall be reduced not less than 40 db below peak envelope power of the emission;
    - c) For class A3A emissions, the carrier power shall be reduced 16  $\pm$  2 db below peak envelope power of the emission.
  - (4) The transmitter audio-frequency band shall be 350 to 2700 c/s, with a permitted amplitude variation of 6 db.
  - (5) The short-term limits for the carrier frequency tolerance (of the order of 15 minutes) of ship stations shall be  $\pm$  40 c/s.

Reasons :

The assigned frequency should be the centre of the necessary bandwidth. The necessary bandwidth for SSB telephony is 3 kc/s in Appendix 5 and C.C.I.R. Report, and in Japan too, as the assigned frequency, the value of 1500 c/s higher than carrier frequencies is already in force. Also, in E.A.R.C. (Aeronautical Mobile) held last year, + 1500 c/s was adopted. It is desirable to define 1500 c/s higher than carrier frequencies as the assigned frequency.

Ref.

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2. Frequencies to be used by coast and ship stations in the bands allocated to the radiotelephone service between 4000 and 23 000 kc/s :

- (1) The table in Section A indicates the frequencies for duplex channel to be used by coast and ship stations. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprises 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.

Note : It is necessary to change the words from "Appendix 17" to "Section A of Appendix 17" in No. 456. The Table in "Section A of Appendix 17" is given in Annex I.

Reasons :

To amend 1 and 2 in Appendix 17.

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- (2) The table in Section B indicates the frequencies for simplex channel to be used by coast and ship stations.

- a) For the use of these frequencies, see also No. 1356 of Article 35.
- b) In the table in Section B, the working frequencies in a given band are :
- indicated by the lowest and highest frequency, in heavy type, in that band;
  - regularly spaced, where there are more than two; the number of frequencies and the spacing in kc/s being indicated in italics.

Note : It is necessary to change the words from "Section A of Appendix 15" to "Appendix 15" in Nos. 1145, 1146, 1158, 1175, 1180 to 1182, 1184, 1187, 1189, 1191, 1193 and 1197. The table in "Section B of Appendix 17" is given in Annex II.

Reasons :

To transfer 1 and 3 in Appendix 15 into Appendix 17.

Ret.

ANNEX I

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APP 17

SECTION A

Table of Transmitted Frequencies Duplex Channelling of the Maritime Mobile Radiotelephone Bands between 4000 and 23000 kc/s (in kc/s)

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast Station Frequency	Ship Station 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	4369.5	4064.5	8746.5	8196.5	13131.7	12331.7	17291.7	16461.7	22651.7	22001.7
2	4372.6	4067.6	8749.6	8199.6	13135.0	12335.0	17295.0	16465.0	22655.0	22005.0
3	4375.8	4070.8	8752.8	8202.8	13138.7	12338.7	17298.7	16468.7	22658.7	22008.7
4	4378.9	4073.9	8755.9	8205.9	13142.0	12342.0	17302.0	16472.0	22662.0	22012.0
5	4382.2	4077.2	8759.2	8209.2	13145.7	12345.7	17305.7	16475.7	22665.7	22015.7
6	4385.3	4080.3	8762.3	8212.3	13149.0	12349.0	17309.0	16479.0	22669.0	22019.0
7	4388.6	4083.6	8765.6	8215.6	13152.7	12352.7	17312.7	16482.7	22672.7	22022.7
8	4391.7	4086.7	8768.7	8218.7	13156.0	12356.0	17316.0	16486.0	22676.0	22026.0
9	4395.0	4090.0	8772.0	8222.0	13159.7	12359.7	17319.7	16489.7	22679.7	22029.7
10	4398.1	4093.1	8775.1	8225.1	13163.0	12363.0	17323.0	16493.0	22683.0	22033.0
11	4401.4	4096.4	8778.4	8228.4	13166.7	12366.7	17326.7	16496.7	22686.7	22036.7
12	4404.5	4099.5	8781.5	8231.5	13170.0	12370.0	17330.0	16500.0	22690.0	22040.0
13	4407.8	4102.8	8784.8	8234.8	13173.7	12373.7	17333.7	16503.7	22693.7	22043.7
14	4410.9	4105.9	8787.9	8237.9	13177.0	12377.0	17337.0	16507.0	22697.0	22047.0

Ref.

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(cont.)

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast Station Frequency	Ship Station 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
15	4414.2	4109.2	8791.2	8241.2	13180.7	12380.7	17340.7	16510.7	22700.7	22050.7
16	4417.3	4112.3	8794.3	8244.3	13184.0	12384.0	17344.0	16514.0	22704.0	22054.0
17	4420.6	4115.6	8797.6	8247.6	13187.7	12387.7	17347.7	16517.7	22707.7	22057.7
18	4423.7	4118.7	8800.7	8250.7	13191.0	12391.0	17351.0	16521.0	22711.0	22061.0
19	4427.0	4122.0	8804.0	8254.0	13194.7	12394.7	17354.7	16524.7	22714.7	22064.7
20	4430.1	4125.1	8807.1	8257.1	13198.0	12398.0	17358.0	16528.0	22718.0	22068.0
21	4433.3	4128.3	8810.3	8260.3						
22	4436.4	4131.4	8813.4	8263.4						

ANNEX II

Ref.

J/86(43 bis)

APP 17  
15

SECTION B

Carrier-Frequencies-in-kc/s simplex channelling for ship radiotelephone stations using the Maritime Mobile Service bands between 4000 and 23 000 kc/s (in kc/s)

Limits		Radiotelephone (Double-sideband) Carrier frequencies	Frequencies for Coast Stations and Ship Stations Radiotelephone (Single-sideband) Upper-sideband carrier-frequencies	Limits
Band (Mc/s)				
4	4133		4134.5 4133 and 4138 4136.5	4140
6	6200		6202 ----- 6209 6200.5 3 Frequencies spaced 3.5 6207.5	6211
8	8265	8267.5 8269	8273 ----- 8278 and 8276.5 4 Frequencies spaced 3.5	8280
12	12400	12401.5 12403.5	12407 ----- 12419 6 12417.5 4 Frequencies spaced 3.5	12421
16	16530	16531.5 16533.5	16537 ----- 16559.5 9 16558 7 Frequencies spaced 3.5	16562
22	22070	22072.5 22074	22078 ----- 22097 8 22095.5 6 Frequencies spaced 3.5	22100

\* For particular conditions concerning the use of 6204 kc/s see No. 1353.

Ref.

USA/18(28)

APPENDIX 17

Duplex channelling of the maritime mobile radiotelephone  
bands between 4000 and 23000 kc/s

(see Article 35)

- MOD 1. The following Table (pages 434 and 434A) indicates the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radiotelephone service between 4000 and 23000 kc/s.
- NOC 2. One or more series of frequencies are assigned to each coast station, which uses these frequencies associated, as far as possible, in pairs; each pair comprising 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.
- SUP 3  
/See 1358-BP and  
1358-BQ/\*)
- SUP 3.1  
/See 1358-BR/\*)
- SUP 3.2  
/See 1358-BS/\*)
- SUP 3.2.1  
/See 1358-BJ and  
1358-BT/\*)
- SUP 3.2.2  
/See 1358-BJ and  
1358-BT/\*)
- SUP 4  
/See 1358-BV and  
1338-BX/\*)

\*) Document No. 16

Series No.	COAST STATION FREQUENCY					SHIP STATION FREQUENCY				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Assigned	Carrier	Assigned	Carrier		Assigned	Carrier
(1)	(2)	(3)	(4)	(5)	(6) <sup>4</sup> Mc/s band	(7)	(8)	(9)	(10)	(11)
1			4371.1					4066.1		
A	4369.4	4368.0				4064.4	4063.0			
B				4372.5	4371.1				4067.5	4066.1
2			4377.4					4072.4		
A	4375.7	4374.3				4070.7	4069.3			
B				4378.8	4377.4				4073.8	4072.4
3			4383.8					4078.8		
A	4382.1	4380.7				4077.1	4075.7			
B				4385.2	4383.8				4080.2	4078.8
4			4390.2					4085.2		
A	4388.5	4387.1				4083.5	4082.1			
B				4391.6	4390.2				4086.6	4085.2
5			4396.6					4091.6		
A	4394.9	4393.5				4089.9	4088.5			
B				4398.0	4396.6				4093.0	4091.6
6			4403.0					4098.0		
A	4401.3	4399.9				4096.3	4094.9			
B				4404.4	4403.0				4099.4	4098.0
7			4409.4					4104.4		
A	4407.7	4406.3				4102.7	4101.3			
B				4410.8	4409.4				4105.8	4104.4
8			4415.8					4110.8		
A	4414.1	4412.7				4109.1	4107.7			
B				4417.2	4415.8				4112.2	4110.8
9			4422.2					4117.2		
A	4420.5	4419.1				4115.5	4114.1			
B				4423.6	4422.2				4118.6	4117.2
10			4428.6					4123.6		
A	4426.9	4425.5				4121.9	4120.5			
B				4430.0	4428.6				4125.0	4123.6
11			4434.9					4129.9		
A	4433.2	4431.8				4128.2	4126.8			
B				4436.3	4434.9				4131.3	4129.9



Series No.	COAST STATION FREQUENCY					SHIP STATION FREQUENCY				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Assigned	Carrier	Assigned	Carrier		Assigned	Carrier
(1)	(2)	(3)	(4)	(5)	(6) <sup>8</sup> Mc/s Band	(7)	(8)	(9)	(10)	(11)
1			8748.1					8198.1		
A	8746.4	8745.0				8196.4	8195.0			
B				8749.5	8748.1				8199.5	8198.1
2			8754.4					8204.4		
A	8752.7	8751.3				8202.7	8201.3			
B				8755.8	8754.4				8205.8	8204.4
3			8760.8					8210.8		
A	8759.1	8757.7				8209.1	8207.7			
B				8762.2	8760.8				8212.2	8210.8
4			8767.2					8217.2		
A	8765.5	8764.1				8215.5	8214.1			
B				8768.6	8767.2				8218.6	8217.2
5			8773.6					8223.6		
A	8771.9	8770.5				8221.9	8220.5			
B				8775.0	8773.6				8225.0	8223.6
6			8780.0					8230.0		
A	8778.3	8776.9				8228.3	8226.9			
B				8781.4	8780.0				8231.4	8230.0
7			8786.4					8236.4		
A	8784.7	8783.3				8234.7	8233.3			
B				8787.8	8786.4				8237.8	8236.4
8			8792.8					8242.8		
A	8791.1	8789.7				8241.1	8239.7			
B				8794.2	8792.8				8244.2	8242.8
9			8799.2					8249.2		
A	8797.5	8796.1				8247.5	8246.1			
B				8800.6	8799.2				8250.6	8249.2
10			8805.6					8255.6		
A	8803.9	8802.5				8253.9	8252.5			
B				8807.0	8805.6				8257.0	8255.6
11			8811.9					8261.9		
A	8810.2	8808.8				8260.2	8258.8			
B				8813.3	8811.9				8263.3	8261.9

Series No.	COAST STATION FREQUENCY					SHIP STATION FREQUENCY				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Assigned	Carrier	Assigned	Carrier		Assigned	Carrier
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1			13133.5					12333.5		
A	13131.6	13130.2				12331.6	12330.2			
B				13134.9	13133.5				12334.9	12333.5
2			13140.5					12340.5		
A	13138.6	13137.2				12338.6	12337.2			
B				13141.9	13140.5				12341.9	12340.5
3			13147.5					12347.5		
A	13145.6	13144.2				12345.6	12344.2			
B				13148.9	13147.5				12348.9	12347.5
4			13154.5					12354.5		
A	13152.6	13152.2				12352.6	12351.2			
B				13155.9	13154.5				12355.9	12354.5
5			13161.5					12361.5		
A	13159.6	13158.2				12359.6	12358.2			
B				13162.9	13161.5				12362.9	12361.5
6			13168.5					12368.5		
A	13166.6	13165.2				12366.6	12365.2			
B				13169.9	13168.5				12369.9	12368.5
7			13175.5					12375.5		
A	13173.6	13172.2				12373.6	12372.2			
B				13176.9	13175.5				12376.9	12375.5
8			13182.5					12382.5		
A	13180.6	13179.2				12380.6	12379.2			
B				13183.9	13182.5				12383.9	12382.5
9			13189.5					12389.5		
A	13187.6	13186.2				12387.6	12386.2			
B				13190.9	13189.5				12390.9	12389.5
10			13196.5					12396.5		
A	13194.6	13193.2				12394.6	12393.2			
B				13197.9	13196.5				12397.9	12396.5

Series No.	COAST STATION FREQUENCY					SHIP STATION FREQUENCY				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Assigned	Carrier	Assigned	Carrier		Assigned	Carrier
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1			17293.5					16463.5		
A	17291.6	17290.2				16461.6	16460.2			
B				17294.9	17293.5				16464.9	16463.5
2			17300.5					16470.5		
A	17298.6	17297.2				16468.6	16467.2			
B				17301.9	17300.5				16471.9	16470.5
3			17307.5					16477.5		
A	17305.6	17304.2				16475.6	16474.2			
B				17308.9	17307.5				16478.9	16477.5
4			17314.5					16484.5		
A	17312.6	17311.2				16482.6	16481.2			
B				17315.9	17314.5				16485.9	16484.5
5			17321.5					16491.5		
A	17319.6	17318.2				16489.6	16488.2			
B				17322.9	17321.5				16492.9	16491.5
6			17328.5					16498.5		
A	17326.6	17325.2				16496.6	16495.2			
B				17329.9	17328.5				16499.9	16498.5
7			17335.5					16505.5		
A	17333.6	17332.2				16503.6	16502.2			
B				17336.9	17335.5				16506.9	16505.5
8			17342.5					16512.5		
A	17340.6	17339.2				16510.6	16509.2			
B				17343.9	17342.5				16513.9	16512.5
9			17349.5					16519.5		
A	17347.6	17346.2				16517.6	16516.2			
B				17350.9	17349.5				16520.9	16519.5
10			17356.5					16526.5		
A	17354.6	17353.2				16524.6	16523.2			
B				17357.9	17356.5				16527.9	16526.5

Series No.	COAST STATION FREQUENCY					SHIP STATION FREQUENCY				
	Single Sideband		Double Sideband	Single Sideband		Single Sideband		Double Sideband	Single Sideband	
	Assigned	Carrier		Assigned	Carrier	Assigned	Carrier		Assigned	Carrier
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1			22653.5					22003.5		
A	22651.6	22650.2				22001.6	22000.2			
B				22654.9	22653.5				22004.9	22003.5
2			22660.5					22010.5		
A	22658.6	22657.2				22008.6	22007.2			
B				22661.9	22660.5				22011.9	22010.5
3			22667.5					22017.5		
A	22665.6	22664.2				22015.6	22014.2			
B				22668.9	22667.5				22018.9	22017.5
4			22674.5					22024.5		
A	22672.6	22671.2				22022.6	22021.2			
B				22675.9	22674.5				22025.9	22024.5
5			22681.5					22031.5		
A	22679.6	22678.2				22029.6	22028.2			
B				22682.9	22681.5				22032.9	22031.5
6			22688.5					22038.5		
A	22686.6	22685.2				22036.6	22035.2			
B				22689.9	22688.5				22039.9	22038.5
7			22695.5					22045.5		
A	22693.6	22692.2				22043.6	22042.2			
B				22696.9	22695.5				22046.9	22045.5
8			22702.5					22052.5		
A	22700.6	22699.2				22050.6	22049.2			
B				22703.9	22702.5				22053.9	22052.5
9			22709.5					22059.5		
A	22707.6	22706.2				22057.6	22056.2			
B				22710.9	22709.5				22060.9	22059.5
10			22716.5					22066.5		
A	22714.6	22713.2				22064.6	22063.2			
B				22717.9	22716.5				22067.9	22066.5

Proposals relating  
to the introduction  
of a new Appendix 17A

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Ref.

F/8(51) Appendix 17 A

After Appendix 17 insert the following :

APPENDIX 17 A

Technical characteristics of single sideband transmitters used for the maritime mobile radiotelephone service in the bands 1605 to 4000 kc/s and 4000 to 23000 kc/s.

1. a) For class A3H emissions the carrier power shall be 3 to 6 db less than the peak envelope power (1) of the emission.
- b) For class A3A emissions, the carrier power shall be  $16 \pm 2$  db less than the peak envelope power of the emission (1)
- c) For class A3J emissions, the carrier power shall be more than 40 db less than the peak envelope power (1) of the emission.
2. The upper sideband shall always be used.
3. The transmitted audio-frequency band shall be 350 to 2700 c/s, the amplitude variation with the frequency not exceeding 6 db.
4. The maximum short-term drift (of the order of 15 minutes) shall be less than  $\pm 40$  c/s.

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(1) This note concerns the French text only.

Ref.

G/76(32)

ADD

APPENDIX 17A

Technical characteristics for single sideband equipment used in  
the maritime mobile radiotelephony services in the bands

1605 to 3800 kc/s and 4000 to 23 000 kc/s

(See Articles 28 and 35 and Appendix 17)

1. In coast and ship station transmitters facilities should be provided for both class of emission A3A having a carrier reduction of  $16 \pm 2$  db below peak envelope power, and class of emission A3U having a carrier reduction of not less than 40 db below peak envelope power.

2. The carrier frequency of the transmitters should be maintained within the following tolerances :

a) for coast stations :  $\pm 20$  c/s;

b) for ship stations : short-term limits (of the order of 15 min.)  
 $\pm 40$  c/s;

c) for ship stations : within  $\pm 100$  c/s of the reference value.

3. The carrier frequency of the receivers should be maintained within the following tolerances :

a) for coast stations :  $\pm 20$  c/s;

b) for ship stations the short-term limits (of the order of 15 min.)  
 $\pm 40$  c/s; (Note 1)

4. The channel arrangements should be such, that two SSB channels are accommodated within each existing DSB channel and the bandwidth of the SSB emissions should be kept within such limits as will permit this to be done.



Ref.

G/76(32)  
(cont.)

5. The transmitter audio-frequency band should be 350 to 2700 c/s, with a permitted amplitude variation of 6 db; (Note 2)
6. The unwanted frequency modulation of the SSB carrier should be sufficiently low to prevent harmful distortion.
7. In the medium frequency maritime mobile radio-telephony bands, SSB ship stations should be able to insert a carrier at a level sufficient to permit satisfactory reception by DSB receivers when communicating with DSB stations.
8. In the particular case of transmissions on the radiotelephone calling and distress frequency 2182 kc/s, all transmissions should be made either by DSB, or by SSB with a carrier level sufficient to permit satisfactory reception by DSB receivers.

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Note 1 : This value may be maintained either manually or by other means.

Note 2 : These limits may need to be modified when selective calling is introduced.

Ref.

HOL/70(6)

ADD

APPENDIX 17A

Technical and operational provisions for radiotelephone stations using single sideband emissions in the maritime mobile bands 1605 - 4000 kc/s and 4000 - 23000 kc/s

(See Articles 28 and 35 and Appendix 17)

1.
  - a) For the class of emission A3A the carrier shall be reduced to 16 dB  $\pm$  2 dB below peak envelope power.
  - b) For the class of emission A3J the carrier shall be reduced to not less than 40 dB below peak envelope power.
2. The carrier frequency of the transmitters shall be maintained within the following tolerances :
  - a) coast stations :  $\pm$  20 cycles per second;
  - b) ship stations :  $\pm$  100 cycles per second;  
The short-term limits (of the order of 15 minutes) of ship stations shall be  $\pm$  40 cycles per second.
3. The transmitter audio-frequency band shall be 350 to 2700 cycles per second, with a permitted amplitude variation of 6 dB.
4. The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.
5. Coast and ship stations shall use upper sideband emissions.
6. Frequency bands between 1605 and 4000 kc/s :
  - 6.1 The channel arrangements shall be such that two single sideband channels of at least 3 kc/s bandwidth each are accommodated within each existing double sideband channel of at least 6 kc/s bandwidth.
  - 6.2 The carrier frequency of a station operating in the upper half of a double sideband channel shall be the same as the carrier frequency of the double sideband channel.

Ref.

HOL/70(6)  
(cont.)

- 6.3 The carrier frequency of a station operating in the lower half of a double sideband channel shall be 3000 cycles per second below the carrier frequency of the double sideband channel.
- 6.4 The assigned frequency will be 1400 cycles per second higher than the carrier frequency.
7. Frequency bands between 4000 and 23000 kc/s :
  - 7.1 A station utilizing single channel single sideband or two channel independent sideband emissions shall be considered to be in accordance with the Table of Appendix 17 (Revised) if
    - 7.1.1 it operates in the channels with assigned frequencies at the appropriate values listed in the Table;
    - 7.1.2 the necessary bandwidth does not extend beyond the upper or lower limits provided for these emissions in accordance with the Table.
  - 7.2 In the Table of Appendix 17 (Revised) both the assigned and carrier frequencies are shown.
  - 7.3 If an administration assigns frequencies other than those indicated above, its radiotelephone service shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with Appendix 17 (Revised).
  - 7.4 Independent sideband emission may be used by agreement between administrations concerned and affected in those instances where adjacent single sideband channels are assigned to a coast station.

Reasons :

To include the technical characteristics for single sideband emissions as recommended by the C.C.I.R. as well as the technical characteristics contained in the present Appendix 17, in one new appendix to the Radio Regulations.

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Proposals relating to

Appendix 18

Table of Transmitting Frequencies for the Band 156-174 Mc/s  
for Radiotelephony in the International Maritime Mobile Service

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# APPENDIX 18

**Table of Transmitting Frequencies for the Band 156-174 Mc/s  
for Radiotelephony in the International Maritime Mobile Service \***  
(See Article 35)

Channel designators	Transmitting Frequencies (Mc/s)		Intership	Port Operations		Public Corres- pondence
	Ship Stations	Coast Stations		Single Frequency	Two Frequency	
1	156-05**	160-65			10	8
2	156-10	160-70			8	10
3	156-15**	160-75			9	9
4	156-20	160-80			11	7
5	156-25	160-85			6	12
6	156-30		(1)			
7	156-35	160-95			7	11
8	156-40		(2)			
9	156-45	156-45	5	5		
10	156-50		3	***		
11	156-55	156-55		3		
12	156-60	156-60		(1)		
13	156-65	156-65	4	4		
14	156-70	156-70		(2)		
15	Guard band 156-725 - 156-775 Mc/s					
16	156-80	156-80	CALLING AND SAFETY			
17	Guard band 156-825 - 156-875 Mc/s					
18	156-90	161-50			3	
19	156-95	161-55			4	
20	157-00	161-60			(1)	
21	157-05	156-05** or 161-65			5	
22	157-10	161-70			(2)	
23	157-15	156-15** or 161-75				5
24	157-20	161-80				4
25	157-25	161-85				(3)
26	157-30	161-90				(1)
27	157-35	161-95				(2)
28	157-40	162-00				6

\* For assistance in understanding the Table, see notes a) to g) below.

\*\* See Note e). \*\*\* See Note f).

## NOTES REFERRING TO THE TABLE

- The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
- The figures in the columns headed "Port Operations" and "Public Correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
- During ice seasons, ship stations shall avoid harmful interference to communications on 156-30 Mc/s (Channel 6) between icebreakers and assisted ships.
- Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures in a circle can obtain a reasonably adequate use of available services.
- The frequencies 156-05 and 156-15 Mc/s marked \*\* are used as ship station frequencies in Channels 1 and 3 respectively and as coast station frequencies in Channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- Channel 10 marked \*\*\* is also available for port operations in Region 2.
- In the United States of America, the frequencies 156-35, 156-90, 156-95, 157-05, 157-10, 157-15 and 157-20 Mc/s are not available for use in accordance with this Table. These frequencies will be used for other functions in the maritime mobile service.

Ref.

Agenda Item 4 - Possible revision of Appendix 18 to the Radio Regulations

CAN/42(32)

Comments

Canada is of the opinion that the Maritime Mobile frequencies in the band 156 - 174 Mc/s as outlined in Appendix 18 of the Radio Regulations should be retained on the basis that the function of those channels presently spaced 50 kc/s will not be changed. Recognizing the need for additional VHF channels, Canada is prepared to support the adoption of a revision to this Appendix which would permit the inclusion of 25 kc/s channels to be implemented on a national or regional basis provided full protection is given to 50 kc/s channel operations designated above and on an agreed date all frequencies would be used on a 25 kc/s channel separation.

(No specific proposals for this item.)

Ref.

F/14(90)

Appendix 18

Replace the footnote under \*) by the following :

- \*) For assistance in understanding the Table, see notes a) to h) below :

Notes referring to the table

Add the following note h) :

- h) The frequencies in this table may also be used for shipping on inland waterways, in the conditions specified in No. 287.

Reasons :

See Proposal F/14(89) relating to No. 287.

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Ref.

G/112(55) MOD

Appendix 18

Table of transmitting frequencies for the band 156-174 Mc/s  
for radiotelephony in the international maritime mobile service\*

(See Article 35)

Channel design- ators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence	Other uses of inter- leaved channels
	Ship Stations	Coast Stations		Single frequency	Two frequency		
1	156.050**	160.650			10		
51	156.075	160.675					Pilot stations
2	156.100	160.700			8		
52	156.125	160.725					Pilot stations
3	156.150**	160.750			9		
53	156.175	160.775			13		
4	156.200	160.800			11		
54	156.225	160.825			14		
5	156.250	160.850			6		
55	156.275	160.875			15		
6	156.300	-	1				
56	156.325	160.925			17		
7	156.350	160.950			7		
57	156.375	156.375		8			
8	156.400	156.400	2	6			
58	156.425	161.025			12		
9	156.450	156.450	5	5****			

\* For assistance in understanding the Table, see Notes a) to h) below

\*\* See Note e)

\*\*\*\* See Note h)

Ref.

G/112(55) MOD  
(cont.)

Channel design- nators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence	Other uses of inter- leaved channels
	Ship Stations	Coast Stations		Single frequency	Two frequency		
59	156.475	-	6				
10	156.500	156.500	3	7			
60	156.525	-					On board
11	156.550	156.550		3			
61	156.575	156.575					Cargo handling
12	156.600	156.600		1			
62	156.625	156.625					Cargo handling
13	156.650	156.650	4	4****			
63	156.675	156.675					Cargo handling
14	156.700	156.700		2			
64	156.725	156.725					Cargo handling
15	156.750	-		9			
65	Guard band 156.7625-156.7875 Mc/s						
16	156.800	156.800	CALLING AND SAFETY				
66	Guard band 156.8125-156.8375 Mc/s						
17	156.850	-		10			
67	156.875						On board
18	156.900	161.500			3		
68	156.925	161.525			16		
19	156.950	161.550			4		
69	156.975	161.575				12	
20	157.000	161.600			1		

\*\*\*\* See Note h)

Ref.

G/112(55) MOD  
(cont.)

Channel design- nators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence	Other uses of inter - leaved channels
	Ship Stations	Coast Stations		Single frequency	Two frequency		
70	157.025	161.625					Usage under consideration
21	157.050	156.050** or 161.650			5		
71	157.075	161.675					Usage under consideration
22	157.100	161.700			2		
72	157.125	161.725					Usage under consideration
23	157.150	156.150** or 161.750				5	
73	157.175	161.775				7	
24	157.200	161.800				4	
74	157.225	161.825				8	
25	157.250	161.850				3	
75	157.275	161.875				9	
26	157.300	161.900				1	
76	157.325	161.925				11	
27	157.350	161.950				2	
77	157.375	161.975				10	
28	157.400	162.000				6	

\*\* See Note e)

Ref.

G/112(55)  
(cont.)

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" 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) During ice seasons, ship stations shall avoid harmful interference to communications on 156.30 Mc/s (Channel 6) between icebreakers and assisted ships.
- d) Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures in a circle can obtain a reasonably adequate use of available services.
- e) The frequencies 156.05 and 156.15 Mc/s marked \*\* are used as ship station frequencies in Channels 1 and 3 respectively and as coast station frequencies in Channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- f) Delete.

Reasons : Consequential upon amendment to Channel 10 - see Table.

- g) In the United States of America, the frequencies 156.35, 156.90, 156.95, 157.05, 157.10, 157.15 and 157.20 Mc/s are not available for use in accordance with this Table. These frequencies will be used for other functions in the maritime mobile service.
- h) Channels 9 and 13 marked \*\*\*\* may be used, on low power (1 watt) for berthing operations.

Reasons : To provide for berthing operations.

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Ref.

HOL/75(27)

APPENDIX 18

- MOD      \*) For assistance in understanding the Table,  
          see notes a) to h) below.
- ADD      h) The frequencies in this Table may also be used for  
          mobile radiotelephone communications on inland  
          waterways in accordance with the provisions of  
          No. 287.

Reasons :

To permit the use of the frequencies listed in  
Appendix 18 for mobile radiotelephone communications on inland  
waterways.

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Ref.

USA/55(47)

MOD

APPENDIX 18

Table of Transmitting Frequencies for the Band 156-174 Mc/s \*  
for Radiotelephony in the International Maritime Mobile Service

(See Article 35)

Channel designa- tors	Transmitting Frequencies (Mc/s)		Inter- ship	Port Operations		Public Corres- pondence	Navi- gation- al
	Ship Stations	Coast Stations		Single Frequency	Two Frequency		
1	156.05**	160.65			10	8	
2	156.10	160.70			8	10	
3	156.15**	160.75			9	9	
4	156.20	160.80			11	7	
5	156.25	160.85			6	12	
6	156.30		①				
7	156.35	160.95			7	11	
8	156.40		②				
9	156.45	156.45	5	5			
10	156.50		3	***			
11	156.55	156.55		3			
12	156.60	156.60		①			
13	156.65	156.65	--4--	--4--			①
14	156.70	156.70		②			
15	Guard band 156.725 - 156.775 Mc/s						
16	156.80	156.80	CALLING AND SAFETY				
17	Guard band 156.825 Mc/s - 156.875 Mc/s						
18	156.90	161.50			3		
19	156.95	161.55			4		
20	157.00	161.60			①		
21	157.05	156.05** or 161.65			5		
22	157.10	161.70			②		
23	157.15	156.15** or 161.75				5	
24	157.20	161.80				4	
25	157.25	161.85				③	
26	157.30	161.90				①	
27	157.35	161.95				②	
28	157.40	162.00				6	

\* For assistance in understanding the Table, see notes a) to h) below.

\*\* See Note e)

\*\*\* See Note f).

Ref.

APPENDIX 18

USA/55(47)  
(cont.)

Notes referring to the Table

- NOC a) The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
- NOC b) The figures in the columns headed "Port Operations" and "Public Correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
- NOC c) During ice seasons, ship stations shall avoid harmful interference to communications on 156.30 Mc/s (Channel 6) between icebreakers and assisted ships.
- NOC d) Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures in a circle can obtain a reasonably adequate use of available services.
- NOC e) The frequencies 156.05 and 156.15 Mc/s marked \*\* are used as ship station frequencies in Channels 1 and 3 respectively and as coast station frequencies in Channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- NOC f) Channel 10 marked \*\*\* is also available for port operations in Region 2.
- MOD g) In the United States of America, the frequencies 156.35, 156.90, 156.95, 157.05, 157.10, and 157.15 ~~157.20~~ Mc/s are not available for use in accordance with this Table. These frequencies will be used for other functions in the maritime mobile service.
- ADD h) The intermediate frequencies between (spaced 25 kc/s from) those listed in the Table may be assigned to stations in the maritime mobile service for radiotelephony to meet national requirements. In assigning these intermediate frequencies, administrations shall give full consideration to adequate technical measures for preventing harmful interference to stations operating on frequencies listed in the Table.

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Proposals relating to  
Appendix 19

Technical Characteristics for Transmitters and Receivers  
used in the Maritime Mobile Service in the 156 - 174 Mc/s Band

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## APPENDIX 19

### **Technical Characteristics for Transmitters and Receivers used in the Maritime Mobile Service in the 156-174 Mc/s Band**

(See Articles 28 and 35 and Appendix 18)

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 15 kc/s as nearly as practicable. In no event shall the frequency deviation exceed  $\pm 15$  kc/s. However, it is recognized that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference.
3. When transmitting on any of the frequencies designated in the Table in Appendix 18, the emission of each station shall be polarized vertically at the source.
4. The audio frequency bandwidth shall be limited to 3 000 c/s.

Ref.

F/11(69)

Appendix 19 - Amplify paragraph 2 by the following :

All transmitters brought into service after 1 January 1970 shall be so designed as to permit of easy reduction of the maximum frequency deviation from 15 to 5 kHz.

Reasons :

To ensure that transmitters brought into service after this date will be able to operate in due course with a separation of 25 kHz between adjacent channels.

(See draft Resolution F/11(70)).

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APPENDIX 19

RFA/95(29)

ADD

5. For short-distance radiotelephone traffic it must be possible to reduce the power to 1 watt or less.

Reasons :

The port operations radio traffic is usually handled over short distances between coast stations and ship stations or between ship stations within or near ports or on rivers and near shores. In order to prevent interference to stations working on the same channels, it would be useful and necessary to have the possibility of reducing the power of the VHF radiotelephone installations to 1 watt or less. Reference is made in this connection to No. 27 (a) of the I.M.C.O. Document COM IV/18 of 6 February 1967.

USA/55(48)

NOC

1. Only frequency modulation with a pre-emphasis of 6 db/octave (phase modulation) shall be used.

MOD

2. The frequency deviation corresponding to 100% modulation shall approach  $\pm 5$  kc/s as nearly as practicable. In no event shall the frequency deviation exceed  $\pm 5$  kc/s. However, it is recognized that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference.

NOC

3. When transmitting on any of the frequencies designated in the Table in Appendix 18, the emission of each station shall be polarized vertically at the source.

NOC

4. The audio frequency bandwidth shall be limited to 3000 c/s.

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Proposals relating to  
Appendix 20

Automatic Receiving Equipment  
for Radiotelegraph and Radiotelephone Alarm Signals

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## APPENDIX 20

### **Automatic Receiving Equipment for Radiotelegraph and Radiotelephone Alarm Signals**

(See Section VIII of Article 36)

1. The automatic devices intended for the reception of the radiotelegraph alarm signal shall fulfil the following conditions :
  - a) The equipment shall respond to the alarm signal transmitted by the telegraphic emissions of at least class A2 or B (but see No. 677).
  - b) The equipment shall respond to the alarm signal through interference (provided it is not continuous) caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the apparatus.
  - c) The equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal.
  - d) The equipment shall possess a minimum sensitivity such that with negligible atmospheric interference, it is capable of being operated by the alarm signal transmitted by the emergency transmitter of a ship station at any distance from this station up to the normal range fixed for this transmitter by the International Convention for the Safety of Life at Sea, and preferably at greater distances.
  - e) The equipment shall give warning of any fault which would prevent the apparatus from performing its normal functions during watch hours.
2. The automatic devices intended for the reception of the radiotelephone alarm signal shall fulfil the following conditions :
  - a) The equipment shall respond to the alarm signal through intermittent interference caused by atmospherics and powerful signals other than the alarm signal, preferably without any manual adjustment being required during any period of watch maintained by the equipment.
  - b) The equipment shall not be actuated by atmospherics or by strong signals other than the alarm signal.
  - c) The equipment shall be effective beyond the range at which speech transmission is satisfactory and it should, as far as practicable, give warning of faults that would prevent the apparatus from performing its normal function during watch hours.

Ref.

G/58(7) Appendix 20

- MOD            1.    a) Replace present text by:
- a) The equipment shall respond to the alarm signal transmitted by the telegraphic emissions of at least Class A2 (see: 974.1) or A2H.

Reasons :

To delete Class B (the permissive use of this type of emission ceased on 1 January, 1966; to provide for class A2H emissions, and in order to ensure the correct operation of all types of radiotelegraphy automatic alarm equipments.

G/63(72)

MOD                            Appendix 20

Delete reference to Class B emissions.  
(See UK proposals for Agenda Item 5, Document No. 58).

Reasons :

The permissive use of Class B emissions by existing stations for distress calls and distress traffic ceased on 1 January, 1966.

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Proposals relating  
to the introduction of  
new Appendix 20A, 20B and 20C

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Ref.

G/60(24)

ADD

APPENDIX 20A

Technical characteristics of emergency position-indicating  
radio-beacons operating on the frequency 2182 kc/s

(See Section VIIIA of Article 36)

1. Emergency position-indicating radio-beacons shall fulfil the following conditions :

a) Low power beacon (Type L)

1) the power radiated shall be of a value necessary to produce at a distance of 30 nautical miles at sea level

- a minimum initial field strength of 2.5 microvolts per metre;

- a field strength equal to or less than 10 microvolts per metre.

2) After a period of 48 hours continuous operation the radiated power shall not be less than 20 per cent of the initial power.

b) High power beacon (Type H)

1) the power radiated shall be of a value necessary to produce a field strength greater than 10 microvolts per metre at a distance of 30 nautical miles at sea level.

c) shall be capable of Class A2 emission, with a depth of modulation between 30 and 90 per cent.

d) The keying signal for Type L beacon shall consist of a keyed emission modulated by a tone of 1300 cycles per second ( $\pm 20$  cycles per second), having a ratio of the period of the emission to the period of silence equal to or greater than one, and an emission duration between one and five seconds.

Ref.

G/60(24)  
(cont.)

e) The keying signal for a Type H beacon shall either consist of the radiotelephone alarm signal (see No. 1465) or be the same as in d) above; if the radiotelephone alarm signal be used, the morse letter 'B' and/or the call-sign of the ship to which the beacon belongs, shall be included by keying a carrier modulated by a tone of 1300 cycles per second ( $\pm 20$  c/s) or of 2200 cycles per second ( $\pm 35$  c/s).

f) Speech transmission may be provided if administrations so desire.

g) Equipment shall be so designed as to comply with relative C.C.I.R. recommendations.

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Ref.

G/60(17)

ADD

APPENDIX 20B

Narrow-band direct printing telegraph equipment

(see Articles 28, 29 and 32)

1. The equipment for narrow-band direct printing telegraphy in the maritime mobile service shall fulfil the following conditions :

- a) Equipment intended for interconnection with the Public Telegraph Network shall accept signals conforming to International Telegraph Alphabet No. 2 at a modulation rate of 50 bauds and shall provide similar signals at its output.
- b) The modulation rate over the radio path shall not exceed 100 bauds.
- c) Class F1 emission shall be used, with a frequency shift of 170 c/s.
- d) For ship stations, the centre of the frequency band occupied by the emission shall at all times be maintained within  $\pm 100$  c/s of the assigned frequency, and for short periods (of the order of 15 minutes), within  $\pm 40$  c/s.
- e) For coast stations, the centre of the frequency band occupied by the emission shall at all times be maintained within  $\pm 20$  c/s of the assigned frequency.

Ref.

G/113(57)

ADD

APPENDIX 20C

Selective calling system for use in the  
international maritime mobile services

(See Articles 19, 28A, 29 and 33 and Appendix 9)

1. that where there is a need to fulfil immediate requirements for selective calling the system to be used should have the following characteristics :

1.1 the selective call signal should consist of five figures representing the code number assigned to a ship for selective calling;

1.2 the audio frequency signal applied to the input of the coast station transmitter should consist of consecutive audio-frequency pulses conforming to the following :

1.2.1 The audio frequencies used to identify the figures of the code number assigned to a ship should conform to the following series :

Figure	1	2	3	4	5	6	7	8	9	0	Figure repetition
Audio frequency (c/s)	1124	1197	1275	1358	1446	1540	1640	1747	1860	1981	2110

For example, the series of audio-frequency pulses corresponding to the selective call 12 13 would be 1124-1197-1124-1275-2110 c/s, and the series corresponding to the code number 22222 would be 1197-2110-1197-2110-1197 c/s;

1.2.2 if the series of numbers represented by the use of only two frequencies, chosen from those in Section 1.2.1, are reserved for calling predetermined groups of ships, then 100 different groups of numbers are available for allocation, according to the needs of administrations;

1.2.3 the waveforms of the audio-frequency generators should be substantially sinusoidal and not exceeding 2% total harmonic distortion;

Ref.

G/113(57)  
(cont.)

- 1.2.4 the audio-frequency pulses should be transmitted sequentially;
- 1.2.5 the difference between the maximum amplitude of any audio-frequency pulses should not exceed 1 dB;
- 1.2.6 the duration of each audio-frequency pulse, measured between the half-amplitude points, should be  $100\text{ ms} \pm 10\text{ ms}$ ;
- 1.2.7 the time interval between consecutive pulses, measured between the half-amplitude points, should be  $3\text{ ms} \pm 2\text{ ms}$ ;
- 1.2.8 the rise and the decay time of each audio-frequency pulse, measured between the 10% and 90% amplitude points, should be  $1.5\text{ ms} \pm 1\text{ ms}$ ;
- 1.2.9 the frequency tolerance of the audio frequencies given in Section 1.2.1 should be  $\pm 4\text{ c/s}$ ;
- 1.2.10 the selective call signal (ship's code number) should be transmitted twice with an interval of  $900\text{ ms} \pm 100\text{ ms}$  between the end of the first signal and the beginning of the second signal (Figure 1);
- 1.2.11 the interval between calls from a coast station to different ships should be at least 1 s (Figure 1).

2. that if additional information is added to the selective call signal it should be as follows :

- 2.1 to identify the calling coast station four figures should be transmitted;
- 2.2 to identify the VHF channel on which a reply is required two "zeros" followed by two "figures" should be transmitted;
- 2.3 the characteristics of the signals should conform to Sections 1.2.1 and 1.2.3 to 1.2.9 inclusive;
- 2.4 the composition of the signal should be as shown in the diagram (Figure 2); the tolerance on the 350 ms interval being  $\pm 30\text{ ms}$ ;

Ref.

G/113(57)  
(cont.)

3. that an "all ships call" to actuate the receiving selectors on all ships, regardless of their individual code numbers, should consist of a continuous sequential transmission of the eleven audio-frequencies given in Section 1.2.1. The parameters of the audio-frequency pulses should be in accordance with Sections 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, should be  $17 \text{ ms} \pm 1 \text{ ms}$  and the interval between consecutive pulses, measured between half-amplitude points, should not exceed  $1 \text{ ms}$ ;
4. that receiving selectors on ships should operate reliably in any radio conditions acceptable for satisfactory communication;
5. that the receiving selector should be designed to accept the signals as defined in Section 1. However, bearing in mind that coast stations may transmit additional signals (e.g. coast station identification) it is important that the re-set time of the decoder should be  $250 \text{ ms} \pm 40 \text{ ms}$ ;
6. that the receiving selector should be so designed, constructed and maintained that it is resistant to atmospherics and other unwanted signals including selective calling signals other than that for which the decoder has been set up;
7. that the receiving selector should include an audible or visual means of indicating the receipt of a call and, if required, an additional facility allowing the determination of the identity of the calling station or the VHF channel on which to reply according to the needs or administrations;
8. that the indicating means should be actuated on correct reception of the calling signal, no matter whether the correct registration has occurred on the first, or the second, or both parts of the calling signal transmitted by the coast stations;
9. that the indicating means should remain actuated until re-set manually;
10. that the receiving selector equipment should be as simple as is practicable, be capable of reliable operation over long periods with a minimum of maintenance, and could, with advantage, include facilities for self-testing.



# COMPOSITION OF SELECTIVE CALL SIGNALS WITHOUT ADDITIONAL INFORMATION

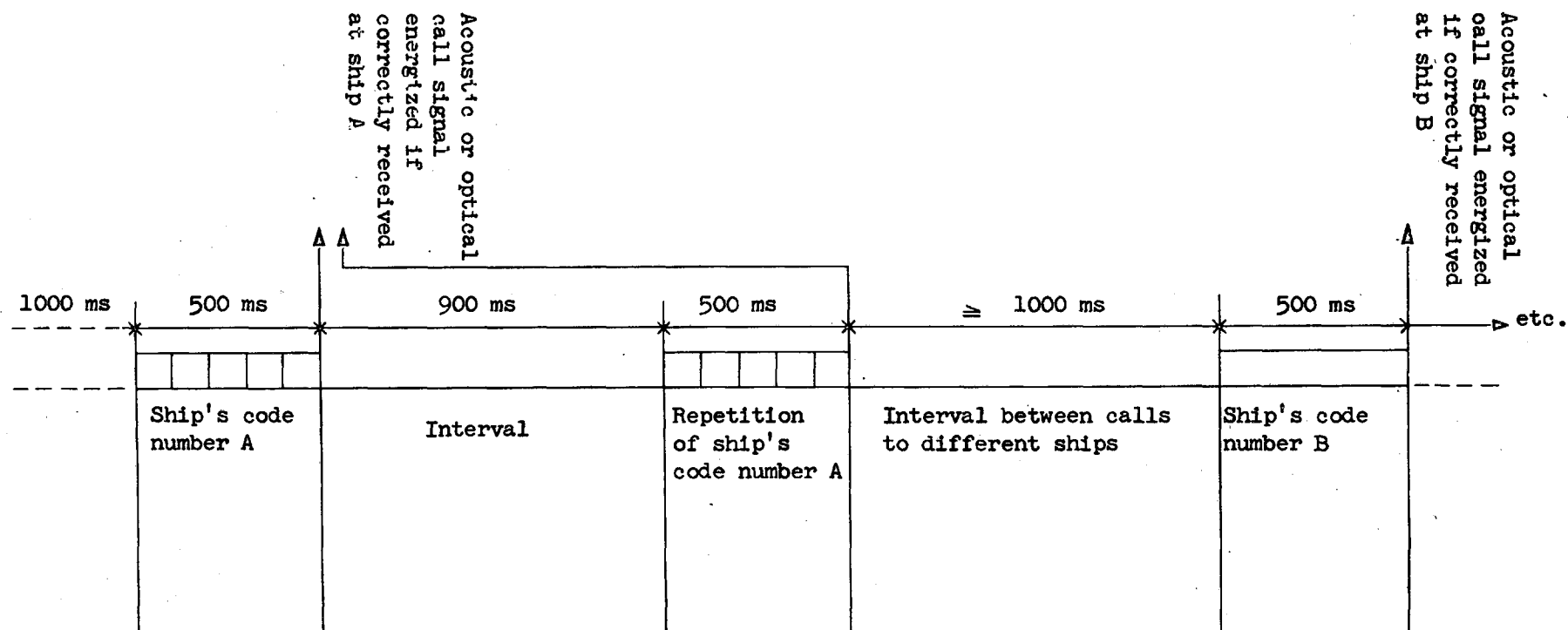


Figure 1

Ref.

G/113(57)  
(contd.)

- 662

COMPOSITION OF SELECTIVE CALL SIGNALS WITH ADDITIONAL INFORMATION

Acoustic or optical  
call signal energized  
if correctly received  
at ship B

Coast station identi-  
fication displayed or  
recorded if correctly  
received at ship A

Acoustic or optical  
call signal energized  
if correctly received  
at ship A

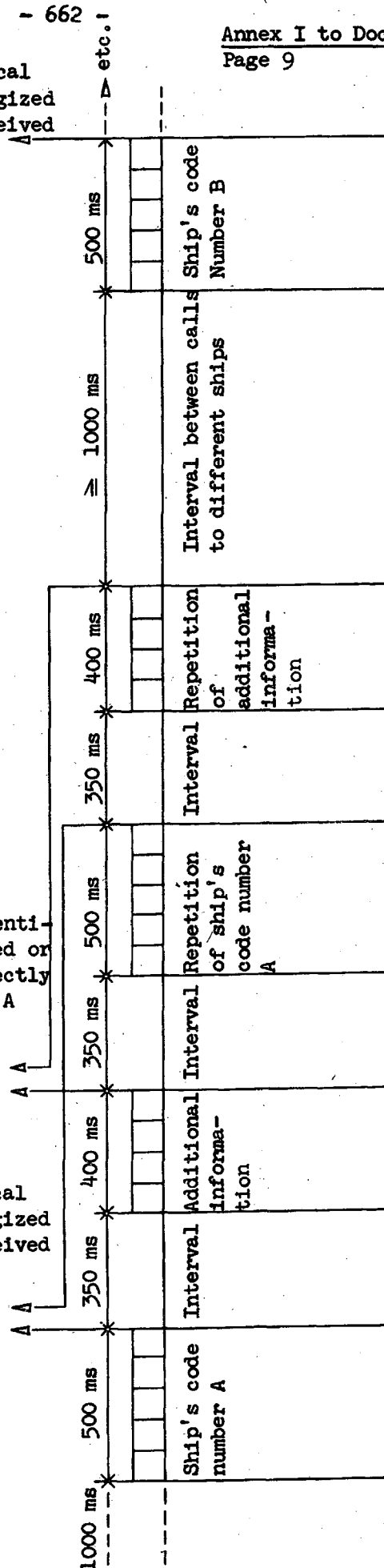


Figure 2

Proposals relating to

Appendix 25.

Frequency Allotment Plan for Coast Radiotelephone Stations Operating  
in the Exclusive Maritime Mobile Bands between 4000 and 23000 kc/s

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In view of the length of Appendix 25 to the Radio Regulations, we considered that it was not essential to reproduce the present text.

Ref.

Agenda Item 3 - Consequential revision of Appendices 15, 17 and 25 to the Radio Regulations

CAN/41(31)

Comments

As a consequence of Canadian proposals in relation to Agenda items 2.4 and 1 Appendices 15 and 17 have been revised and are contained herein.

Canada is of the opinion that Appendix 25 should be revised on the basis of SSB operation. Such a revision would make available additional frequencies to provide for the needs of new and developing countries and also to satisfy requirements of existing users. Such a plan will greatly increase the sharing possibilities of the frequencies available.

Canada is of the opinion that there is sufficient time for this Conference to revise the plan providing Member countries are prepared to state their requirements. This could be achieved by the following procedure :

- 1) Replace existing Appendix 25 DSB allotments which have been implemented and listed in the International Frequency List with new SSB channels.
- 2) Replace those frequency assignments already in use and listed in the International Frequency List but not allotted in existing Appendix 25 with new SSB channels.
- 3) Satisfy new requirements.
- 4) Agree on implementation date.

Ref.

F/10(186)

Appendix 25

The proposals made by France concerning the division of the DSB channels appearing in Appendix 17 (1959) into two SSB channels and the inclusion in the new Appendix 17 of the channels in Appendix 15B (1959) would provide supplementary channels to meet new HF radiotelephone requirements of the Maritime Mobile Service.

However, the French Administration considers that the number of frequencies made available in this way is not enough to permit countries to use a simple notification procedure without serious drawbacks.

The use, by all countries of the world and for the same purpose, of a very limited number of frequencies recorded in the Register with different dates further to the notification procedure would be a permanent source of serious disputes between Administrations which might lead eventually, as the result of complaints of harmful interference, to the point where some of them are forbidden to use the frequencies in question.

In any case, such a procedure would lead to a notification race.

Furthermore, the deletion of Appendix 25 would lead to the disappearance of rights which had been recognized in respect of countries that have not yet been able to notify the corresponding assignments.

It is quite certain that the use of a small number of frequencies by a large number of countries, under the best possible conditions, can be based only on reciprocal tolerance, which leads quite naturally to the idea of a plan.

However, the evolution of frequency management shows that planning procedure is a more elaborate process than the mere notification procedure.

Hence, the French Administration considers that the Conference should do its utmost to prepare a revised allotment plan (new Appendix 25) which would take both past allotments and new requirements into account.

As regards the technical bases to be considered in revising the allotment plan, the Conference could draw guidance from the standards used by the I.F.R.B. for examining frequency notices.

Ref.

F/10(186)  
(cont.)

The French Administration feels that the Maritime Conference is in a position to revise Appendix 25. For this purpose it proposes :

1. A working document entitled "Procedure for the revision of Appendix 25" (Annex I).
2. A draft resolution (Annex II) relative to the conditions for the recording in the Master International Frequency Register :
  - a) of allotments appearing in Appendix 25 (1959) and of entries relative to frequency assignment notices effected in accordance with the present Appendix;
  - b) of new allotments and entries relative to frequency assignment notices which do not come under the above category.
3. Draft amendment of the pertinent portions of Article 9 of the Regulations, concerning action to be taken by the I.F.R.B. on frequency notices other than those referred to in the preceding point.

Ref.

F/10(186)  
(cont.)

PROCEDURE FOR THE REVISION OF APPENDIX 25  
TO THE RADIO REGULATIONS

(Working Document)

The preparation of a new frequency allotment plan for the maritime mobile HF radiotelephone service will lead the Conference to consider in turn the old allotments appearing in Parts I and II of Appendix 25 (1959) plus all requirements which do not correspond to an allotment contained in this appendix. These requirements will be referred to hereinafter as "other requirements".

A. Old allotments

A.1 In an initial stage, the Conference will invite all Administrations having one or more DSB channel allotments in Part I of Appendix 25 (1959) to keep for each of these channels, under the new allotments contained in the amended plan, only one SSB channel corresponding, in the amended Appendix 17, either to the upper half or to the lower half of the DSB channel of Appendix 17 (1959).

These countries will also appreciably reduce the load on the other half-channel by stopping all traffic on it by the end of the transitional period at the latest (1). The choice may be made unilaterally by each Administration concerned, but it would appear to be very desirable for all the Administrations using one and the same allotment to agree on this matter.

The Conference should fix a deadline for this first phase to ensure that its work is not delayed.

A.2 Countries having an allotment under Part II of the plan (Appendix 25 - 1959) will do the same. However, this choice will lead to an allotment under Part II of the new plan only if the procedure outlined below under Section B does not cause the Conference to transfer the allotment in question to Part I of the new plan.

Unless the Conference decides that the power must be changed for a given allotment, the number expressing the maximum power (peak power) of each of the allotments shall be twice the number expressing the mean power in the old plan (Appendix 25 - 1959).

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(1) This does not exclude the possibility of supplementary allotments for other requirements, as mentioned under Section B below.



Ref.

F/10(186)  
(cont.)

Hence, the new allotment plan will first contain the SSB channel allotments resulting from the above procedure.

B. Other requirements

In a second stage, the Conference will continue the preparation of an allotment plan basing itself on the following rules :

B-1 Account will be taken of allotments already made under Section A above.

B-2 Requirements which it had been possible to meet in 1959 only by an allotment in Part II of the plan (Appendix 25 - 1959) will first be examined with a view to their transfer, where possible, to Part I of the new Plan.

B-3 Considering that the most urgent (new or supplementary) requirements have been or will be expressed by a frequency assignment notice, the Conference will continue the preparation of the allotment plan taking as a basis for requirements to be met :

In the first place :

Frequency notices sent to the I.F.R.B. between 3 December 1951 and 26 February 1967 giving rise to an entry in the M.I.F.R. with a date later than 4 December 1951 in column 2 b).

Frequency notices which were within the limits of an allotment appearing for an Administration in Appendix 25 (1959) but which were accessory assignments to main DSB assignments considered in the first phase of the work (Section A above).

Then the assignments notified to the I.F.R.B. since 26 February 1967 and the requirements expressed at the present Conference before \*).....

The attached draft resolution indicates the changes which will be made by the I.F.R.B. in the entries appearing at present in the Master International Frequency Register or which will appear therein on the date when the Final Acts of this Conference come into force. These amendments concern :

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\*) Date to be fixed by the Conference (as close as possible to its opening date).

Ref.

F/10(186)  
(cont.)

- allotments in the old and the new plans,
- assignments in accordance with the old allotment plan (1959),
- assignments not in accordance with the old allotment plan (1959) but which have led to an allotment in the new plan,
- assignments not in accordance with the old plan (1959) and which cannot have led to an allotment in the new plan (1967) on behalf of the notifying country but which are in accordance with the other provisions of the Regulations (Appendices 17 and 17 bis)\*),
- assignments with all the characteristics specified above, but not in accordance with the other provisions of the Regulations (Appendices 17 and 17 bis).

\*

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\*) See proposal F/8(51).

Ref.

HOL/80(34)

CONSEQUENTIAL REVISION OF APPENDIX 25

It is considered that both the retention of Appendix 25 in its present form and the establishment of a new plan for radiotelephone coast stations will be practically impossible. In view of :

- a) the short time available to the Conference;
- b) the lack of sufficient technical data; and
- c) the impracticability of establishing in 1967 a plan which would not become effective until the end of the conversion period (1 January, 1977);

the Netherlands Administration proposes to abrogate Appendix 25 to the Radio Regulations and to deal with frequency assignments to radiotelephone coast stations operating in the HF bands under the normal procedure provided for in Article 9 of the Radio Regulations.

During the period of conversion to single sideband operation the notification and recording of frequency assignments should take place in accordance with a suitable procedure, which also contains provisions to be applied to those assignments to radiotelephone coast stations already recorded in the Master Register. It is proposed that such an interim procedure should be established in the form of a Resolution.

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Ref.

I/33(17)

Withdraw Appendix 25 from the Radio Regulations

(See Document N° 33)

J/86(44)

Delete Appendix 25

It is proposed that Appendix 25 to the Radio Regulations Geneva, 1959, be abolished, and in consequence of abolishing Appendix 25, the relevant provisions of the Radio Regulations be revised as follows. In view of the above, a resolution related to the processing of frequency assignment notices is proposed.

Reasons :

1. Since 1959 when the Geneva Conference established the present Appendix 25, the Members of the I.T.U. have increased 31 in number from 101 to present 132. Therefore, with respect to the frequency allotment plan for the coast radiotelephone stations contained in Appendix 25, it may well be expected that new requirements will be made by these newly increased Members.
2. Moreover, it is considered that, even among the Members who participated in the Geneva Conference in 1959, there are not a few countries which are under the necessity of new frequency allotment or feel keenly the shortage in the frequency allotment plan.
3. Therefore, it is not considered appropriate that the frequency allotment plan contained in Appendix 25 should be left as it is.
4. On the one hand, out of the frequency allotment plan contained in Appendix 25, some individual allotments may never be brought into use and are still recorded in the Master Frequency Register under prior protection.
5. On the other hand, now that the conversion of DSB to SSB has been assured of possible realization under the present circumstances, the schedule of transition to SSB system is expected to be put under study at this Conference. Accordingly, with respect to the communication channels contained in Appendix 25 also, it is expected that the same number of communication channels be created in the same manner as seen in the SSB conversion.
6. Therefore, viewed in the light of not only effective utilization of communication channel but also of meeting the demand of the Members, with respect to the frequencies for coast radiotelephone stations also, we should like to assign them in accordance with the general rules for frequency assignments, as in the case of the frequency assignments to coast radiotelegraph station. In view of the foregoing, the abolition of Appendix 25 is proposed.

Ref.

MDG/47(1)

The Administration of the Malagasy Republic has no specific proposals to make concerning the work of the forthcoming World Administrative Radio Conference.

However, should the Conference decide to revise Appendix 25 to the Radio Regulations, the Malagasy Administration would request that account be taken of :

- 1) the frequencies already allocated to the Malagasy Republic in the 4-8 and 12 Mc/s bands, appearing in the Frequency Allotment Plan for Coast Radiotelephone Stations;
- 2) new frequency requirements in the 16 and 22 Mc/s bands (one frequency per band).

USSR/50(6)

It is proposed that Appendix 25 be maintained, but adjusted to take into account the wishes of administrations and the projected transfer to single-sideband operation, keeping strictly to the planned allocation of frequencies for coast radiotelephone stations.

Once the transfer to single-sideband operation has been completed, Appendix 25 should again be revised in order to redistribute single-sideband channels among the various countries.

Comments

In view of positive experience gained in the use of frequencies for coast radiotelephone stations, in accordance with Appendix 25 to the Radio Regulations (Geneva 1959), the Soviet Administration considers that planned system for the use of frequencies by these stations must be retained. In this connection, it is considered that some essential corrections must be made to Appendix 25, in accordance with the wishes of administrations, and provision made therein for the prospective use of single-sideband operation. After the conversion to single-sideband operation has been completed, Appendix 25 will have to be reviewed once more in order to redistribute single-sideband channels among the various countries.

Ref.

USA/18(28)

Agenda Item 3 :

Consequential revision of Appendix 25

U.S. Proposal :

- a) Delete Appendix 25
- b) Consequential amendment of Article 9
- c) Resolution covering the interim procedure during the transition period.

Reasons :

To provide an equitable and efficient means of meeting growing requirements for frequencies in the international maritime mobile radiotelephone service, anticipating eventual and exclusive use of single sideband (SSB) emissions.

Background :

The deletion of Appendix 25 and conversion to single sideband will require the preparation of instructions to the I.F.R.B. in regard to the handling of notifications received by the I.F.R.B. during the interim period. The United States has under study such a procedure, which will be submitted to the Conference.

Revision of Appendix 25 would present a complex problem if existing and foreseen additional requirements not now included in the Appendix were to be accommodated. The original allotment plan was contained in Volume VI of the Final Acts of the 1951 Geneva Extraordinary Administrative Radio Conference. The plan was revised at the 1959 Geneva Radio Conference to reflect channel allotments designated at that Conference. Additionally, it was annexed to the Radio Regulations as Appendix 25. In taking this action, the Conference perpetuated the 3 and 4 December 1951 dates. New allotments received either a date of 3 December 1951, in Column 2a of the International Frequency List, or a date of 4 December 1951, in Column 2b of the I.F.L., depending on whether they were inserted in Section I or Section II of Appendix 25. However, some allotments appearing previously in Volume VI, Section II, of the Final Acts of the 1951 Geneva E.A.R.C. were transferred to Appendix 25, Section I, with a column 2a date of 3 December 1951. The remaining original allotments were transferred from Volume VI to their respective Sections of Appendix 25 without change. If Appendix 25 were again to be modified by the forthcoming Conference, it presumably would add a new series of allotments in Sections I and II, and perhaps in a new Section III.

Ref.

USA/18(28)  
(cont.)

The disadvantages of retaining Appendix 25 would be several. First, if the allotment plan were to be amended, new allotments would be superimposed on the previous allotments. While the original allotment plan was based on engineering considerations, emphasis would be placed eventually on the necessity for providing for all indicated requirements whether active or not, recognizing that some individual allotments may never be brought into use. It is obvious that there are not enough channels to meet all needs if each country were to be represented equally in the plan, noting that there are now 131 Members of the I.T.U. as compared with 101 in 1959 when the last revision to Appendix 25 was made.

In addition to perpetuating an out-dated allotment plan, its retention would mean that new stations activated between conferences must be relegated to Column 2b date status in the International Frequency List (I.F.L.) until such time as the Appendix is revised by a duly authorized conference. Then, based on past procedure, every new operation would be given the same date in Column 2a or 2b regardless of when each individual station comes into existence. Therefore, the allotment plan eventually would become composed of at least two priority groups, i.e. those with a date of 3 or 4 December 1951 and perhaps a third group with some agreed upon later date. Under the group priority system, a station bearing a date of 4 December 1951, for example, which was not activated until 1967 would have equal priority with all other stations with the same priority date, including those which may have been activated as early as 1952.

This proposal recognizes the precedent established by the 1959 Geneva O.A.R.C. when, for similar reasons, it abolished the coast telegraph allotment plan developed by the 1951 Geneva E.A.R.C., instituted Article 9 procedures for dealing with new assignments, and directed the Board to list in the I.F.L. with a Column 2a date based on the date of notification, those coast telegraph station assignments not included in the original plan but found satisfactory after technical examination. Accordingly, the same procedure is proposed for disposing of Appendix 25, to give recognition to out-of-plan stations now in operation, and to provide for future needs in an orderly fashion under Article 9.

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Proposals relating to Article 4  
of the Additional Radio Regulations (AR)

Charges for Radiotelegrams

N° 2031, 2040, 2054 and 2059

**Address of Radiotelegrams**

**2005 § 1.** (1) The address of radiotelegrams destined for mobile stations must be as complete as possible and must include :

**2006**            *a)* the name or the designation of the addressee, with supplementary particulars, if necessary ;

**2007**            *b)* in the case of a ship station, the name of this station separated from the name of the station by a fraction bar, as shown in the List of Ship Stations ;

**2008**            *c)* in the case of an aircraft station the call sign or other identification, as it appears in No. **2011** ;

**2009**            *d)* the name of the land station through which the message is to be forwarded, as it appears in the appropriate list of stations.

**2010**            (2) If the ship does not appear in the List of Ship Stations, the sender should, if possible, indicate the nationality and route followed by the ship.

**2011**            (3) However, the name and call sign required under Nos. **2007** and **2008** may be replaced, at the risk of the sender, by particulars of the passage made by such mobile station, indicated by the names of the ports or airports of departure and of destination, or by any equivalent indication.

**ARTICLE 4****Charges for Radiotelegrams****Section I. General. Full-rate Radiotelegrams**

**2025**            (3) The maximum land station charge is 0.60 gold franc (sixty centimes) per word ; the maximum ship or aircraft charge is 0.40 gold franc (forty centimes) per word. Administrations shall notify to the Secretary General the rates fixed by them.

**2026**            (4) Each administration, however, reserves to itself the right to fix and authorize a land station charge higher than the maximum charge indicated in No. **2025** in the case of land stations which are exceptionally costly on account of their installation or working.

**2031 § 6.**        Additional charges collected by offices of origin or mobile stations for multiple radiotelegrams (see No. **2115**) and radiotelegrams to be delivered by post (direction ship or aircraft to land, see No. **2116**) are the charges fixed by the Telegraph Regulations.

**2040 § 11.**      The land station or ship or aircraft station charges for 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 ship or aircraft station charges pertaining to radiotelegrams intended 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 in question or, in the absence of such notification, they are the maximum charges prescribed in No. **2025**.

Proposals relating to

Article 4 of the AR

(continuation)

*C. Meteorological Radiotelegrams*

**2053** § 15. (1) The term "meteorological radiotelegram" denotes a radiotelegram consisting solely of meteorological observations or meteorological forecasts, which is sent by an official meteorological service or by a station in official relation with such a service, and addressed to such a service or to such a station.

**2054** (2) Meteorological radiotelegrams must bear the paid service indication = OBS = before the address. This paid service indication is the only one admitted.

*D. Press Radiotelegrams*

**2058** § 17. The minimum number of chargeable words for press radiotelegrams shall be fixed at fourteen.

**2059** § 18. (1) The land station and ship or aircraft charges are reduced by 50 per cent for press radiotelegrams originating in a ship or aircraft station and destined for places on land. These radiotelegrams are subject to the conditions of acceptance laid down in Articles 65 to 69 of the Telegraph Regulations (Geneva Revision, 1958). For those radiotelegrams which are addressed to a destination in the country of the land station, the telegraph charge to be collected is one-half of the telegraph charge applicable to an ordinary radiotelegram.

**2060** (2) Press radiotelegrams destined for a country other than that of the land station are subject to the press rate in force between the country of the land station and the country of destination.

(Proposals made under paragraph I, sub-paragraph 2  
of Administrative Council Resolution No. 590  
which do not come under any of the items 1 to 7)

Additional radio regulations

Ref.

Article 4

F/110(108)      SUP      2031      Delete.

Reasons :

It seems desirable to insert the provisions of this  
number under Article 7 AR. See proposal relative to  
No. 2117A.

---

F/110(109)      MOD      2040      Replace the last sentence of this number by  
the following :

They are the normal rates notified by the  
Administration(s) in question or, in the  
absence of such notification, they are the  
maximum charges prescribed in No. 2025.

Reasons :

To make the text clearer.

---

F/110(110)      MOD      2054      Replace by the following :

Meteorological radiotelegrams must bear the  
service instruction "OBS" at the beginning of  
the preamble and the paid service indication  
"OBS" before the address.

Reasons :

To mention the insertion of the service instruction  
"OBS" at the beginning of the preamble (see Article 41 RTg)

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Ref.

F/110(111)      ADD      2057A      Under the heading : D. Press Radiotelegrams,  
insert No. 2057 A as follows :

Press telegrams from a mobile station to  
the mainland shall be admitted as press  
radiotelegrams.

Reasons :

To indicate the essential condition for the acceptance  
of press radiotelegrams.

---

F/110(112)      MOD      2059      Replace the first sentence by the following :

The land station and ship or aircraft  
charges are reduced by 50%.

Reasons :

A consequence of the addition of No. 2057A.

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Proposals relating to  
Article 7 of the AR

Special Radiotelegrams. Paid Service Indications

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N° 2108, 2109, 2112, 2118 - 2122

## ARTICLE 7

### Special Radiotelegrams. Paid Service Indications

**2107 § 1.** The following special radiotelegrams are admitted provided the administrations concerned accept them :

**2108** a) Press radiotelegrams originating in mobile stations and destined for the land.

**2109** b) Meteorological radiotelegrams (= OBS =).

**2110** c) Paid service advices. These are forwarded, as far as practicable, by the same route as that of the original radiotelegram. In the case of diversion (for example, in case of interruption or where the mobile station proceeds beyond the service area of the land station which has acted as intermediary for the transmission of the original radiotelegram) they bear the indication "dévié" and particulars of the route followed by the original radiotelegram.

**2111** d) Urgent radiotelegrams, but only over the general network of telecommunication channels.

**2112** e) Radiotelegrams with prepaid reply. The reply voucher issued on board a mobile station gives the right to send up to its value a radiotelegram to any destination, but only from the mobile station which issued the voucher. When the charge for a radiotelegram paid for by voucher exceeds the value of the voucher, the excess charge must be paid by the sender using the voucher.

**2113** f) Radiotelegrams with collation.

**2114** g) Radiotelegrams with notification of delivery destined for mobile stations, but only as far as concerns the notification to the telegraph office of origin of the date and time at which the land station has transmitted the radiotelegram to the mobile station of destination.

**2115** h) Multiple radiotelegrams.

**2116** i) Radiotelegrams to be delivered by express or by post (from ship or aircraft to land).

**2117** j) De luxe radiotelegrams (subject to the conditions laid down in Article 60 of the Telegraph Regulations, Geneva Revision, 1958).

**2118** k) Radiotelegrams to be retransmitted by one or two mobile stations at the sender's request (= RM =).

**2119** l) Radiomaritime letters and radio air letters.

**2120** m) Radiotelegrams concerning persons protected in time of war by the Geneva Conventions of August 12, 1949 (= RCT =).

**2121** n) Radiotelegrams to be delivered to the addressee in person.

**2122 § 2.** In addition, the following paid service indications shall be permitted in radiotelegrams : = GP =, = GPR =, = TR =, = TFX = (from ship or aircraft to land), = TLXx = (from ship or aircraft to land), = Jx = (from land to ship or aircraft), = Réexpédié de x = (only when the charge for forwarding can be collected), = Jour =, = Nuit =, = Etat Priorité Nations =, = Etat Priorité =, = Etat =, = Remettre x = (from ship or aircraft to land).

**2123 § 3.** Radiotelegrams are not admitted as letter telegrams. Radiotelegrams to follow the addressee at the request of the sender are also not admitted.



Ref.

Article 7

F/110(113)      MOD      2108      Replace this number by the following :  
  
a) Press radiotelegrams in the conditions specified in Nos. 2057A to 2060.

Reasons :

To specify the numbers concerned of the Regulations.  
See also the proposal relative to No. 2057A.

---

F/110(114)      MOD      2109      Replace this number by the following :  
  
b) Meteorological radiotelegrams in the conditions mentioned in Nos. 2053 to 2057.

Reasons:

To specify the numbers concerned of the Regulations.

---

F/110(115)      MOD      2112      Delete the last sentence.

Reasons :

Repetition of No. 496 RTg which has become superfluous  
(see No. 2001. AR)

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F/110(116)      ADD      2117A      Add the following text :  
  
The supplementary charges levied by the offices of origin or by mobile stations for the special radiotelegram category mentioned in Nos. 2110 to 2117 inclusive shall be the charges specified in the Telegraph Regulations.

Reasons :

A consequence of the deletion of No. 2031 AR.

---

Ref.

F/110(117)      MOD      2118      Insert the following phrase at the end of  
this number :

.... (in the conditions specified in  
Nos. 2152 to 2154).

Reasons :

To specify the numbers concerned of the Regulations.

---

F/110(118)      MOD      2119      Insert the following phrase at the end of  
this number:

.... (in the conditions specified in  
Article 6 AR).

Reasons :

To specify the Article concerned of the Regulations.

---

F/110(119)      MOD      2120      Insert the following phrase at the end of  
this number :

.... (in the conditions specified in  
Nos. 2061 and 2062).

Reasons :

To specify the numbers concerned of the Regulations.

---

F/110(120)      SUP      2121      Delete this number.

Reasons :

Radiotelegrams to be delivered to the addressee in  
person do not constitute a special category of radiotelegrams.  
The paid service indication = MP = merely indicates a particular  
method of delivery.

---

F/110(121)      MOD      2122      After = GPR =, insert the paid service  
indication = MP =.

Reasons :

See proposal relative to No. 2121.

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Proposals relating to  
Article 8 of the AR

Period of Retention of Radiotelegrams at Land Stations

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Nº 2126, 2127, 2130 and 2131

## ARTICLE 8

### Period of Retention of Radiotelegrams at Land Stations

#### Section I. Radiotelegrams destined for Ships at Sea

**2124** § 1. (1) The sender of a radiotelegram destined for a ship at sea may specify the number of days during which the coast station may hold the radiotelegram.

**2125** (2) In that case, the sender writes before the address the paid service indication = Jx = (x days) specifying the number of days (ten at the most) exclusive of the day of handing-in of the radiotelegram.

**2126** § 2. When it has not been possible for a land station to transmit to a ship station

a) a radiotelegram bearing the paid service indication = Jx = within the prescribed period, or

b) a radiotelegram not bearing this service indication within a period of three days following the date of handing-in,

the coast station informs the office of origin, which notifies the sender. The sender of the radiotelegram may then ask, by paid service advice, addressed to the coast station, either that his radiotelegram be cancelled as regards the section between the coast station and the ship station or that further attempts at transmitting it to the ship station be made during a period of another seven days at the most. Failing such a request, the radiotelegram is treated as undelivered by the coast station three days after the dispatch of the advice of non-transmission. The office of origin shall be immediately advised if the coast station transmits the radiotelegram during the last-mentioned period of three days. The same shall apply if the coast station transmits the radiotelegram during the additional period which may have been requested by the sender.

**2127** § 3. On the morning of the day following that day on which a radiotelegram to a ship station is treated as undelivered by the coast station, the latter shall advise the office of origin which notifies the sender. The coast station and ship station charges and the charges for the special services not performed may be refunded to the sender.

**2130** (2) The coast station which carries out the redirection by wire alters the address of the radiotelegram by placing after the name of the ship station that of the new coast station charged with the transmission and inserting at the end of the preamble the service instruction "redirected from x Radio" which must be transmitted throughout the course of the radiotelegram.

**2131** (3) If, within the limits of the requisite period of retention of radiotelegrams, the coast station which has redirected a radiotelegram to another coast station is subsequently in a position to transmit the radiotelegram direct to the mobile station of destination, it does so by inserting the service instruction "ampliation" before the preamble. It shall then transmit to the coast station to which the radiotelegram had been redirected a service notice informing the latter of the transmission of the said radiotelegram.

Ref.

F/110(122)

MOD

2126

Replace the sixth and seventh lines by the following :

..... up to the morning of the fourth day following the date of handing in.

Reasons :

To specify the date on which the coast station must inform the office of origin that a radiotelegram has not been transmitted. The present drafting may be interpreted in different ways.

(thirteenth line - amendment concerning the French text only)

Eighteenth line : after " .... advice of non-transmission" add the following sentence :

The same applies upon the expiry of any delay which may have been requested by the sender, if it has been impossible to reach the ship.

Reasons :

A necessary clarification.

---

F/110(123)

MOD

2127

Fifth line of this number :

Replace "may be refunded" by "shall be refunded".

Reasons :

Alignment with No. 919 RTg.

---

Ref.

F/110(124)      MOD      2130      First and second lines :  
Delete " .... by wire ....".

Reasons :

This information is superfluous.

Fourth line :

Replace : "inserting" by "adding".

Reasons :

To make the drafting more accurate.

---

F/110(125)      ADD      2130A      Add the following text :  
Upon cancellation of a radiotelegram,  
either at the request of the sender or  
ex officio, land charges, ship charges, and  
any charges for special services not provided  
shall be refunded.

Reasons :

Necessary clarification. The same procedure is  
applied regarding the refund for radiotelegrams treated as  
undelivered (No. 2127) and radiotelegrams cancelled in  
accordance with No. 2129.

---

F/110(126)      MOD      2131      Fifth line :  
Replace "service instruction" by "service  
indication".

Reasons :

"Ampliation" is a service indication. See No. 395 RTg.

---

G/67(82) MOD      2126      b) a radiotelegram not bearing this service indication  
within a period of two days following the date of  
handing-in.

Reasons :

To provide for an earlier advice of radiotelegrams not trans-  
mitted to a ship station.

Proposals relating to  
Article 9 of the AR

Doubtful Reception. Transmission by "Ampliation".  
Long-distance Radiocommunications

---

N° 2144 and 2151

**2144** § 2. When a mobile station subsequently transmits a radiotelegram thus held to the land station which incompletely received it, this new transmission must bear the service instruction "ampliation" in the preamble of the radiotelegram. If the radiotelegram is transmitted to another land station subject to the same administration or the same private enterprise, the new transmission must bear the service instruction "ampliation via . . ." (insert here the call sign of the land station to which the radiotelegram was transmitted in the first instance) and the administration or private enterprise in question may claim only the charges relating to a single transmission. The "other land station" which thus forwards the radiotelegram may claim from the mobile station of origin any additional charges resulting from the transmission of the radiotelegram over the general network of telecommunication channels between itself and the office of destination.

**2151** (4) Each administration designates the long-distance land station or stations for which its mobile stations keep watch.



Ref.

F/110(127)

MOD

2144

Third and seventh lines :

Replace : "service instruction "ampliation" "  
by "service indication 'ampliation'"

Reasons :

See proposals relative to No. 2131.

---

F/110(128)

MOD

2151

Replace this number by the following :

Each administration designates the land  
station or stations participating in the  
long-distance radio service.

Reasons :

To make the text clearer.

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Proposals relating to  
Article 10 of the AR

Retransmission by Mobile Stations

---

N° 2152 and 2157

## ARTICLE 10

### Retransmission by Mobile Stations

#### Section I. Retransmission at the Request of the Sender

- 2152** § 1. Mobile stations shall, if the sender so requests, serve as intermediaries for the exchange of radiotelegrams originated in or destined for other stations of the mobile service; the number of intermediary mobile stations is, however, limited to two.

#### Section II. Routine Retransmission

- 2155** § 4. (1) When a land station cannot reach the mobile station for which a radiotelegram is destined and no payment for retransmission of the radiotelegram has been deposited by the sender, 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.
- 2156** (2) The same provision is also applicable to traffic from mobile stations to land stations, when necessary.
- 2157** (3) The station assisting in the free retransmission in accordance with the provisions of Nos. **2155** and **2156** must enter the service abbreviation QSP . . . . . (name of the mobile station) in the preamble of the radiotelegram.

Ref.

F/110(129)	MOD	2152	Replace this number by the following :  Mobile stations shall, if the sender so requests, serve as intermediaries for the routing of radiotelegrams; the number of intermediary mobile stations is, however, limited to two.
------------	-----	------	--

Reasons :

To make the text more accurate. The present drafting seems to limit retransmission to radiotelegrams from or to other mobile stations.

---

F/110(130)	MOD	2157	Third and fourth lines :  Replace :  ".... in the preamble ...." by  ".... at the end of the preamble ....".
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Reasons :

Drafting clarification.

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Proposals relating to  
Article 11 of the AR

Advice of Non-Delivery

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N° 2160

## ARTICLE 11

### Advice of Non-Delivery

- 2159 § 1.** When, for any reason, a radiotelegram originating in a mobile station and destined for a place on land cannot be delivered to the addressee, an advice of non-delivery is addressed to the land station which received the radiotelegram. After checking the address, the land station forwards the advice, when possible, to the mobile station, if necessary, by way of another land station of the same country or of a neighbouring country, as far as existing conditions or special agreements permit.
- 2160 § 2.** When a radiotelegram received at a mobile station cannot be delivered, that station so informs the office or mobile station of origin by a service advice. In the case of a radiotelegram originating on land, this service advice is sent, whenever possible, to the land station through which the radiotelegram passed or, if necessary, to another land station of the same country or of a neighbouring country, as far as existing conditions or special agreements permit.



Ref.

G/67(83) MOD 2160

g2. When a radiotelegram received at a mobile station cannot be delivered, that station so informs the office or mobile station of origin by a service advice. In the case of a radiotelegram originating on land, this service advice is sent, whenever possible, to the land station through which the radiotelegram passed, or, if necessary, to another land station of the same country, or of a neighbouring country quoting the name or call sign of the station from which the radiotelegram was received, as far as existing conditions or special arrangements permit.

Reasons :

To ensure that advices of non-delivery of a radiotelegram, or query on a radiotelegram, is routed back to the station from which it was received by the mobile station.

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Proposals relating to  
the Recommendation N° 22

relating to an International Radiotelephone Code  
for the Maritime Mobile Service

(pages 567 - 595 of the R.R.)

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In view of the lenght of Recommendation N° 22,  
we considered that it was not essential to reproduce  
the present text.

Ref.

HOL/74(20)

SUP

RECOMMENDATION No. 22

Reasons :

Since the revised International Code of Signals is to be used for all means of communication, there is no further need for a separate radiotelephone code.

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Proposals relating to  
the Recommendation N° 27

relating to Hours of Service for Ship Stations

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RECOMMENDATION No. 27

**Relating to Hours of Service for Ship Stations**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that the number of ship stations equipped to operate on frequencies in the authorized bands between 4 000 and 27 500 kc/s is increasing ;
- b) that these bands are heavily loaded during single operator watch periods ;
- c) that, in accordance with the provisions of Appendix 12, watch is maintained at the same times, on ship stations in four of the zones, thus causing peak loading of the calling and working bands during single operator watch periods ;
- d) that this uneven loading in the bands between 4 000 and 27 500 kc/s leads to prolonged calling and excessive waiting by ships ;
- e) that more efficient use could be made of these bands if the hours of watchkeeping by single operator ship stations were staggered ;

*recommends*

1. that administrations should study the problem of watchkeeping by ship stations with a view to achieving a more even traffic loading of the bands between 4 000 and 27 500 kc/s ;
2. that administrations submit proposals to the next Administrative Radio Conference.



Ref.

RFA/5(5)      Delete Recommendation No. 27 of the Radio Regulations.

Reasons:

After the acceptance of proposals a) and b)  
Recommendation No. 27 becomes superfluous.

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Proposals relating to  
the Recommendation N° 30  
relating to the Phonetic Figure Table

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RECOMMENDATION No. 30

**Relating to the Phonetic Figure Table**

The Administrative Radio Conference, Geneva, 1959,

*considering*

- a) that in radiotelephone communications between stations normally using different languages there are, at present, no standard phonetic expressions for figures ;
- b) that Appendix 16 to the Radio Regulations permits such figures to be expressed by means of the application of the phonetic letter equivalents, printed on the same horizontal line of the table, with the indication " as a number " spoken twice before and after such expressions ;
- c) that this system of using letters for designating figures may lead to confusion ;
- d) that in the aeronautical mobile service international civil aviation uses a phonetic figure table (see column A below) which is subject to modification as a result of speech tests still being carried out ;
- e) that it has been agreed to evaluate the efficiency of a phonetic figure table (see column B below) in the " International Radiotelephone Code for Maritime Mobile Service " which itself is the subject of Recommendation No. 22 ;

*believes*

- a) that the adoption of a standard phonetic figure table is essential for the expression of figures between stations employing radiotelephony where different languages are normally used, especially in cases where the safety of life is involved ;
- b) that the ideal solution would be a phonetic figure table comprised of words or expressions, the pronunciation of which would be as identical as possible in the greatest number of languages and chosen to avoid any confusion with the words used in the phonetic letter table ;

*recommends*

1. that administrations study this whole question, taking into account the existing and proposed phonetic figure tables, their evaluation, and any modifications which might be made to them, also the possibilities of developing a new table likely to meet with universal appeal ;

Recommendation N° 30

(continuation)

2. that the result of their study should be communicated to the Secretary General for the information of the Members and Associate Members of the Union, well in advance of the next Administrative Radio Conference ;

3. that at the next Administrative Radio Conference consideration be given to the adoption of a standard phonetic figure table for the use of all services in radiotelephone communications where language difficulties are likely to arise.

Word to be used		
Figure	A	B
0	ZE-RO	ZERO
1	WUN	WUN
2	TOO	BIS
3	TREE	TER
4	FOW-ER	QUARTO
5	FIFE	PENTA
6	SIX	SAXO
7	SEV-EN	SETTE
8	AIT	OCTO
9	NIN-ER	NONA
Decimal point	DAY-SEE-MAL	DECIMAL
Thousand	TOUS-AND	

Ref.

HOL/74(21)

SUP

RECOMMENDATION No. 30

Reasons :

To be consistent with the proposed revision of  
Appendix 16.

RFA/7(19)

Delete Recommendation No. 30 of the Radio Regulations.  
(Geneva, 1959).

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Draft Resolutions by  
items of the agenda  
and in alphabetical  
order of the countries'  
symbols

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Item 1. The use of single sideband technique  
in the Maritime Mobile Service in  
the bands available to that service  
between 1605 and 4000 kc/s and in  
the exclusive HF Maritime Mobile  
Radiotelephone bands.

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Ref.

F/8(52 corr.)

DRAFT RESOLUTION No. 1.A RELATING TO THE TRANSFER OF INTER-SHIP FREQUENCIES IN THE BANDS BETWEEN 1605 AND 4000 kc/s WHEN THE SEPARATION BETWEEN ADJACENT ASSIGNED FREQUENCIES IS EQUAL TO 5 kc/s

The Maritime Conference (Geneva, 1967),

considering

- a) that during and after conversion to SSB, each DSB channel will be occupied by two SSB channels, one in the upper half and the other in the lower half of the DSB channel;
- b) that the SSB channels must remain within the DSB channel limits but that the latter overlap with each other since the separation between adjacent assigned frequencies is less than the necessary bandwidth;

resolves

that in the bands between 1605 and 4000 kc/s the sub-division of the former DSB channels into two SSB channels for intership calls, when the separation between assigned frequencies is equal to 5 kc/s, shall conform to the following regulations concerning the carrier frequency arrangement and the necessary bandwidth:

- 1) the frequency assigned for SSB to a station working in the upper half of the DSB channel shall be 1.35 kc/s higher than the DSB carrier and the SSB carrier shall be equal to the DSB carrier (necessary bandwidth 2.7 kc/s) <sup>1</sup>;

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<sup>1</sup> These provisions could lead to limiting the receiver passband at audio frequencies to a value lower than 2.5 kc/s.

Ref.

F/8(52 corr.)  
(cont.)

- 2) the frequency assigned for SSB to a station working in the lower half of the DSB channel shall be 1.15 kc/s lower than the DSB carrier and the SSB carrier shall be 2.5 kc/s below the DSB carrier (necessary bandwidth 2.7 kc/s)<sup>1</sup> ;
- 3) when an administration asks for an entry in its name in the register to be altered to bring it into line with the regulations set out in paragraphs 1) and 2) above, and provided the power, expressed as the peak envelope power for SSB emissions, is not more than twice the mean power previously notified, the I.F.R.B. shall make the required change so that the status of the assignment in question is maintained.
- 4) in the month following the date of \* entries in the Master International Frequency Register relating to a double sideband assignment in the maritime mobile MF radiotelephone service shall be the subject of an I.F.R.B. questionnaire.

If, within 2 months, the notifying administration has not sent a reply or announced that it is continuing to use the frequency in accordance with the existing entry, or if the amendments proposed for the assignment are such that the entry does not conform to the regulations set out in paragraphs 1) and 2) above, a special symbol shall be inserted in column 13C, indicating that the entry is not in accordance with the rules adopted by the present Conference and that it has been maintained for information only.

- 
- <sup>1</sup> These provisions could lead to limiting the receiver passband at audio frequencies to a value lower than 2.5 kc/s.
  - \* Date one month after the entry into force of the definitive provisions concerning the use of single sideband emissions for maritime MF radiotelephony.

Ref.

F/8(53 corr.)

DRAFT RESOLUTION No. 1.B RELATING TO THE TRANSFER OF  
FREQUENCY ASSIGNMENTS IN THE BANDS ALLOCATED EXCLUSIVELY  
TO THE MARITIME MOBILE SERVICE BETWEEN 4000 and 23 000 kc/s  
FOR COAST RADIOTELEGRAPH STATIONS

(see diagram in Annex II)

The Maritime Conference (Geneva, 1967),

considering

- a) that the transfer to slightly lower frequencies of frequency assignments to coast radiotelegraph stations in the HF bands allows a larger number of 2-frequency channels to be cleared for radiotelephone links;
- b) that the transfer method proposed below strictly preserves the relative position of all assignments to coast stations, thus avoiding any new operating difficulties;
- c) that the transfer affects only a few stations and does not involve large expenditure for the administrations;

recognizing

- a) that re-arrangement of the frequency bands allocated to the maritime mobile service should be carried out in several stages and that the transfer of coast radiotelegraph station frequency assignments conditions any subsequent arrangements - and should therefore be one of the first phases of the re-arrangement;
- b) that, in the bands under consideration, assignments to stations of the fixed service may be made by some countries in certain conditions, and that the proposed transfer must not lead to an aggravation in the conditions of use of the frequencies concerned;

resolves

- 1. that the assignments made to coast radiotelegraph stations in the bands :

4238	-	4368 kc/s
6357	-	6525 kc/s
8476	-	8745 kc/s
12 714	-	13 130 kc/s
16 952	-	17 290 kc/s
22 400	-	22 650 kc/s

and entered in the Master International Frequency Register on the date of entry into force of the provisions contained in the Final Acts of this conference shall be transferred as follows :

Ref.

F/8(53 corr.)  
(cont.)

- any frequency assignment  $f$  in the 4238 - 4368 kc/s band shall be transferred to the frequency  $f - 7$  kc/s;
- any frequency assignment  $f$  in the 6357 - 6525 kc/s band shall be transferred to the frequency  $f - 11$  kc/s;
- any frequency assignment  $f$  in the 8476 - 8745 kc/s band shall be transferred to the frequency  $f - 14$  kc/s;
- any frequency assignment  $f$  in the 12 714 - 13 130 kc/s band shall be transferred to the frequency  $f - 21$  kc/s;
- any frequency assignment  $f$  in the 16 952 - 17 290 kc/s band shall be transferred to the frequency  $f - 28$  kc/s;
- any frequency assignment  $f$  in the 22 400 - 22 650 kc/s band shall be transferred to the frequency  $f - 30$  kc/s.

2. At  $x$  hours GMT on \* administrations shall change the transmitting frequencies of their radiotelegraph stations in accordance with the rules mentioned above and shall notify the I.F.R.B. of the changes made.

3. Provided no characteristic other than the designation of the transmitting frequency has been changed, the I.F.R.B. shall enter the change requested in the Master International Frequency Register. The other details of the entry - in particular the dates given in column 2 - shall not be altered.

4. Three months after \* the I.F.R.B. shall send to any administrations which have not reported the transfer of frequencies assigned to their coast radiotelegraph stations an extract from the Master International Frequency Register showing the entries contained therein opposite their name, relating to stations of this category, accompanied by a reminder of the provisions of this resolution.

5. Two months after the despatch of these extracts, the I.F.R.B. shall re-examine any assignments contained in the Master Record in respect of which a change making the assignments in question conform with the present resolution has not been notified by the countries concerned; this re-examination shall be made as though the notification appearing in the Master Register had been sent to the I.F.R.B. on the date of the examination.

The Master Record shall be amended in the light of the findings reached by the Board.

---

\* Date to be fixed by the Conference; it should, in the view of the French Administration, be as soon as possible after the date on which the Final Acts of the Conference come into force.

Ref.

F/8(53 corr.)  
(cont.)

6. Administrations under whose name frequency assignment notifications have been entered in the Master Record under Nos. 209, 211 or 213 of the Radio Regulations (Geneva, 1967) may, within the limits of the bands mentioned in the aforementioned numbers, make any frequency changes they consider necessary to prevent the assignments concerned being subjected to increased interference or causing more interference to stations of the maritime mobile service, or to reduce such interference.

7. When the Board notices, further to the notification of such frequency changes, that results in accordance with paragraph 6 above have been obtained or if the change has been the result of direct coordination by all the administrations concerned, the relevant entries in the Master Record shall be amended as mentioned in paragraph 3) above.

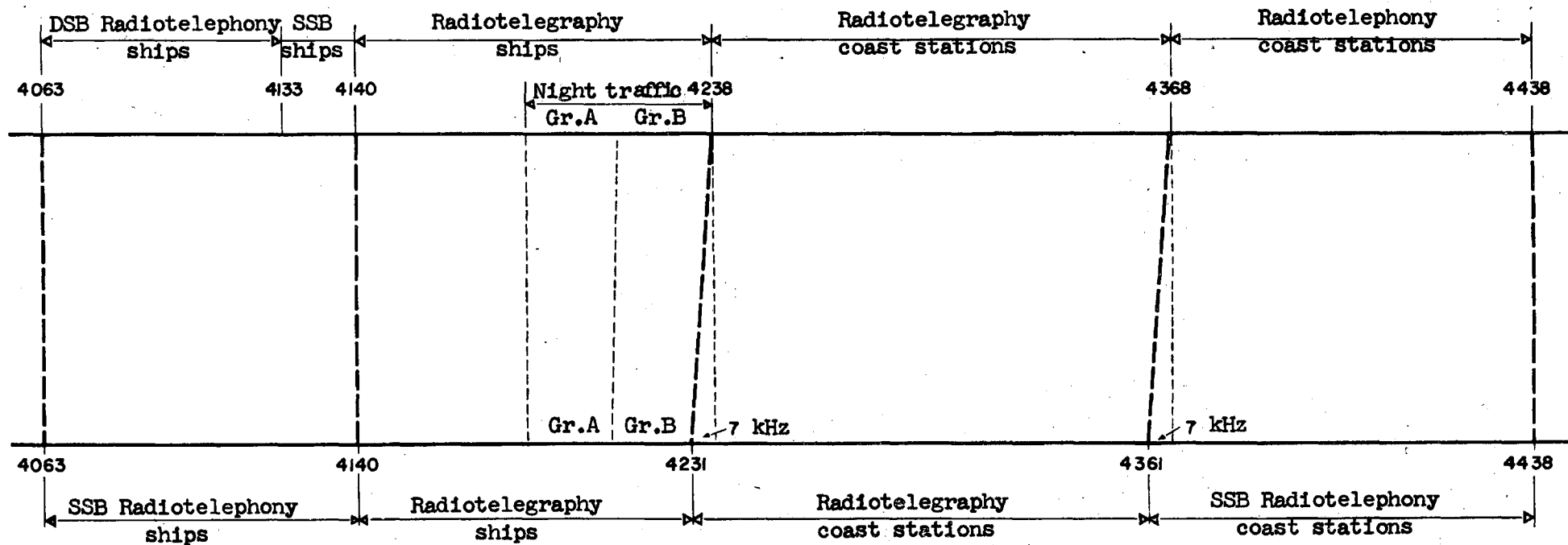
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# A N N E X II

## DISTRIBUTION OF FREQUENCY BANDS ALLOCATED TO THE MARITIME

### MOBILE SERVICE BETWEEN 4 AND 27.5 MHz

(example in the 4 MHz band)





Ref.

F/8(54)

DRAFT RESOLUTION 1.C

INTERIM PROVISIONS GOVERNING THE ENTRY INTO FORCE OF THOSE  
PARTS OF THE RADIO REGULATIONS WHICH RELATE TO THE USE OF  
SINGLE SIDEBAND SYSTEMS FOR RADIOTELEPHONY IN THE  
1605 - 2300 kc/s BANDS

(See diagram in Annex III.)

The Maritime Conference (Geneva, 1967),

decides

that the following interim provisions shall be applied :

I. Bands between 1605 and 4000 kc/s

- a) The installation of new double sideband equipment on board ships shall cease to be authorized on 1 January 1973.
- b) Coast stations open to public correspondence shall be capable of sending single sideband emissions, on at least one working frequency, from 1 January 1973.

Coast stations shall cease to send double sideband emissions on 1 January 1975.

- c) With the exception of the cases covered by Nos. 987 and 996, ship stations shall cease to send double sideband emissions on 1 January 1980.
- d) Whenever it is necessary to establish a radiotelephone communication, coast and ship stations equipped for single sideband emission must be capable of using class A3H on their working frequencies. This provision will cease to be compulsory on 1 January 1980.

II. Bands between 4000 and 23000 kc/s

- a) Frequency assignments already notified for SSB emissions in accordance with the provisions of the Radio Regulations (Geneva, 1959) shall be transferred to the channels in the new Appendix 17\*\*) on .....\*).

The channels to which, on this date, the frequency assignments to those DSB stations due to remain in service, and to which the frequencies in the table in Appendix 17 had been assigned, will be as set out in the following table :

---

\*) date of entry into force of the Final Acts of the present conference.

\*\*) See Document No. 10, proposal F/10(61).

Ref.

F/8(54)  
(cont.)

Serial No. (1959 RR)	New Serial No.
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
10	20
11	22

- b) The installation of new double sideband equipment on board ships will cease to be authorized on .....\*).
- c) Coast stations open to public correspondence shall be capable of sending single sideband emissions, on at least one working frequency, from .....\*).

Double sideband emissions from coast stations shall cease on 1 January 1971.

- d) Ship stations shall cease to send double sideband emissions on 1 January 1977.
- e) Whenever it is necessary to establish a radiotelephone communication, coast and ship stations equipped for single sideband emission must be able to use class A3H on their working frequencies. This provision will cease to be compulsory on 1 January 1977.

---

\*) date of entry into force of the Final Acts of the present conference.

ANNEX III  
(Draft resolution )  
Dates of conversion to SSB

		Date of entry into force of the Final Acts of the Conference					
C O A S T	MF	DSB					
					SSB (A3A - A3J)		
				A3H compulsory			
	HF	DSB					
			SSB (on one frequency at least) (A3A - A3J)				
			A3H compulsory				
S H I P	MF	DSB equipment					
		DSB					No. 987 and
					SSB (A3A-A3J) by deduction		No. 996
				A3H compulsory			
	HF	DSB equipment					
		DSB					
			SSB (A3A - A3J) by deduction				
			A3H compulsory				

Ref.

Agenda Item 1 :

G/76(34)

RESOLUTION No. 1A

Relating to the dates of implementation for the conversion  
to single-sideband operation of the double sideband  
radiotelephone services in the maritime mobile bands  
between 1605 and 23 000 kc/s

The Maritime World Administrative Radio Conference,  
Geneva, 1967,

considering

- a) Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959,
- b) Recommendation No. 3 of the Panel of Experts, established under Resolution No. 3 and Recommendation No. 37 of the same Conference;
- c) Recommendation No. 258-1 of the C.C.I.R.,

decides

- 1. Bands between 1605 and 4000 kc/s (except 2182 kc/s)
  - 1.1 that coast radiotelephone stations shall be capable of single sideband operation in the A3A or A3J mode on at least one frequency by 1st January, 1970;
  - 1.2 that coast radiotelephone stations shall cease double-sideband operation (except for 2182 kc/s), and shall be equipped to use class A3H emissions in place of class A3 emissions, by 1st January, 1973;
  - 1.3 that, with the exception of the cases covered by Nos. 987 and 996 of the Radio Regulations, the conversion of ship radiotelephone stations from double-sideband to single-sideband operation (A3A and A3J) shall commence not later than the 1st January 1970 and shall be completed by 1st January 1980;
  - 1.4 that the use of class A3 and A3H emissions by ship radiotelephone stations and A3H emissions by coast radiotelephone stations shall cease (except for 2182 kc/s) by 1st January 1980.

Ref.

G/76(34)  
(cont.)

2.

Bands between 4000 and 23 000 kc/s

- 2.1 that coast radiotelephone stations shall be equipped for single sideband operation, A3H and either A3A or A3J emissions, and shall cease double-sideband operation by 1st January 1970;
- 2.2 that the conversion of ship radiotelephone stations from double sideband to single sideband operation (A3A and A3J) shall commence not later than the 1st January 1970, and shall be completed by 1st January 1977;
- 2.3 that the use of class A3 emissions by ship radiotelephone stations and class A3H emissions by coast radiotelephone stations shall cease by the 1st January 1977;
- 2.4 that the provisions of 2.2 and 2.3 shall not apply to ship radiotelephone stations operating in accordance with Note c) of Appendix 3 of the Radio Regulations; these stations shall be treated as ship radiotelephone stations operating in the band between 1605 and 4000 kc/s (see 1.3 and 1.4).

RESOLUTION No. 1B

Relating to the conversion to single sideband operation of the double sideband radiotelephone frequencies assigned to the maritime mobile service in the bands between 1605-4000 kc/s assigned for communications between ships and coast stations

The Maritime World Administrative Radio Conference,  
Geneva, 1967,

considering,

- a) that in the interests of economy in the use of the radio spectrum, each DSB channel should be sub-divided into two SSB channels, one in the upper and the other in the lower half of the DSB channel;
- b) that the bandwidth occupied by the two SSB channels should not exceed that of the DSB channel;
- c) the desirability of retaining the same registration (column 2) date for the two SSB channels as that of the corresponding DSB channel;
- d) the need to meet, as far as possible, the provisions of RR No. 114, bearing in mind the procedure laid down in RR No. 534;

noting

- a) Recommendation 258-1 of the C.C.I.R. in respect of the transmitter audio-frequency bandwidth (350 - 2700 c/s);
- b) that operational efficiency should be improved by the use of a transmitter audio-frequency bandwidth of 250 - 2400 c/s;

decides :

that in the bands between 1605 - 4000 kc/s each DSB channel be sub-divided as follows :

- 1) a station operating in the upper half of the channel shall use the upper sideband derived from a nominal carrier frequency 100 c/s above the original DSB carrier frequency;
  - 2) a station operating in the lower half of the channel shall use the upper sideband derived from a nominal carrier frequency 2.90 kc/s below the original DSB carrier frequency;
  - 3) the transmitter audio-frequency band shall be 250 to 2400 c/s, with a permitted amplitude variation of 6 db.
-

Ref.

Agenda Item 1 :

G/76(35)

RESOLUTION No. 1C

Relating to the study of the problems concerning the  
application of single-sideband techniques on the  
international distress and calling frequency 2182 kc/s

The World Administrative Radio Conference, Geneva,  
1967,

considering

- a) that, except for 2182 kc/s, the conversion to SSB operation of the DSB maritime mobile assignments in the band 1605-4000 kc/s will be complete by 1st January 1980;
- b) that during the period of conversion, ship stations will use either class A3 or class A3H emission on 2182 kc/s;
- c) that coast stations will use either class A3 or class A3H emission until 1st January 1973 and from that date only class A3H emission on 2182 kc/s;
- d) that large numbers of portable radio equipments designed only for safety purposes use class A3 emission;
- e) that there may be practical difficulties in design of portable equipment for safety purposes using single sideband emissions;

resolves

that a study be made by the C.C.I.R.<sup>1</sup> of the problems concerning the application of single sideband techniques on the frequency 2182 kc/s.

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Note : <sup>1</sup> In cooperation, as necessary, with the Intergovernmental Maritime Consultative Organization.

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Ref.

HOL/70(1)

DRAFT RESOLUTION

Relating to the Conversion from Double Sideband Operation (DSB) to Single Sideband Operation (SSB) in the Frequency bands 1605 - 4000 kc/s and 4000 - 23000 kc/s by the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959;
- b) Resolution No. 3 of the Administrative Radio Conference, Geneva, 1959;
- c) Recommendation No. 3, contained in the Final Report of the Panel of Experts, Geneva, 1963;
- d) that the trend towards congestion and saturation in the bands between 4 and 27.5 Mc/s equally applies to the band 1605 - 4000 kc/s;
- e) that the conversion from double sideband to single sideband operation in the bands 1605 - 4000 kc/s and 4000 - 23000 kc/s should be completed as soon as possible;
- f) that suitable equipment for single sideband operation in the bands referred to in paragraph e) above was not sufficiently available on the date of commencement of the conversion (1 January, 1967) as recommended by the Panel of Experts;
- g) that for economical reasons a depreciation period of 7 to 10 years is considered necessary;

resolves

that the conversion from double sideband to single sideband operation in the frequency bands 1605 - 4000 kc/s and 4000 - 23000 kc/s by coast and ship stations operating on Maritime Mobile radiotelephone channels shall take place in accordance with the following schedule:



Ref.

HOL/70(1)  
(cont.)

- A. Frequency bands between 1605 and 4000 kc/s :
1. Coast stations shall be equipped for single sideband operation not later than 1 January, 1970.
  2. Coast stations shall cease double sideband operation not later than 1 January, 1970.
  3. Administrations should, if possible, endeavour to cease the installation of double sideband equipment on board ship stations not later than 1 January, 1970.
  4. During the period of conversion from double sideband to single sideband operation, ship stations, already equipped with single sideband equipment, and coast stations, shall be able to use full carrier (A3H) emission to permit communication with stations using either double sideband or single sideband emissions.
  5. Double sideband and A3H emissions by ship stations and A3H emissions by coast stations shall cease on 1 January, 1980. However, on the frequency of 2182 kc/s, the use of single sideband emissions using full carrier may be continued.
- B. Frequency bands between 4000 and 23000 kc/s :
1. Coast stations shall be equipped for single sideband operation not later than 1 January, 1970.
  2. Coast stations shall cease double sideband operation not later than 1 January, 1970.
  3. Administrations should, if possible, endeavour to cease the installation of double sideband equipment on board ship stations not later than 1 January, 1970.
  4. During the period of conversion from double sideband to single sideband operation, ship stations, already equipped with single sideband equipment, and coast stations, shall be able to use full carrier (A3H) emission to permit communication with stations using either double sideband or single sideband emissions.
  5. Double sideband and A3H emissions by ship stations and A3H emissions by coast stations shall cease on 1 January, 1977.
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Ref.

J/84(32)

RESOLUTION No. ...

Relating to the enforcement of the provisions of the Radio  
Regulations for SSB operation in a station in the maritime  
mobile service

The World Administrative Radio Conference, Geneva, 1967,

considering

1. that the provisions for DSB operation in a station in the maritime mobile service shall be abrogated on the date of coming into force of the Final Acts of this Conference;
2. that it is necessary to decide on the procedure for facilitating the transition from DSB operation to SSB operation in the stations concerned;

resolves

1. that a coast station and a ship station are permitted to operate with DSB radiotelephony equipments until 31 December 1969, and 31 December 1973 respectively. In this case, both stations shall conform to the conditions of the relevant provisions (except Article 9) of the Radio Regulations, Geneva, 1959;
2. that a coast station or a ship station employing SSB equipment before 1 January 1974 shall be able to send class A3H emissions and receive class A3 and A3H emissions when communicating with DSB stations;
3. that after 1 January 1974 a coast station or a ship station equipped for radiotelephony shall employ only class A3J emission. However, if required for the public correspondence service, class A3A emissions may also be used;
4. that notwithstanding those aforementioned, the use of class A3 or A3H emission on 2182 kc/s is permitted;
5. that the reduction of the guard band of 2182 kc/s shall come into force on 1 January 1974. The frequencies 2171.5 kc/s and 2192 kc/s made possible of new assignment by this reduction may be used on and after the said date.

Reasons :

In the Radio Regulations amendment has been made so that the equipment of a radio telephone station in the maritime mobile service in the frequency bands between 1605 and 4000 kc/s and between 4000 and 23 000 kc/s may be operated by SSB system. Therefore, it is necessary to provide for the procedure to be followed during and after the period of transition from the date of coming into force of these revised provisions until the date on which DSB operation is forbidden.

Ref.

J/86(54)

RESOLUTION No.

Relating to the processing of frequency assignment  
notices to Coast Radiotelephone Stations operating  
in the frequency bands contained in No. 448 of the  
Radio Regulations

The World Administrative Radio Conference, Geneva, 1967,  
considering

that Frequency Allotment Plan for Coast Radiotelephone  
Stations contained in Appendix 25 to the Radio Regulations  
(Geneva, 1959) shall be abrogated on the date of coming into force  
of the Final Acts of this Conference;

resolves

that during the period between the date of entry into  
force of the Final Acts of this Conference and 31 December 1969,  
notices of frequency assignments to stations in the bands listed  
in No. 448 shall be treated by the I.F.R.B. on the following 1.  
below. The entry recorded in the Master International Frequency  
Register in accordance with this processing shall be put under the  
re-examination by the Board on the following 2. below.

1. 1.1 the provisions of Nos. 496 to 540 shall be applied;
- 1.2 the relevant date to be recorded in the Master Register  
shall be entered in the appropriate part of Column 2  
in conformity with the provisions of Nos. 574 or 575;
2. that on 1 January 1970, the Board shall re-examine all  
the frequency assignments which are contained in the Master  
Register for the bands listed in No. 448 of the Radio Regulations,  
as provided by the following items, and take an appropriate action;
  - 2.1 if the frequency assignments to the coast radiotelephone  
stations operating with classes A3A, A3H and/or A3J  
emission are in conformity with an allotment plan in  
Section I of Appendix 25 and they are converted to  
SSB operation in the upper half of the channel of DSB  
frequencies listed in the table of Appendix 17 and in  
addition the activation date has already been notified  
to the Board, the date of 3 December 1951 shall be  
entered in Column 2a.

However, if, due to the above shifting, any  
harmful interference is experienced mutually, either  
of SSB operation shall be able to be transferred to the  
lower half of the channel through coordination between  
the Administrations concerned. On this occasion, the  
date of 3 December 1951 shall be entered in Column 2a;

Ref.

J/86(54)  
(cont.)

- 2.2 if the frequency assignments to the coast radiotelephone stations operating with classes A3A, A3H and/or A3J emission are in conformity with an allotment in Section II of Appendix 25 and they are converted to the SSB operation in the lower half of the channel of DSB frequencies listed in the table of Appendix 17 and in addition the activation date has already been notified to the Board, the date of 4 December 1951 shall be entered in Column 2a;
- 2.3 if the frequency assignments to the coast radiotelephone stations operating with classes A3A, A3H and/or A3J emission are not in conformity with the above mentioned paragraphs 2.1 and 2.2, and they are operated under the SSB system in the upper half or lower half of DSB frequencies listed in the table of Appendix 17, the Board shall apply the provisions of Nos. 496 to 540 in the order of the receipt of notice. The date to be entered in Column 2a or 2b shall be determined according to the finding by the Board, based on the following :
  - 2.3.1 with respect to the assignments to which the provisions of No. 578 have been applied;
    - a) if the finding by the Board is favourable, the date of receipt of the original notice by the Board shall be entered in Column 2a;
    - b) if the finding by the Board is unfavourable, the date of receipt of the original notice by the Board shall be entered in Column 2b;
  - 2.3.2 with respect to the assignments to which the provisions of Nos. 579 and 580 have been applied;
    - a) if the finding by the Board is favourable, the relevant date shall be entered in Column 2a;
    - b) if the finding by the Board is unfavourable, the relevant date shall be entered in Column 2b;
- 2.4 each entry of the radiotelephone coast stations which is not in conformity with the provisions of No. 501 shall be entered in Column 2b with the date of 1 January 1970;
- 2.5 if those entries related to 2.1 (c) of the Resolution No. 1 of the Ordinary Administrative Radio Conference, Geneva, 1959 and entries related to DSB are still in the Master Register, they shall be deleted from it.

Ref.

J/86(54)  
(cont.)

Reasons :

1. Since 1959 when the Geneva Conference established the present Appendix 25, the Members of the I.T.U. have increased 31 in number from 101 to present 132. Therefore, with respect to the frequency allotment plan for the coast radiotelephone stations contained in Appendix 25, it may well be expected that new requirements will be made by these newly increased Members.
2. Moreover, it is considered that, even among the Members who participated in the Geneva Conference in 1959, there are not a few countries which are under the necessity of new frequency allotment or feel keenly the shortage in the frequency allotment plan.
3. Therefore, it is not considered appropriate that the frequency allotment plan contained in Appendix 25 should be left as it is.
4. On the one hand, out of the frequency allotment plan contained in Appendix 25, some individual allotments may never be brought into use and are still recorded in the Master Frequency Register under prior protection.
5. On the other hand, now that the conversion of DSB to SSB has been assured of possible realization under the present circumstances, the schedule of transition to SSB system is expected to be put under study at this Conference. Accordingly, with respect to the communication channels contained in Appendix 25 also, it is expected that the same number of communication channels be created in the same manner as seen in the SSB conversion.
6. Therefore, viewed in the light of not only effective utilization of communication channel but also of meeting the demand of the Members, with respect to the frequencies for coast radiotelephone stations also, we should like to assign them in accordance with the general rules for frequency assignments, as in the case of the frequency assignments to coast radiotelegraph station. In view of the foregoing, the abolition of Appendix 25 is proposed.

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Draft Resolutions  
relating to Item 3  
of the agenda

Item 3 : Consequential revision of Appendices  
15, 17 and 25 to the Radio Regulations.

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DRAFT RESOLUTION

Ref.

F/10(62)

The Maritime Conference,

considering

that a new allotment plan has been prepared to replace the allotment plan in Appendix 25 to the Radio Regulations (Geneva 1959);

that the allotments on behalf of certain countries in the old allotment plan (Appendix 25 - 1959) have been transferred to the new plan (Appendix 25 - 1967), subject to changes regarding the class of emission, the necessary bandwidth and the maximum usable power;

that the frequency assignments not in accordance with the old allotment plan (Appendix 25 - 1959), which have formed the subject of frequency notices sent to the I.F.R.B. between 4 December 1951 and the present Conference, have been considered in assessing requirements with a view to the preparation of the new plan;

that some countries have thereby benefited from new allotments and that the corresponding entries in the Master International Frequency Register (M.I.F.R.) may therefore be backdated in columns 2 a) and 2 b) of the Register, subject to certain transfer rules to make the entries in accordance with the new allotment plan;

resolves

a) that after .....\*) the Master International Frequency Register shall include the allotments appearing in the Plan contained in Appendix 25 (revised) to the Radio Regulations (Geneva 1967);

b) that on this same date entries in the Master International Frequency Register concerning allotments in the plan contained in former Appendix 25 (1959) shall be deleted;

c) that, at the request of the Administrations concerned, the I.F.R.B. shall proceed to change in the Master International Frequency Register those entries which related :

- either to frequency assignments involving the use of double sideband operation, which were in accordance with an allotment in Appendix 25 (1959) - Part I;
- or to frequency assignments involving the use of single sideband operation, which were contained within the limits of an allotment in Appendix 25 (1959) - Part I.

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\*) Date of entry into force of the Final Acts of the Maritime Conference.

Ref.

F/10(62)

(contd.)

The modification, which shall apply only to one of the entries referred to above from all those relating to a channel allotted under the old plan (Appendix 25 - 1959), may concern only:

- the designation of the frequency which shall correspond to the new channel allotted in the new plan in exchange for the former allotment (column 1 of the Master Register);
- the designation of the class of emission and the necessary bandwidth which will satisfy the rules laid down at this Conference (column 7 of the Master Register);
- the power, expressed as peak power (1), which may not exceed the power indicated in the revised allotment plan.

The date of 3 December 1951 in column 2 a) shall be kept.

d) that, at the request of the Administrations concerned, the I.F.R.B. shall proceed, in accordance with the same rules, to modify the entries appearing in the Master International Frequency Register corresponding to allotments in Part II of the allotment plan (Appendix 25 - 1959) having formed the subject of an exchange allotment in Part II of the new allotment plan (Appendix 25 - 1967).

For these entries, the date 4 December 1951 shall be kept in column 2 b).

e) that, at the request of the Administrations concerned, the I.F.R.B. shall proceed, in accordance with the same rules, to modify the entries appearing in the Master International Frequency Register or under examination on ....\*) concerning assignments involving the use of DSB or SSB provided they have given rise to the allotment, by the Conference, of a new or supplementary channel to the Administration concerned.

The modified entries shall be in accordance with the rules laid down by this Conference and with the new allotment plan. They shall bear the date 3 December 1951 in column 2 a) or 4 December 1951 in column 2 b), depending on whether they relate to an allotment in Part I or Part II of the new plan;

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(1) In accordance with C.C.I.R. Recommendation 326 (Geneva 1963) the term used in French to designate this power should be "puissance en crête de modulation".

\*) Deadline for handing in requests, to be fixed by the Conference and which should be shortly after its meeting date.

Ref.

F/10(62)  
(contd.)

f) that the I.F.R.B. shall circulate a questionnaire during the month following .... \*) for entries concerning assignments in accordance with Appendix 25 (1959) but not modified so as to be in accordance with the new plan.

If, within two months, the notifying administration states that the assignment in question has been modified to make it in accordance with the new plan, the procedure referred to under e) above shall be applied.

If, at the expiry of this period, the notifying administration has not replied or has announced that it is continuing to use the frequency not in accordance with the new plan, the question shall be dealt with by the I.F.R.B. as described under point h) below.

g) That the assignments notified to the I.F.R.B. between 4 December 1951 and the date of entry into force of the Final Acts of the present Conference, which have not given rise to a new allotment, shall be dealt with as follows :

g.1) DSB assignments which were in accordance with Appendix 17 (1959).

The notifying Administration shall have up to ....\*) to request the I.F.R.B. that the entry be modified and transferred as SSB to one of the channels chosen by it corresponding in the new Appendix 17 to the upper part or the lower part of the formerly occupied DSB channel in Appendix 17. The peak power (1) shall not be more than twice the mean power notified for the DSB emission.

- The I.F.R.B. shall then make the requested change and the date in column 2 b) shall be kept.
- If the notifying Administration does not make use of this possibility, the matter will be dealt with by the I.F.R.B. as mentioned under h) below.

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\*) Dates one month after the entry into force of the definitive provisions relative to the use of SSB for HF radiotelephony, by coast stations and ship stations respectively.

(1) In accordance with C.C.I.R. Recommendation 326 (Geneva 1963), the term used in French to designate this power should be "puissance en crête de modulation".

Ref.

F/10(62)  
(contd.)

- g.2) SSB assignments which were in accordance with Appendix 17 (1959) or, where applicable, with Appendix 25, and to which the above provisions do not apply.

The provisions of paragraph g.1) above shall apply. However, the frequency of the entry may be modified only to the extent that it may be transferred to the channel of the new Appendix 17 corresponding to the half-channel of the former Appendix (1959) occupied by the assignment in question. If the entry carries the date 3 December 1951 in column 2 a), the date when the assignment in question was notified to the I.F.R.B. shall be entered in column 2 b).

- g.3) SSB or DSB assignments which were not in accordance with Appendix 17 (1959).

Until ....\*) the notifying Administration shall have the possibility of transferring the assignment so that the frequency concerned may keep the same position with respect to the channels of the new Appendix 17 as the original entry had with respect to the corresponding channels of former Appendix 17 (1959). Furthermore, in the case of a DSB assignment, the notifying Administration may request that the DSB assignment be changed into an SSB assignment with a peak power (1) not more than twice the mean power notified for the DSB emission.

Once the above-mentioned procedure has been put into effect, the I.F.R.B. shall proceed to modify the assignment without changing the date appearing in column 2 b).

If the notifying Administration does not make use of this possibility, it shall be questioned by the I.F.R.B. as mentioned in the third sub-paragraph of paragraph g.1) above. The I.F.R.B. shall take the action specified in that sub-paragraph with regard to the entry in question.

- h) Treatment by the I.F.R.B., as a result of the foregoing, of certain entries referred to in paragraphs f), g.1), g.2) and g.3) above.

The I.F.R.B. shall make a new examination of the frequency notices relating to these entries in accordance with Article 9, as if these notices had been sent to it on ....\*).

\*) Dates one month after the entry into force of the definitive provisions relative to the use of SSB for HF radiotelephony, by coast stations and ship stations respectively.

(1) In accordance with C.C.I.R. Recommendation 326 (Geneva 1963), the term used in French to designate this power should be "puissance en crête de modulation".

Ref.

Agenda Item 3

G/77(43)

RESOLUTION No. 3A

Relating to the transfer of frequency assignments for  
coast radiotelegraph stations in the bands exclusively  
allocated to the Maritime Mobile Service  
between 4 000 and 23 000 kc/s

The Maritime World Administrative Radio Conference,  
Geneva, 1967,

decides

1. that use by ships of the radiotelegraph working frequencies in the bands 4 231-4 238, 6 346.5-6 357, 8 462-8 476, 12 693-12 714, 16 924-16 952 and 22 370-22 400 kc/s shall cease by .....

2. that the assignments for coast radiotelegraph stations entered in the Master International Frequency Register on that date shall be transferred in the frequency order in which they are then entered from the bands listed under a) to the corresponding bands listed under b) and provided that no changes are made in basic characteristics shall retain the registration dates (Column 2) then applicable.

a)	b)
4 361- 4 368 kc/s	4 231- 4 238 kc/s
6 514.5-6 525 kc/s	6 346.5-6 357 kc/s
8 731- 8 745 kc/s	8 462- 8 476 kc/s
13 109-13 130 kc/s	12 693-12 714 kc/s
17 262-17 290 kc/s	16 924-16 952 kc/s
22 620-22 650 kc/s	22 370-22 400 kc/s.

Ref.

HOL/80(28)

DRAFT RESOLUTION

Relating to the Notification and Recording of Frequency Assignments to Radiotelephone Coast Stations operating in the Bands allocated exclusively to the Maritime Mobile Service between 4000 and 23 000 kc/s during and after the period of conversion from double sideband to single sideband operation.

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that the Final Acts of this Conference will enter into force on the first of January, 1969;
- b) that the Frequency Allotment Plan for radiotelephone coast stations contained in Appendix 25 to the Radio Regulations will be abrogated on that date;
- c) that radiotelephone coast stations operating in the bands referred to in No. 448 of the Radio Regulations must be equipped for single sideband operation by the first of January 1970, and must be able to use full carrier (A3H) emission to permit communication with radiotelephone ship stations using both double sideband and single sideband emission until the first of January, 1977;
- d) that the use of double sideband emission by radiotelephone ship stations in the bands referred to in No. 447 and the use of A3H emission by radiotelephone coast stations in the bands referred to in No. 448 of the Radio Regulations, must be discontinued by the first of January, 1977;
- e) that some Administrations will change over, at their radiotelephone coast stations, to single sideband operation, or put new frequencies or stations for single sideband operation into use, before the first of January, 1970, where this can be done without causing harmful interference to radiotelephone coast stations operating in accordance with Column 4 of the Table in Appendix 17 (Revised) to the Radio Regulations and using class A3 emission;

Ref.

HOL/80(28)  
(contd.)

f) that, therefore, it will be necessary to provide for a procedure to facilitate the conversion from double sideband to single sideband operation;

resolves

1. during the period between the first of January, 1969, and the first of January, 1977, the notification and recording of frequency assignments to radiotelephone coast stations operating in the bands referred to in No. 448 of the Radio Regulations shall take place in accordance with the provisions laid down in the Annex to this Resolution.

2. As from the first of January, 1977, the notification and recording of frequency assignments to radiotelephone coast stations operating in the bands referred to in No. 448 of the Radio Regulations shall take place in accordance with the provisions of Article 9 of the Radio Regulations (Nos. 486-540), unless otherwise provided for in the Annex to this Resolution.

3. For the notification and recording of frequency assignments to radiotelephone ship stations operating in the bands referred to in No. 447 of the Radio Regulations and used for reception by particular radiotelephone coast stations, the provisions referred to in paragraph 1 or 2 above, as appropriate, shall be applied by analogy.

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Annex

to Draft Resolution

Notification and Recording of Frequency Assignments to Radiotelephone Coast Stations operating in the Bands referred to in No. 448 of the Radio Regulations, during and after the period between 1 January, 1969, and 1 January, 1977.

Section I. Notification of Frequency Assignments

1. § 1.(1) In so far as this has not yet been done, any frequency assignment to a radiotelephone coast

Ref.

HOL/80(28)  
(contd.)

station using single sideband operation and for which, on the corresponding double sideband channel, an entry is listed in the Master Register for double sideband operation, shall be notified to the International Frequency Registration Board in accordance with the provisions of Section I of Article 9 of the Radio Regulations. However, each notice shall reach the Board not later than 1 January, 1970.

2. (2) Similar notice shall be given for any frequency assignment to a radiotelephone coast station using single sideband operation and for which, on the corresponding double sideband channel, no entry is listed in the Master Register for double sideband operation.
3. § 2.(1) For any notification under item 1 above, an Administration shall, in principle, notify only the upper half of the original double sideband channel as the conversion from double sideband to single sideband operation.
4. (2) Exceptionally, however, if harmful interference has been experienced on the upper channel, an Administration may notify the lower channel as the conversion from double sideband to single sideband operation, after agreement has been reached with all interested and affected Administrations.
5. § 3. Exceptionally, any Administration may notify a frequency assignment to a radiotelephone coast station using independent sideband operation, when
6. a) two adjacent sideband channels for the particular station have received favourable findings by the Board;
7. b) the necessary bandwidth is confined within the limits of these two single sideband channels; and
8. c) the Administrations concerned and affected are in agreement.



Ref.

HOL/80(28)  
(contd.)

9. § 4.(1) The deletion of any recorded frequency assignment to a radiotelephone coast station using double sideband operation shall be notified to the Board not later than 1 January, 1970.
10. (2) Similar notice shall be given of the deletion of any recorded frequency assignment to a radiotelephone coast station using A3H emission, but not later than 1 January, 1977.

Section II. Examination of Notices and Recording of  
Frequency Assignments in the Master Register

11. § 5.(1) Frequency assignments notified to the Board between 1 January, 1969, and 1 January, 1970.
12. (2) The provisions of Nos. 496 to 540 of the Radio Regulations shall be applied.
13. (3) Where such assignments are to be recorded in the Master Register, the relevant date shall be entered in Column 2a or 2b in accordance with the provisions of No. 574 or 575 of the Radio Regulations, as appropriate.
14. (4) Any frequency assignment to a radiotelephone coast station satisfactory with respect to No. 501 of the Radio Regulations and with classes A3A, A3H and A3J emission, the assigned frequency of which is in conformity with a frequency listed in Column 2 or 6 of the Table in Appendix 17 (Revised) to the Radio Regulations, the necessary bandwidth of which is confined within the lower or the upper channel provided for in that Table, shall be so indicated by an appropriate symbol in the Remarks Column of the Master Register.
15. (5) Notices concerning frequency assignments to radiotelephone coast stations submitted to the Board under items 5 to 8 above, shall be treated as follows :

Ref.

HOL/80(28)  
(contd.)

16. a) the assignment shall be separately recorded in the Master Register;
17. b) the date to be entered in Column 2a or 2b shall be in accordance with the relevant provisions of Article 9 of the Radio Regulations.
18. § 6.(1) Frequency assignments already recorded in the Master Register for the bands listed in No. 448 of the Radio Regulations on 1 January, 1970.
19. (2) On 1 January, 1970, the Board shall re-examine the frequency assignments already recorded in the Master Register for the bands listed in No. 448 of the Radio Regulations, particularly with respect to their conformity with Section III of Article 35 of the Radio Regulations, and shall record against them a date in Column 2a or 2b as follows.
20. (3) For each listing for a radiotelephone coast station satisfactory with respect to No. 501 of the Radio Regulations and with classes A3A, A3H and A3J emission, the assigned frequency of which is in conformity with a frequency listed in Column 6 or 2 of the Table in Appendix 17 (Revised) to the Radio Regulations, the necessary bandwidth of which is confined within the upper or the lower channel provided for in that Table and which is the conversion to single sideband operation of an allotment in Section I of Appendix 25 to the Radio Regulations previously notified to the Board as having been brought into use, the date of 3 December, 1951, shall be entered in Column 2a.
21. (4) For each listing for a radiotelephone coast station satisfactory with respect to No. 501 of the Radio Regulations and with classes A3A, A3H and A3J emission, the assigned frequency of which is in conformity with a frequency listed in Column 6 or 2 of the Table in Appendix 17 (Revised) to the Radio Regulations, the necessary bandwidth of which is confined within the upper or the lower channel provided for in that Table and which is the conversion to single sideband operation of an allotment in Section II of

Ref.

HOL/80(28)  
(contd.)

Appendix 25 to the Radio Regulations previously notified to the Board as having been brought into use, the provisions of Nos. 496 to 540 of the Radio Regulations shall be applied in the order in which the corresponding notice was received by the Board, except that no account shall be taken of listings with class A3 or A3B emission. The date of 4 December 1951, shall be entered in Column 2a or 2b, depending upon the finding of the Board resulting from the re-examination.

22. (5) For each listing for a radiotelephone coast station satisfactory with respect to No. 501 of the Radio Regulations and with classes A3A, A3H and A3J emission, the assigned frequency of which is in conformity with a frequency listed in Column 2 or 6 of the Table in Appendix 17 (Revised) to the Radio Regulations, the necessary bandwidth of which is confined within the lower or the upper channel provided for in that Table, but which is not the conversion to single sideband of an allotment in Section I or II of Appendix 25 to the Radio Regulations, the provisions of Nos. 496 to 540 of the Radio Regulations shall be applied, except that no account shall be taken of those listings with class A3 or A3B emission. The date to be entered in Column 2a or 2b, depending upon the finding of the Board resulting from the re-examination, shall be that which was relevant at the time No. 579 or 580 was applied.
23. (6) For each remaining listing for a radiotelephone coast station, the date of 1 January, 1970, shall be entered in Column 2b.
24. (7) For assignments to stations other than radiotelephone coast stations, the date of 2 January, 1970, shall be entered in Column 2b.
25. (8) The entries resulting from the application of item 2.1 c) of Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959, shall be deleted.
26. § 7.(1) Frequency assignments notified to the Board after 1 January, 1970.

Ref.

HOL/80(28)  
(contd.)

27. (2) Except for those cases referred to hereafter, notices concerning frequency assignments to radio-telephone coast stations shall be treated in conformity with the provisions of Article 9 of the Radio Regulations (Nos. 486 - 540).
28. (3) Notices referred to in items 5 to 7 above shall be treated in conformity with the provisions of items 15 to 17 above.
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Ref.

I/33(17)

Withdraw Appendix 25 from the Radio Regulations

As a consequence of the suppression of Appendix 25, insert into the Radio Regulations the following Resolution to ensure that the assignments to coast radiotelephone stations recorded in the Master Register and already in service maintain the date in the appropriate entering of column 2.

RESOLUTION No. ...

RELATING TO THE TREATMENT OF NOTICES CONCERNING FREQUENCY  
ASSIGNMENTS TO RADIOTELEPHONE SHIP AND COAST STATIONS IN  
THE BANDS LISTED IN NOS. 447 AND 448 OF THE RADIO REGULATIONS

The World Administrative Radio Conference,  
Geneva, 1967,

considering

- a) that the Final Acts of this Conference will enter into force on 1 January 1969;
- b) that the frequency allotment plan for radiotelephone coast stations contained in Appendix 25 to the Radio Regulations will be abrogated on that date;
- c) that radiotelephone coast stations in the bands listed in No. 448 must be equipped for single sideband operation by 1 January 1971., and must have the capability of using full carrier (A3H) emission to permit communication with both double sideband and single sideband radiotelephone ship stations until 1 January 1977.;
- d) that the use of double sideband emission by radiotelephone ship stations in the bands listed in No. 447, and the use of A3H emission by radiotelephone coast stations in the bands listed in No. 448, must be discontinued by 1 January 1977.;

Ref.

I/33(17)  
(contd.)

- e) that some administrations will convert their radiotelephone coast stations for single sideband operation, or bring new frequencies or stations for single sideband operation into use, before 1 January 1971., where this can be done without causing harmful interference to radiotelephone coast stations using class A3 emission in accordance with the Table in Appendix 17;
- f) that it will therefore be necessary to provide an interim procedure to facilitate the transition from double sideband to single sideband operation;

resolves

- 1. that during the period between the date of the entry into force of the Final Acts of this Conference and 1 January 1971., notices of frequency assignments to stations in the bands listed in No. 448 of the Radio Regulations shall be treated by the I.F.R.B. as follows :
  - 1.1 the provisions of Nos. 496 to 540 shall be applied;
  - 1.2 where such assignments are to be recorded in the Master International Frequency Register, the relevant date shall be entered in Column 2a or 2b in accordance with No. 574 or 575 as appropriate;
  - 1.3 any frequency assignment to a radiotelephone coast station with classes A3A, A3H and A3J emissions found to be satisfactory in respect of No. 501, whose assigned frequency is in conformity with a frequency listed in the table in Appendix 17, and whose necessary bandwidth is confined within either the upper or lower limits of the bandwidth provided for double sideband emissions in that table, shall be so indicated by an appropriate symbol in the remarks column of the Master Register;
- 2. that on 1 January 1971..., the I.F.R.B. shall re-examine the frequency assignments which are contained in the Master Register for the bands listed in No. MOD 448 (Proposal No. I/33(18)) of the Radio Regulations, particularly in respect of their conformity with Appendix 17, and shall record against them a date in Column 2a or 2b as follows :

Ref.

I/33(17)  
(contd.)

2.1 for each listing for a radiotelephone coast station satisfactory in respect of No. 501 and with classes A3A, A3H and A3J emission, whose assigned frequency is in conformity with a frequency listed in the table in Appendix 17, whose necessary bandwidth is confined within either the upper or lower limits of the bandwidth provided for double sideband emissions in that table, and which is the conversion to single sideband operation of an allotment in Section I of Appendix 25 to the Radio Regulations previously notified to the Board as having been brought into use, the date of 3 December 1951, shall be entered in Column 2a. If the corresponding double sideband listing is still in the Master Register, it shall thereupon be deleted.

This procedure is to be applied only to one of the two channels resulting from the conversion to single sideband operation of an allotment in Section I of Appendix 25 to the Radio Regulations; as to the other channel resulting from this conversion, the procedure under 2.4 below is to be applied.

In principle, in the conversion to single sideband operation the radiotelephone coast stations operating in accordance with frequency assignments listed in Appendix 25 to the Radio Regulations shall have an assigned frequency in the upper channel provided in the table, Appendix 17. However, if harmful interferences have been experienced, in order to avoid such interferences the lower channel may be assigned by agreement between the administrations concerned;

2.2 for each listing for a radiotelephone coast station satisfactory in respect of No. 501 and with classes A3A, A3H and A3J emission, whose assigned frequency is in conformity with a frequency listed in the table in Appendix 17, whose necessary bandwidth is confined within either the upper or lower limits of the bandwidth provided for double sideband emissions in that table, and which is the conversion to single sideband operation of an allotment in Section II of Appendix 25 to the Radio Regulations previously notified to the Board as having been brought into use, the provisions of Nos. 496 to 540 shall be applied in the order in which the corresponding notice was received by the Board except that no account shall be taken of listings with class A3 or A3B emission.

Ref.

I/33(17)  
(contd.)

The date of 4 December 1951, shall be entered in Column 2a or 2b, depending upon the finding of the Board resulting from the re-examination.

If the corresponding double sideband listing is still in the Master Register, it shall thereupon be deleted.

This procedure is to be applied only to one of the two channels resulting from the conversion to single sideband operation of an allotment in Section 11 of Appendix 25 to the Radio Regulations; as to the other channel resulting from the above said conversion, the procedure under 2.4 below is to be applied.

In principle, in the conversion to single sideband operation the radiotelephone coast stations operating in accordance with frequency assignments listed in Appendix 25 to the Radio Regulations shall have an assigned frequency in the upper channel provided in the table in Appendix 17. However, if harmful interferences have been experienced, in order to avoid such interferences the lower channel may be assigned by agreement between the administrations concerned;

2.3 for each listing for a radiotelephone coast station satisfactory in respect of No. 501 and with classes A3A, A3H and A3J emission, whose assigned frequency is in conformity with a frequency listed in the table in Appendix 17, whose necessary bandwidth of emission is confined within the upper or lower limits of the bandwidth provided for double sideband emissions in that table, but which is not the conversion to single sideband of an allotment in Section I or II of Appendix 25, the provisions of Nos. 496 to 540 shall be applied in the order in which the corresponding notice was received by the Board, except that no account shall be taken of those listings with class A3 or A3B emission. The date to be entered in Column 2a or 2b, depending upon the finding of the Board resulting from the re-examination, shall be that which was relevant at the time No. 579 or 580 was applied.

2.4 for each remaining listing for a radiotelephone coast station, the date of 1 January 1971., shall be entered in Column 2b;



Ref.

I/33(17)  
(contd.)

2.5 for assignments to stations other than radiotelephone coast stations, the date of 2 January 1971..., shall be entered in Column 2b;

2.6 those entries resulting from the application of No. 2.1(c) of Resolution No. 1 of the Administrative Radio Conference, Geneva, 1959, shall be deleted;

3. that each listing for a radiotelephone coast station using A3 or A3B emission remaining in the Master Register on 1 January 1971..., and each radiotelephone coast station using A3H emission after 1 January 1971..., shall thereafter be treated as an assignment in contravention of the Radio Regulations. Exceptionally however, where two adjacent single sideband channels for a particular station have received satisfactory findings by the Board, independent sideband operation whose necessary bandwidth of emission is confined within the limits of those two channels shall not be considered as being in contravention of the Radio Regulations, where used by agreement between the administrations concerned and affected.

4. that, by analogy, the Board shall apply the above provisions, as appropriate, to the notices concerning frequencies in the bands listed in No. MOD 447 (Proposal No. I/33(18)) of the Radio Regulations, to be used for reception by particular radiotelephone coast stations, except that the interim period shall extend to 1 January 1977..., and the re-examination of the listings in the Master Register shall take place on that date;

invites

administrations to notify to the I.F.R.B. as soon as possible the cancellation of frequency assignments to radiotelephone stations employing double sideband emission released as a consequence of the conversion of the corresponding stations for the use of single sideband emission.

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Ref.

I/33(22)

RESOLUTION No. ...

RELATING TO THE CHANGE OF FREQUENCY BAND LIMITS FOR  
RADIOTELEGRAPH COAST STATIONS IN THE BANDS  
BETWEEN 4000 AND 27 500 KC/S

The World Administrative Radio Conference, Geneva,  
1967,

considering

a) that pursuant to the revision of Appendices 15  
and 17 the frequency band limits for radiotelegraph coast  
stations have been modified;

b) that the existing assignments of the radiotele-  
graph coast stations comprised within the limits from

4364.5 - 4368 kc/s  
6518 - 6525 kc/s  
8735 - 8745 kc/s  
13 112.4 - 13 130 kc/s  
17 261.9 - 17 290 kc/s  
22.625.4 - 22 650 kc/s

must be reallocated to make such frequencies available to  
radiotelephone coast stations;

c) that pursuant to the revision of Section A of  
Appendix 15 the frequencies comprised within the limits from

4231 - 4238 kc/s  
6346 - 6357 kc/s  
8461 - 8476 kc/s  
12 692 - 12 714 kc/s  
16 922 - 16 952 kc/s  
22 368 - 22 400 kc/s.

are now available for radiotelegraph coast stations;

Ref.

I/33(22)  
(contd.)

noting

- that the frequency bands under considering c) are wider than those under considering b);
- that for this reason it is possible to ensure the frequency reallocation to radiotelegraph coast stations, which must make their frequencies available for radiotelephone coast stations.

resolves

- that the radiotelegraph coast stations assignments already entered in the Master Register and operating in the frequency bands under considering b) be reallocated in the frequency bands under considering c);
- that the above assignments enter the appropriate part of Column 2 bearing the same date they now have in the Master Register.

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Draft Resolutions  
relating to Item 4  
of the agenda

Item 4 : Possible revision of Appendix 18  
to the Radio Regulations.

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F/11(70)

DRAFT RESOLUTION  
RELATIVE TO THE SEPARATION BETWEEN ADJACENT CHANNELS  
ASSIGNED IN THE VHF BAND (156 - 174 MHz) FOR THE  
MARITIME MOBILE SERVICE  
(See Appendix 18)

The Maritime Conference,

considering

that it will be desirable to envisage a separation of 25 kHz instead of 50 kHz between adjacent channels assigned in the 156 - 174 MHz band for use by the Maritime Mobile Service :

that it is desirable to make the necessary arrangements for smooth passage from a separation of 50 kHz to a separation of 25 kHz between adjacent assigned channels;

resolves

that equipment operating in the VHF band (156 - 174 MHz) brought into service on board ships after 1 January 1970 must be capable, after simple conversion, of operating with a separation of 25 kHz between adjacent assigned channels. The transmitters of such equipment must meet the necessary conditions of stability as soon as they are brought into service.

Reasons :

The maritime mobile service on VHF is expanding rapidly. It seems premature to amend Appendix 18 with a view to providing twice the number of channels with a spacing of 25 kHz instead of 50 kHz.

However, it would appear to be desirable for this conference to contemplate the conversion of equipment which will have to work with a narrower separation between adjacent channels with class of emission 16 F3 rather than 36 F3. This operation should not raise any difficulties, since land mobile services are already being developed in the same frequency band with a separation of 25 or 20 kHz between adjacent channels.

Ref.

G/112(54)

DRAFT RESOLUTION RELATING TO THE CHANNEL SPACING OF TRANSMITTING  
FREQUENCIES ALLOTTED TO THE INTERNATIONAL MARITIME MOBILE SERVICE  
FOR RADIOTELEPHONY IN THE BAND 156-174 Mc/s

(See Appendix 18 and Article 35A)

The Maritime Radio Conference, Geneva 1967,

considering

- a) the expanding use of the maritime mobile radiotelephone frequencies in the VHF band between 156 Mc/s and 174 Mc/s;
- b) the increasing demand for additional channels for Port Operations (including Pilotage, Tug and other services);
- c) the need for additional VHF channels for short-distance communications in the maritime mobile service to relieve the congestion and saturation on the maritime mobile frequencies in the band 1605 kc/s to 3800 kc/s;
- d) that this expanding use of VHF cannot be fully met by the existing available channels given in the Table of Transmitting Frequencies in Appendix 18;
- e) that additional channels could be made available by reducing the present channel spacing of 50 kc/s to 25 kc/s;

resolves

- 1. that the channel spacing for international maritime mobile VHF radiotelephone services shall be reduced from 50 kc/s to 25 kc/s;
- 2. that the additional channels shall be obtained by inter-leaving the 25 kc/s channels midway between the existing 50 kc/s channels given in Appendix 18 of the Radio Regulations, Geneva, 1959 so as to cause the least disturbance to existing services;



Ref.

G/112(54)  
(cont.)

3. that the 25 kc/s channels should be allocated for specific purposes;
  4. that the technical characteristics of equipment for the international maritime mobile VHF radiotelephone service shall be in accordance with C.C.I.R. Recommendations.
  5. that from 1 July 1979, guard bands on either side of 156.80 Mc/s shall be 156.7625 to 156.7875 Mc/s and 156.8125 to 156.8375 Mc/s;
  6. that the transition from a channel spacing of 50 kc/s to that of 25 kc/s shall be in accordance with the following :
    - date of commencement of implementation 1.1.69
    - date by which all existing transmitters shall be modified to  $\pm 5$  kc/s deviation, and receiver audio gain increased, where necessary 1.7.69
    - date by which all coast station receivers shall be modified to meet the selectivity requirements 1.7.69
    - date on which all new equipment shall conform to 25 kc/s standards 1.7.69
    - date by which channel allocations on interleaved channels may commence where possible See draft Recommendation which follows.
    - date by which all equipments shall conform to 25 kc/s standards and all interleaved channels be introduced. 1.7.79
-

Ref.

G/112(56)

DRAFT RECOMMENDATION No. .... RELATING TO THE INTRODUCTION OF A  
CHANNEL SPACING OF 25 kc/s IN THE VHF MARITIME MOBILE RADIOTELE-  
PHONE SERVICE

The Maritime Radio Conference, Geneva, 1967

considering

- a) the future need for additional channels in the VHF maritime mobile radiotelephone service;
- b) that additional channels may best be provided by reducing the channel spacing to 25 kc/s and by introducing the new channels midway between the present channels;
- c) that the technical standards for a channel spacing of 25 kc/s are given in Appendices ... (or are under study by the C.C.I.R.);
- d) that equipment for 50 kc/s channel spacing now in service should be given an acceptable economic life;
- e) that, in general, the new interleaved channels cannot be fully used until all equipments are suitable for a channel spacing of 25 kc/s;

recommends

- 1. that the date by which channel allocations on the interleaved channels may commence should be .....  
(This date to be five years after the date on which all new equipment should conform to the new standards for 25 kc/s channel spacing.)
-

Ref.

I/34(23)

Agenda Item 4 - Possible revision of Appendix 18 to the Radio Regulations.

Foreword

The Mobile Maritime Service in the VHF field is at present ruled by Appendix 18 to the Radio Regulations with a channel spacing of 50 kc/s.

While this spacing was justified by the status of the technique existing ten years ago, it could certainly be reduced today to 25 kc/s, thus doubling the number of available channels.

However, as the channels now available are more than sufficient to meet the present requirements of the Mobile Maritime Service and to satisfy the growing demand in the near future, the reduction of the spacing from 50 to 25 kc/s would not seem justified.

The possibility can be foreseen however that in the future the development of the Mobile Maritime Service in VHF might require a greater number of channels and therefore make necessary the adoption of a 25 kc/s spacing.

Although establishing at the present time the conversion date from 50 to 25 kc/s would be premature, it would nevertheless be desirable - in order to make less onerous the consequences of the conversion - that the Administrations take into account this possibility and equip coast and ship stations with apparatus easily adaptable to the 25 kc/s spacing.

Therefore, it is proposed to insert the following Recommendation in the Radio Regulations.

Recommendation No. ...

Relating to equipments for Mobile Maritime Radiotelephone  
Service in the 156-174 Mc/s band

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that the Mobile Maritime Service in the 156-174 Mc/s band is rapidly increasing;
- b) that the 2 Mc/s band is considerably congested : drawback that can be minimized but not completely suppressed by the conversion from DSB to SSB;
- c) that as a result of the conversion from DSB to SSB the present radiotelephone equipment of the stations operating in the 2 Mc/s band shall be substituted;

Ref.

I/34(23)  
(cont.)

d) that several ships will find it convenient to change from the 2 Mc/s to the 156-174 Mc/s band for small-distance communications;

e) that the saturation of channels available at present with a 50 kc/s spacing in the 156-174 Mc/s band can be foreseen in the not-too-distant future, so that it will be necessary to increase the number of channels by adopting a 25 kc/s spacing;

f) that for the 25 kc/s spacing, the equipment should have characteristics similar to those listed below for information purposes :

- 1) transmitter frequency tolerance not above  $10.10^{-6}$ ;
- 2) receiver frequency tolerance not above  $10.10^{-6}$ ;
- 3) maximum frequency deviation  $\pm 5$  kc/s;

g) that equipment for 50 kc/s spacing can be adapted to 25 kc/s spacing by :

- 1) reducing the frequency tolerance of transmitter and receiver;
- 2) reducing the transmitter's frequency deviation;
- 3) reducing the IF bandwidth of the receiver in order to increase its selectivity;
- 4) increasing the receiver's AF gain.

Recommends Administrations

to consider the opportunity to utilize, for the new installations in coast and ship stations of the Mobile Maritime Service in the 156-174 Mc/s band, equipments built in such a way to make as simple as possible their adaptation to 25 kc/s spacing.

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Ref.

ISL/NOR/S/105(1)

Draft RESOLUTION No. ....

The World Administrative Radio Conference, Geneva 1967,

considering,

that the requirements for short distance radiocommunication in the Maritime Mobile Service is rapidly increasing;

that the use of VHF is most suitable for such radiocommunication;

that the number of channels in the VHF band now available for maritime mobile service is likely to become insufficient in the near future in high traffic areas;

that this foreseeable lack of channels cannot be compensated by frequencies outside the bands now allocated to the maritime mobile service;

that the present state of technique allows the successful and economical use of a channel spacing in VHF mobile radiocommunication of 25 kc/s or less, proved by the use of such channelling since many years in the land mobile service;

that, consequently, a transition in the future from the present channel spacing of 50 kc/s into 25 kc/s is unavoidable;

that, because of great investments in new radio equipments during the last years, many Administrations are not yet prepared to specify a date for the transition;

that the transition, when eventually decided, shall be realized with as little difficulties, financial and other, as possible;

resolves,

that all VHF radio equipments for maritime mobile service installed after 1 July, 1969, shall be so designed that they can easily be converted for operation in 25 kc/s channel spacing instead of 50 kc/s.

Ref.

Proposal :

In Japan, in order to cope with great increase in radiotelephone traffic in the 164 - 174 Mc/s band connecting a ship with subscribers of the land telephone system, the operation in this band is already in practice by channel spacing of 25 kc/s. In the near future, in the international VHF channels too, it is considered necessary to reduce the spacing between channels from 50 kc/s to 25 kc/s for the relief of traffic congestion.

Therefore, it is desirable to decide on its future course and prepare for a smooth transition in this Conference.

For this reason, the following Recommendation is proposed :

J/87(55)

RECOMMENDATION No.

Relating to reduction in channel bandwidth in the  
VHF band (156 - 174 Mc/s) for radiotelephony in  
the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that for the relief of traffic congestion it is desirable to reduce the channel bandwidth from 50 kc/s to 25 kc/s on frequencies used for VHF radiotelephony in the Maritime Mobile Service;
- b) that it is necessary to decide promptly on technical and operational requisites for facilitating the reduction in bandwidth mentioned above;

invites the C.C.I.R.

to carry out research in technique and operation necessary for reducing the channel bandwidth from 50 kc/s to 25 kc/s in the band 156 - 174 Mc/s for radiotelephony in the maritime mobile service, to prepare the report on these matters and to draw up the recommendation before the next World Administrative Radio Conference concerned;

and invites the Administrations

to study this problem for the purpose of transferring the channel bandwidth from 50 kc/s to 25 kc/s in the above frequency band, and to submit proposals therefore to the next World Administrative Radio Conference concerned.

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Ref.

Draft Resolution No. \_\_\_\_

USA/55(49)

Relating to permissive use of the intermediate  
(25 kc/s) channels between the (50 kc/s) channels  
listed in Appendix 18 in the band 156-174 Mc/s  
for radiotelephony in the maritime mobile service

The World Administrative Radio Conference, Geneva, 1967,

considering,

- a) the trend towards congestion and saturation on the maritime mobile radiotelephony frequencies at 2 Mc/s, and above, in various areas of the world;
- b) the capability of VHF to fulfil many of the short-distance communication requirements, both national and international, in the maritime mobile service;
- c) the rapidly expanding use of VHF which is being made to meet national and international short-distance communication needs in the maritime mobile service, which cannot be fully met by the existing channels;
- d) that a reduction in the spacing between channels from 50 kc/s to 25 kc/s would approximately double the number of assignable maritime mobile radiotelephony channels in the 156-174 Mc/s band;
- e) that the need for additional VHF channels is not uniformly distributed throughout the world, a situation such that some administrations require access to an increased number of channels, while other administrations do not, and will not in the near future, require additional VHF channels;
- f) that, on the one hand, those administrations which need additional VHF channels should not be precluded from their use by the lack of need by other administrations;
- g) that, on the other hand, those administrations which do not need additional VHF channels should not be unduly inconvenienced in order that an increased number of channels may be made available to other administrations;

believing,

that full encouragement should be given to the use of VHF in order to lessen the congestion on maritime mobile service frequencies at 2 Mc/s, and above;

Ref.

USA/55(49) resolves,  
(cont.)

1. That assignments to stations of the intermediate (25 kc/s) channels between those appearing in Appendix 18 shall be on a national basis; or, as appropriate, by area or regional agreement;
2. That those channels of Appendix 18 which were in use by an administration for radiotelephony in the maritime mobile service on the effective date of the Final Acts of this Conference should be accorded protection from harmful interference from use of the intermediate (25 kc/s) channels between those (50 kc/s) channels heretofore listed in Appendix 18;
3. That, where use of the intermediate (25 kc/s) channels between those listed in Appendix 18 is required by an administration, adequate technical measures should be employed to avoid harmful interference to operations on the (50 kc/s) channels heretofore listed in Appendix 18;

and noting,

- i) that the reduction of frequency deviation of ship and coast station transmitters from  $\pm 15$  kc/s to  $\pm 5$  kc/s is an essential step to maintaining compatibility between ship and coast station equipments in an environment where channel bandwidths of both 50 kc/s and 25 kc/s are employed;
- ii) that the reduction of frequency deviation of ship and coast station transmitters from  $\pm 15$  kc/s to  $\pm 5$  kc/s will permit those administrations desiring to do so to equip their ship and coast stations with new or modified receiving equipment having the capability of operating in a channel spacing environment of 25 kc/s;

further resolves,

to urge administrations to reduce the frequency deviation of ship and coast station transmitters from  $\pm 15$  kc/s to  $\pm 5$  kc/s at the earliest practicable date, to the end that all such changes shall have been accomplished by the effective date of the Final Acts of this Conference.

Reasons :

To provide for the permissive use of intermediate channels between those appearing in Appendix 18; amendment of associated technical criteria; and other consequential amendments.



Draft Resolutions  
relating to Item 5  
of the agenda

Item 5 : Classes of emission to be used on the  
international distress and calling  
frequencies 500 kc/s and 2182 kc/s.

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Ref.

POL/83(4)

DRAFT RESOLUTION No. ...

relating to the necessity of asking the I.M.C.O. Safety Committee to introduce into the International Convention for the Safety of Life at Sea, London, 1960, the amendments assuring keeping watch on the international distress frequency for radiotelephony by all ship stations

The World Administrative Radio Conference, Geneva, 1967,

considering that

- a) so far the ship stations equipped for radiotelegraphy traffic but having as well the radiotelephony means of communications were keeping watch only on the international distress frequency for radiotelegraphy,
- b) big ocean-going ships keeping watch on the international distress frequency for radiotelegraphy could not hear distress calls of small craft calling on the distress frequency for radiotelephony,
- c) to increase the safety of small ships and to improve the efficacy of assistance to the shipwreck survivors big ships should keep watch on both international distress frequencies - for radiotelegraphy as well as for radiotelephony - simultaneously,
- d) this Conference has adopted the necessary amendment of the Radio Regulations, Geneva, 1959, concerning this matter,

requests the Secretary General

to ask the I.M.C.O. Safety Committee to introduce into the pertinent part of the International Convention for Safety of Life at Sea, London, 1960, the rule imposing on all ship stations the duty to keep watch on the international distress frequency for radiotelephony 2182 kc/s.

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Background :

So far ship stations equipped for radiotelegraphy traffic, but having as well the radiotelephony means of communication were keeping watch only on the international distress frequency for radiotelegraphy 500 kc/s (International Convention for the Safety of Life at Sea, Section IV, part B, rule 6).

In this situation big ocean-going ships watching only on 500 kc/s could not hear distress calls of small craft transmitted on 2182 kc/s.

Ref.

POL/83(3)  
(cont.)

To increase the safety of small ships and improve efficacy of assistance to shipwreck survivors the big ships should keep watch on both international distress frequencies 500 kc/s and simultaneously.

The introduction among the ship equipment of automatic position indicating beacon signals helping to locate the position of mobile station in distress and to look for survivors equipped with the above mentioned beacons working on 2182 kc/s stresses the necessity of keeping watch on this frequency and the need of introducing of this duty as a rule to all ship stations.

Draft Resolutions  
relating to Item 6  
of the agenda

Item 6 : Examination of the pertinent portions of  
the revised International Code of Signals.

(See also a Draft Recommendation  
about this Agenda Item in page 795)

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Ref.

F/I3(80)

DRAFT RESOLUTION

RELATIVE TO THE EXAMINATION OF PERTINENT PORTIONS  
OF THE REVISED INTERNATIONAL CODE OF SIGNALS OF THE  
INTER-GOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION

The Maritime Conference (Geneva 1967),

considering

- a) that the Maritime Safety Committee of the Inter-Governmental Maritime Consultative Organization (I.M.C.O.) has prepared a revised International Code of Signals which constitutes a radio-telephone code;
- b) that some aspects of this radiotelephone code differ from the provisions of the 1959 Radio Regulations (see Annex I);
- c) that the present Conference has amended certain points of the Radio Regulations to bring those parts which relate exclusively to the Maritime Mobile Service into line with the revised International Code of Signals of I.M.C.O.;
- d) that the Radio Regulations are the responsibility of the International Telecommunication Union;
- e) that it is desirable to define the responsibility and competence of the I.T.U. and I.M.C.O. regarding the usage of international signals in radiocommunication;

resolves

- 1) that the International Telecommunication Union is competent to determine the choice and conditions of use of international signals relating to radiocommunication procedures;
- 2) that it should be left to the Inter-Governmental Maritime Consultative Organization (I.M.C.O.) to determine the choice and conditions of use of signals relating to matters other than radiocommunication procedures;
- 3) that there is no objection to the adoption of the revised International Code of Signals; however, the attention of I.M.C.O. should be drawn to the existence of abbreviations having a different meaning in the Code and Radio Regulations, which may - in radio-telegraphy only - involve certain drawbacks;

requests the Secretary-General of the International Telecommunication Union to send the Secretary-General of I.M.C.O. the report prepared by the World Maritime Radio Conference (Geneva 1967) annexed hereto.

Ref.

F/13(80)  
(cont.)

Annex to the draft Resolution  
relative to the examination of the pertinent portions  
of the revised International Code of Signals of I.M.C.O.

Material submitted to the Conference with a view to the preparation of the Report to be sent to I.M.C.O.

1. The list of amendments made by the Conference to the Radio Regulations to allow for the revised International Code of Signals will be forwarded to I.M.C.O.
2. The report will also contain comments by the Conference on certain signals in the revised International Code of Signals :
  - the practical application of which involves certain drawbacks (Chapter VIII),
  - which have a different meaning from that attributed to them in the Radio Regulations (Chapter X).

With regard to these latter signals, it would be desirable for I.M.C.O. to draw attention to the possible confusion which might arise if they are used. It could do so for example by including an appropriate note to this effect.

CHAPTER VIII - Radiotelephony

- Paragraph 3 "Method of attack" and paragraph 4 "Reply to calls"

Use of the abbreviation "DE" (DELTA ECHO) in the procedure used in radiotelephony for calling and for answering calls might be a source of confusion if the call signs of the called or calling stations end or begin with "DE".



Ref.

F/13(80)  
(cont.)

CHAPTER X - Procedure signals

- General section - Two-letter signals

Signals having a different meaning in the Radio Regulations and the revised International Code of Signals of I.M.C.O.

Signal	RR	Code of signals
BK	Interruption in transmission	You are above me
BQ	Reply to RQ	Aircraft speed
CL	I am closing my station	Assistance refused
CP	Call to 2 or more specified stations	Am coming to your assistance
DF	Bearing at ... hours	Vessel ready to serve
DO	Bearing doubtful	Watch vessel situated
ER	Here ...	Position at time indicated
NW	Now	Draught in ballast
OL	Ocean letter	Radar piloting
TU	Thank you	Am cutting the ropes
WD	Word(s) or Group(s)	Ice breaker not available
XQ	Note in the fixed service	What kind of weather do you have?

- Medical section - Three-letter signals

Signals having a different meaning in the Radio Regulations and the revised International Code of Signals of I.M.C.O.

Signal	RR	Code of signals
MIN	Minute (or minutes)	Very dark stools
MPH	Statute miles per hour	Is no longer suffering
MSG	Message	Slight movements and massage every day

3. Comparison between the revised International Code of Signals and the "Q" code (Appendix 13, section I)

A number of signals included in the revised International Code of Signals have the same meaning as certain signals included in Appendix 13, Section I to the R.R. (Q Code).

The conference considered that it was not competent to amend the latter code which is used by services other than the Maritime Mobile Service.

Ref.

USA/21(44)

Resolution No. .... - Relating to Responsibility for  
International Signals

The World Administrative Radio Conference, Geneva, 1967,

considering

- (a) that the Administrative Radio Conference, Atlantic City, 1947, suggested that the International Code of Signals should fall within the responsibility of the Inter-Governmental Maritime Consultative Organization (I.M.C.O.);
- (b) that the I.M.C.O. has prepared a revised International Code of Signals;
- (c) that the revised International Code of Signals was adopted by the Fourth Assembly of the I.M.C.O. in 1965, to come into effect on 1 January 1969;
- (d) that this Conference has amended the Radio Regulations to make them consistent with the revised International Code of Signals;
- (e) that the regulation of radiocommunication is within the responsibility of the International Telecommunication Union (I.T.U.);
- (f) that it is necessary to determine the responsibility for those signals in international usage which may be used in both radiocommunication and in other methods of signalling;

resolves

- 1. that those signals identified primarily with radiocommunication should be the responsibility of the I.T.U.;
- 2. that those signals identified primarily with other aspects such as navigation and search and rescue activities should be the responsibility of the I.M.C.O.;
- 3. that where considered desirable, signals within the responsibility of one organization may be included for information in the publications of the other organization, suitably annotated as to indicate their source;
- 4. that the respective Secretaries General should, where doubt exists, confer and decide as to which organization will assume the responsibility for a particular signal;

requests the Secretary-General

- 1. to refer to the I.M.C.O. the substance of this Resolution for its concurrence.

Draft Resolutions  
relating to the Establishment of a Manual  
for use by the Maritime Mobile Service

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Ref.

G/62(70) Comments

1. As the result of Resolution No. 12 of the Administrative Radio Conference, Geneva, 1959, a Manual for Use by the Mobile Services was prepared and published. However, provision for its carriage as an alternative to the Radio Regulations and the Additional Radio Regulations was not made : neither was provision made for the revision of the Manual following a revision of the Radio Regulations and the Additional Radio Regulations.

2. It will be necessary therefore for authority to be given either for the preparation and issue of a new Manual after each revision of the Radio Regulations and Additional Radio Regulations or alternatively for its revision.

Resolution No.

Relating to the Establishment of a Manual  
for use by the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,

considering

a) that the provisions of the Radio Regulations, Geneva, 1959, applicable to the maritime mobile service include :

- provisions directly related to the operation of the maritime mobile service,

- other provisions not directly related to these services;

b) that administrations have submitted to the World Administrative Conference, Geneva, 1967, proposals to revise and reclassify those provisions directly related to the operation of the maritime mobile service;

c) that a new layout for the provisions facilitating the understanding of the technical stipulations and service procedure regulations concerning radiotelegraphy and radiotelephony, as well as the rules regarding radio-telegrams, radiotelephone calls, and distress traffic has been provided;

d) that this new layout would be of great value to the maritime mobile service, and would enable administrations to issue, if they wish to do so, national regulations based upon internationally self-contained sets of rules for the different services;

Ref.

G/62 (70)  
(cont.)

- e) that it would be very useful to publish in a manual those provisions relating directly to the operation of the maritime mobile services;
- f) that a manual for use by the mobile services was prepared and published by the Secretary-General in accordance with Resolution No.12 of the Administrative Radio Conference, Geneva, 1959;
- g) that this manual revised to incorporate the amendments agreed at the World Administrative Radio Conference, Geneva, 1967, could form a basis for the manual for use by the Maritime Mobile Services;
- h) that provision has been made in Appendix 11 for the carriage of the Manual by ship stations as an alternative to the Radio Regulations and Additional Radio Regulations and such provisions of the Convention as relate to the radiocommunications service on board ship;
- i) that the other mobile services have not expressed a need for a manual applicable only to those services;

resolves

1. that the provisions of the Radio Regulations and the Additional Radio Regulations which deal with the operation of the Maritime Mobile Service as revised by the World Administrative Radio Conference, Geneva, 1967, together with those provisions of the International Telecommunication Convention, lists of certain provisions of the Telegraph Regulations and of the Telephone Regulations shall be assembled by the Secretary-General in a manual entitled "Manual for Use by the Maritime Mobile Service";
2. that the Secretary-General shall, as soon as possible after the conclusion of this Conference, publish the Manual to ensure its availability, by the date the revised Radio Regulations and Additional Radio Regulations come into force;
3. that the Secretary-General revise the Manual as necessary to keep it up-to-date.

Ref.

USA/28 (65)

Resolution No.....

Relating to the Establishment of a manual for use  
by the maritime mobile service

The World Administrative Radio Conference, Geneva, 1967,

considering,

- a) that the provisions of the Radio Regulations, Geneva, 1959, applicable to the maritime mobile service include, in particular :
  - provisions directly related to the operation of the maritime mobile service,
  - other provisions not directly related to this service;
- b) that it would be useful to administrations to have available to stations in the maritime mobile service a compact publication containing those Radio Regulations, Additional Radio Regulations, and portions of the Convention necessary and useful for operation of those stations;
- c) that a manual for use by the mobile services (1961) was prepared by the Secretary General pursuant to Resolution No. 12 of the Administrative Radio Conference, Geneva, 1959, and that it with minor revisions could form a basis for the manual for use by the Maritime Mobile Service;
- d) that the other mobile services have not indicated a need for a manual similar to that which would be useful to the maritime mobile service;

resolves

1. that the provisions of the Radio Regulations, the additional radio regulations and portions of the Convention applicable and useful to stations in the maritime mobile service be compiled into a compact manual, designated as the manual for use by the Maritime Mobile Service, by the Secretary General in consultation with administrations as necessary;
2. that the Secretary General publish the Manual as soon as practicable after the conclusion of this Conference to insure its availability as an official publication of the I.T.U. as of the date the Final Acts of this Conference come into force;
3. that the Secretary General revise the Manual as required to keep it current with the Radio Regulations.

Reasons :

To permit use of a more compact and inexpensive publication for use by the maritime mobile service on board those ship stations where the Radio Regulations and additional Radio Regulations are required by Appendix 11.

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**Draft Recommendation**  
**relating to Agenda Item 2.4**

**Item 2.4 : The desirability of accommodating requirements  
for oceanographic communications**

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Ref.

Draft RECOMMENDATION No.....

DNK/HOR/S/104(1)

The World Radio Administrative Conference, Geneva 1967,

considering,

that a Joint Meeting of Experts on Telecommunications, Oceanography and Meteorology, convened in Paris 2-6 September 1963 by the Intergovernmental Oceanographic Commission recommended that the next appropriate Administrative Radio Conference consider a suitable solution to the problem of satisfying the radiocommunication needs of the "Ocean Data Service";

that it appears plausible that one family of HF bands for world-wide use is necessary to accomplish the automatic transmission from and telecommand of ocean data collecting stations;

that this type of radiocommunication does not fall under any of the services defined in the Radio Regulations;

that the extensive use of the HF bands allocated to the maritime mobile service is rapidly increasing as a consequence of the growing number of ships equipped with and using radio telephony;

that an accommodation of other radiocommunication in the HF bands allocated to the maritime mobile service would, consequently, cause severe difficulties to the effective handling of the maritime mobile radio traffic;

that the Extraordinary Administrative Radio Conference for the preparation of a Revised Allotment Plan for the Aeronautical Mobile (R) Service, Geneva 1966, did not allot certain small parts of the edges of the HF bands allocated to the aeronautical mobile (R) service;

recommends,

that, pending the decision of an appropriate Radio Conference with the term of reference to revise Article 5 of the Radio Regulations, the non-allotted parts of the HF bands allocated to the aeronautical mobile (R) service be used to a reasonable extent by oceanographic data collecting stations under the conditions of No. 115 of the Radio Regulations.

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DNK/NOR/S/104(1)

Reasons :

The maritime mobile HF bands being highly congested, a situation which is estimated to become worse every year, it appears impossible to give place in these bands to another type of radio traffic, which does not mainly concern maritime mobile questions. The oceanographic data collection must be considered as a contribution to the improved knowledge of geophysics, which is of great value to many different kinds of human activity. The interaction between oceanography and meteorology is obvious.

It may be questioned whether the present Conference can allocate frequencies to other services even in the maritime mobile bands - it certainly is beyond its competence to allocate frequencies in other bands. The present proposal is therefore written in the form of a recommendation only.

The parts of the frequency band edges referred to in the recommendation are the following :

<u>Frequency</u>		<u>Bandwidth</u>
kc/s		kc/s
2850.0	- 2850.5	0.5
3400.0	- 3400.5	0.5
3499.5	- 3500.0	0.5
4650.0	- 4650.5	0.5
4699.5	- 4700.0	0.5
5480.0	- 5480.5	0.5
6525.0	- 6525.5	0.5
6683.5	- 6685.0	1.5
8815.0	- 8815.5	0.5
8963.5	- 8965.0	1.5
10 097.0	- 10 100.0	3.0
11 395.0	- 11 400.0	5.0
17 900.0	- 17 905.0	5.0
17 969.0	- 17 970.0	1.0

In all, 21 kc/s are thus available, distributed amongst 14 bands over the entire HF range. The lower bands are narrow, but in view of the low speed of information necessary for this type of communication these bands should be fully usable, if the technique is adapted to the available bandwidth.

Draft Recommendation  
relating to Agenda Item 6

Item 6 : Examination of the pertinent portions of  
the revised International Code of Signals.

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In Document No. 44-E, page 2, Canada expressed the view that this W.A.R.C. is not competent to revise Appendix 13 of the Radio Regulations. Acknowledging I.M.C.O.'s responsibility for maritime signals and abbreviations relating to distress, search and rescue, safety of navigation and medical assistance, it was suggested that I.M.C.O. be invited to make use of the Q-code series QOA-QQZ for that purpose.

It is proposed, therefore, that the Conference adopt the following Recommendation :

Ref.

CAN/106(39) RECOMMENDATION .... to the Inter-governmental Maritime Consultative Organization relating to the International Code of Signals.

The World Administrative Radio Conference, 1967,

considering,

- a) that I.M.C.O. has primary responsibility for maritime signals and abbreviations relating to distress, search and rescue, safety of navigation and medical assistance;
- b) that I.M.C.O., in compliance with Recommendation 42 of the International Conference on Safety of Life at Sea, 1960, has developed an International Code of Signals, primarily for use in cases of language difficulties
- c) that the Q-code series QOA to QQZ is reserved for the maritime service but has not been used, noting that the series QAA-QNZ reserved for the aeronautical service has been implemented;
- d) that this Conference could reserve an additional block of Q signals for use by the maritime service, if the present series is inadequate;
- e) that any revision of Appendix 13 of the Radio Regulations should be delayed until the International Code of Signals becomes fully effective;

recommends,

that I.M.C.O., in cooperation with the I.T.U., amend the International Code of Signals to include a series of signals relating to distress, search and rescue, safety of navigation and medical assistance, with corresponding significations in the Q-code series QOA-QQZ and any additional series reserved for the maritime service.

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**Draft Recommendations  
relating to Agenda Item 7.5**

**Item 7.5 : Frequencies to be assigned for the  
transmission by television of port  
radar images.**

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CAN/45(37)

Proposal

Since there are no world-wide allocations available to the maritime mobile service for the purpose nor are there any existing port-radar image transmission systems suitable for international acceptance, Canada considers that the need and operational requirements should be studied by Administrations, the I.M.C.O. and the C.C.I.R. as suggested in the following

Recommendation :

Recommendation

Transmission by television of port radar images to ships  
The World Administrative Radio Conference 1967

Considering

- a) that there may be a future requirement, for the transmission by television of port radar images from shore to ships, in congested waters;
- b) that the table of frequency allocations does not provide spectrum for this purpose.

Recommends

- a) that as a matter of urgency, Administrations, and the Inter-Governmental Maritime Consultative Organization study the operational need and the parameters for such systems and inform the Secretary-General of the results of these studies;
- b) that if such an operational need does exist the C.C.I.R. be invited to determine the most suitable order of frequencies required for this purpose, and the technical parameters to be met by such systems;
- c) that Administrations be prepared to take a decision in this matter at the next competent W.A.R.C.

HOL/75(25)

Frequencies to be assigned for the transmission  
by television of port radar images

DRAFT RECOMMENDATION

to the C.C.I.R. relating to the transmission by  
television of port radar images

The World Administrative Radio Conference, Geneva 1967,

having noted

that some administrations have drawn attention to a need to provide for the transmission of port radar images by means of television when the use of normal radar systems on board ships sailing a harbour area would not appear to be feasible;

considering

a) that the use of such port radar images in the circumstances referred to above will contribute to the safety of navigation and thereby of human life in harbour areas;

b) that no sufficient information is available as to

- the minimum technical demands to be made upon the transmission by television of port radar images, and
- the frequency bands in which such a system could best be accommodated,

so as to provide for satisfactory operation;

c) that, however, the transmission by television of port radar images, although being in the interest of shipping, does not come under the definition of the Maritime Mobile Service as given in No. 36 of the Radio Regulations and that, therefore, the Conference is not competent to take any decision in this matter;

invites the C.C.I.R.

to study the problems involved in the transmission by television of port radar images and to make recommendations concerning :

1. the technical standards for such a system, particularly with respect to the minimum bandwidth necessary;
  2. the frequency bands in which such a system could best be accommodated.
-

Draft Recommendation  
relating to the use  
of the band 450 - 470 Mc/s  
for radiotelephone communication

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Ref.

G/114(60)

RECOMMENDATION No. .... RELATING TO THE USE OF THE BAND  
450-470 Mc/s FOR RADIOTELEPHONE COMMUNICATION

The Maritime Administrative Radio Conference, Geneva, 1967,

considering

- a) that a need exists for short-range on-board radio-telephone communication in ships;
- b) that sufficient frequencies in other bands cannot be provided to meet this requirement in full;
- c) the advantages of reaching international agreement on the frequencies to be used for "on-board" communications in order to minimise interference between such communications and other Fixed and Mobile services;

recommends

- 1. that in addition to any frequency channels which may be made available in other bands, allocations for this purpose be made in the band 450 to 470 Mc/s;
- 2. that for this purpose Administrations should consider allocating the frequencies 456.925 Mc/s, 456.975 Mc/s, 462.425 Mc/s and 462.475 Mc/s on a single frequency basis with a power limit of 500 mW and a channel-width of 50 kc/s.

COMMITTEE 6

DRAFT OUTLINE OF THE WORK OF COMMITTEE 6 (OPERATION)  
WITH CROSS-REFERENCE TO RELATED PROPOSALS

A. Terms of reference :

to examine, inter alia, Articles 20, 22 to 25, 28 (Sections I and II), 29 to 31, 33, 34, 36 to 40 and Appendices 9 to 13, 16, 20 to 22 to the Radio Regulations, together with agenda items 6, 7.2, 7.3, 7.4 and other questions under item 7 which relate to operation. (Extracted from Document No. 157.)

B. The subjects resulting from the above terms of reference may be catalogued as follows :

1. Matters of radiotelegraph procedure

Articles 29-31, RR1000-1094 : DT/2 pages 213-224

2. Matters of radiotelephone procedure

Articles 33-34, RR1209-1318 : DT/2 pages 281-325

3. Service documents

Article 20, RR789-837 : DT/2 pages 131-135

Appendix 9, page 371 : DT/2 pages 443-448

Appendix 10, page 386 : DT/2 pages 449-454

4. Revised International Code of Signals

Appendix 13, page 395 : DT/2 pages 469-528

Appendix 16, page 430 : DT/2 pages 561-575

Recommendation No. 22, page 567 : DT/2 pages 703-705

Recommendation No. 29, page 605 : (No proposals)

Recommendation No. 30, page 605 : DT/2 pages 711-715



5. Questions related to distress and safety

Article 28, Section II, RR965-969 : (No proposals)  
Chapter VIII, Article 36, RR1380-1495 : DT/2 pages 383-423  
Appendix 20, page 437 : DT/2 pages 649-662  
Recommendation 23, page 597 : (No proposals)  
Recommendation 24, page 598 : (No proposals)  
Recommendation 25, page 599 : (No proposals)

6. General provisions to be applied to ship stations

Article 28, Section I, RR955-964 : DT/2 pages 171-173  
Appendix 11, page 388 : DT/2 pages 455-457  
Resolution No. 12, page 533 : (No proposals)  
Recommendation No. 17, page 560 : (No proposals)  
Recommendation No. 26, page 600 : (No proposals)  
Recommendation No. 27, page 601 : DT/2 pages 707-709

7. Questions related to personnel

Chapter VI, Articles 22-26, RR845-948 : DT/2 pages 137-170  
Appendix 12, page 392 : DT/2 pages 459-467  
Recommendation No. 18, page 564 : (No proposals)

8. Questions related to radiotelegrams and radiotelephone calls

Chapter IX, Articles 37-40, RR1496-1550 : DT/2 pages 425-427  
Appendix 21, page 439 : (No proposals)  
Appendix 22, page 440 : (No proposals)  
Additional Radio Regulations Articles 1AR-14AR,  
page 455, RRAR2001-2165 : DT/2 pages 677-701

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Note : Document No. DT/2 as distributed on 19/20 September contains  
the proposals appearing in Documents Nos. 1 to 118.

- C. A list of all proposals transmitted to Committee 6 (Operation) for consideration up to Document No. 143 is reproduced in the Annex attached hereto.

The information supplied in this document is intended to serve as a basis for discussion at the first meeting of the Committee and it is the hope of the Chair that Delegations will find the cross-references helpful.

Konstantin ČOMIC  
Chairman

Annex : 1

A N N E X E

Liste de toutes les propositions publiées dans les documents (jusqu'au Document N° 143) et qui ont été soumises à l'examen de la Commission 6 (Exploitation). Les symboles ci-après ont été utilisés :

- 4/6 = Proposition devant être examinée conjointement par les Commissions 4 et 6.
- p/4 = Proposition devant être examinée tout d'abord par la Commission 6 puis transmise, avec la décision correspondante prise par cette dernière, à la Commission 4 qui statuera en dernier ressort.
- a/4 a/5 = Proposition sur laquelle la Commission 6 se prononcera en dernier ressort lorsqu'elle aura été examinée par la Commission 4 ou la Commission 5 selon les indications données ci-dessous.

A N N E X

List of all proposals published up to Document No. 143 which have been transmitted to Committee 6 (Operation) for consideration. The following symbols have been used :

- 4/6 = Proposal to be considered jointly by Committees 4 and 6.
- p/4 = Proposal to be considered first in Committee 6 and then passed to Committee 4, together with the related decision of Committee 6, for final disposal.
- a/4 a/5 = Proposal to be disposed of finally in Committee 6 after consideration in Committee 4 or Committee 5 as shown.

A N E X O

Lista de las proposiciones publicadas en los documentos (hasta el Documento N.º 143), sometidas a estudio de la Comisión 6 (Explotación). Se han utilizado los siguientes símbolos:

- 4/6 = Proposición para examen conjunto por las Comisiones 4 y 6.
- p/4 = Proposición para estudio en primer lugar por la Comisión 6, que se transmitirá luego con la oportuna decisión a la Comisión que decidirá.
- a/4 a/5 = Proposición para su examen definitivo por la Comisión 6, una vez que haya sido estudiada por la Comisión 4 o la Comisión 5, según se indica a continuación.

Proposition N°  
Proposal No.  
Proposición N.º

D 5 (3-5)			
D 6 (6-15)			
D 7 (16-19)			
F 8 (13-14)			a/5
F 8 (25-29)			a/5
F 13 (77-80)			
F 14 (81)		p/4	
F 14 (82-88)			
USA 17 (24)			
USA 21 (40-44)			
USA 22 (50,52-54)			
USA 22 (53)		p/4	
USA 28 (63-65)			a/5
USA 29 (66)			
DNK/ISL/NOR 30 (2-3)			
I 31 (1)			a/5
I 36 (28)			
DNK 38 (1-17)			
CAN 44 (23)+Corr			
CAN 45 (34)		p/4	
CAN 45 (36)			
URS 52 (8)			
URS 53 (9)			
AUS 54 (5-6)			
G 58 (7)			a/4
G 59 (8-11)			
G 60 (12,13)			
G 60 (18-20)			
G 60 (22-24)			
G 60 (63)			
G 60 (17)			a/4
G 61 (69)			a/4
G 62 (70)			
G 63 (71-73)			
G 64 (74-75)			
G 65 (76-79)			
G 67 (82-83)			
G 68 (100,84-88)			
(RR 863,866F)			a/5

Proposition N°  
Proposal No.  
Proposición N.º

HOL 70 (3)			a/5
HOL 74 (17-22)			
HOL 75 (24,33)			
G 76 (27-28)			a/5
G 77 (41)			a/5
G 78 (90,91,93,94,96)			
G 79 (98)			a/5
POL 83 (4)			
I 84 (6,7)			a/5
I 84 (14-16)			a/5
I 86 (53)			a/5
I 88 (56-71)			
I 89 (72-73)			
I 89 (78-84)			
I 90 (85)			
G 91 (48-53)			
D 92 (18)			
D 93 (19)			
D 94 (20,24-27)			
SUI 101 (1)			
ISR 102 (2)			
CAN 106 (39)			
CAN 107 (35)		p/4	
CAN 108 (26-27)			
F 109 (92-95)			
F 109 (96-97)			a/4
F 109 (98-103)			
F 109 (106-107)			
F 110 (108-103)			
F 111 (131-138)			
F 111 (148)			a/4
F 111 (149,150,154)			a/5
F 111 (151-153, 155-157)			
F 111 (160-185)			
G 113 (57)			
G 113 (58)	4/6		
G 113 (59)			a/5
G 118 (61)			
SG 119			

Proposition N°  
Proposal No.  
Proposición N.º

AUS 122 (42-44)			a/5
ISR 129 (2)			
ISR 130 (3)			
ISR 130 (7-10)			a/4
NZL 131 (27)			
NZL 133 (13-14)			a/5
NZL 135 (2)			
NZL 135 (1-3,5)			
NZL 135 (4)	4/6		
B 137 (18,19)			
B 138 (38,39)			
B 138 (52,53)			
B 141 (79-97)			
B 142 (142,109,110)			
B 142 (114-120)			
B 143 (126-127)			

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/4-E  
19 September 1967  
Original : English

COMMITTEE 4

PROPOSALS MADE BY ADMINISTRATIONS WHICH WERE PUBLISHED  
IN DOCUMENTS Nos.1 TO 143

The following Documents and proposal numbers concern the agenda of Committee 4 meeting scheduled on 20 September, 1967.

Article 28. Section III : F/12 (71,72,73); USA/20 (33); USA/24 (58); I/35 (24);  
CAN/43 (16); AUS/54 (7); G/58 (5); G/61 (67); G/66 (80);  
ISR/130 (6); B/140 (65,66,67).

Article 28. Section VI : F/12 (74); F/14 (81); USA/20 (36); DNK/ISL/NOR/30 (1);  
I/36 (27); CAN/43 (19); G/60 (21); HOL/72 (14);  
J/84 (13); J/89 (75,76,77); J/90 (88); NZL/135 (4);  
B/140 (73).

Article 28. Section V. as far as telegraphy is concerned :

F/8 (19); USA/20 (35); CAN/43 (18); G/58 (5) 992;  
G/66 (80) 992; J/84 (11) 992; B/140 (72) 992.

Point 2.3 of the Conference Agenda (Doc. No. 1) :

RFA/3 (1); F/9 (56); USA/17 (16); I/32 (11); CAN/40 (30);  
G/56 (2); POL/82 (2); J/85 (33); B/137 (9).

Point 2.4 of the Conference Agenda (Doc. No. 1) :

USA/17 (17,18,19); I/32 (12); CAN/40 (3,4,5,6,7,8,9,  
10,11); URS/49 (4); USA/69 (52); DNK/NOR/S/104 (1);  
F/128 (188); NZL/132 (6,7); NZL/133 (12).

Point 2.5 of the Conference Agenda (Doc. No. 1) :

F/8 (9); CAN/40 page 8; URS/49 (5).



SEANCE PLENIERE  
PLENARY MEETING  
SESION PLENARIA

Dans la liste annexée au Document N° DT/5, il y a lieu d'ajouter les indications suivantes :

<u>Point à l'O.J.</u>	<u>Pays</u>	<u>N° du document</u>	<u>Page</u>
Point 2.4	GRC	160	1-2
" 2.4	USA	159	1-21

The following indications should be added to the list annexed to Document No. DT/5 :

<u>Agenda item</u>	<u>Country</u>	<u>Document No.</u>	<u>Page</u>
2.4	GRC	160	1-2
2.4	USA	159	1-21

Añádanse las indicaciones siguientes en la lista anexa al Documento N.º DT/5:

<u>Punto del Orden del día</u>	<u>País</u>	<u>N.º del documento</u>	<u>Página</u>
2.4	GRC	160	1-2
2.4	USA	159	1-21





INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/5-E  
19 September 1967  
Original : French

PLENARY MEETING

PROPOSALS RELATING TO THE WORK  
OF THE CONFERENCE

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Document No. DT/2 contains the texts of specific proposals relating to the provisions of the Radio Regulations and the Additional Regulations, and the reasons given by the Administrations concerned.

These proposals are often accompanied by general comments on agenda items which could not be included in Document No. DT/2.

These comments should not be lost sight of. The numbers of the documents concerned and the pages on which the comments appear are therefore given in the attached list.



Subject or agenda item	Source (country symbol)	No. of document and reference	Pages
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Item UK-5 Categories of ship stations	G	64	1
Item UK-10 Reduction of the guard-band for frequency 2182 kc/s	G	79	1 - 11
Item ISR-1 Watch-keeping system in the HF bands	ISR	130 ISR/130(3)	1 - 2
Item US-F Establishment and use of a manual for use by the Maritime Mobile Service	USA	28 Basic data	2
Item 1	B	136 Introduction	1
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" "	F	9 F/9(55)	1
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" "	USA	17 USA/17(14) Basic data	1 - 2
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" "	F	128 F/128(188) Comments	1 - 2
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UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS

# CONFERENCE MARITIME

GENÈVE, 1967

Document N° DT/6-F/E/S

20 septembre 1967

Original : français, anglais,  
                  espagnol

GROUPE DE TRAVAIL 6A

WORKING GROUP 6A

GRUPO DE TRABAJO 6A

PROJET D'EBAUCHE DES TRAVAUX DU GROUPE DE TRAVAIL 6A  
AVEC REFERENCES RENVOYANT AUX PROPOSITIONS CORRESPONDANTES

---

DRAFT OUTLINE OF THE WORK OF WORKING GROUP 6A  
WITH CROSS-REFERENCE TO RELATED PROPOSALS

---

CLASIFICACIÓN POR MATERIAS DE LAS PROPOSICIONES OBJETO  
DEL GRUPO DE TRABAJO 6A

---



1. Questions concernant la procédure radiotélégraphique
1. Matters of radiotelegraph procedure
1. Cuestiones de procedimiento radiotelegráfico

DT/2 page - página

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2. Questions concernant la procédure radiotéléphonique  
2. Matters of radiotelephone procedure  
2. Cuestiones de procedimiento radiotelefónico

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- 3. Service Documents
- 3. Documentos de servicio

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A. CHASSIGNOL  
Président



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS

# CONFERENCE MARITIME

GENÈVE, 1967

Document N° DT/7-F/E/S

20 septembre 1967

Original : français/anglais/español

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GROUPE DE TRAVAIL 6B

WORKING GROUP 6B

GRUPO DE TRABAJO 6B

PROJET D'EBAUCHE DES TRAVAUX DU GROUPE DE TRAVAIL 6B  
AVEC REFERENCE RENVOYANT AUX PROPOSITIONS CORRESPONDANTES

---

DRAFT OUTLINE OF WORK OF WORKING GROUP 6B  
WITH CROSS-REFERENCE TO RELATED PROPOSALS

---

CLASIFICACIÓN POR MATERIAS DE LAS PROPOSICIONES OBJETO  
DEL GRUPO DE TRABAJO 6B

---



1. Code international des signaux revisé
1. Revised International Code of Signals
1. Código internacional de señales revisado

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2. Questions relatives à la détresse et à la sécurité  
 2. Questions related to distress and safety  
 2. Cuestiones relativas al socorro y a la seguridad

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H.A. FEIGLESON  
Président

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document N° DT/8-F/E/S

20 septembre 1967

Original : français, anglais  
                  espagnol

GROUPE DE TRAVAIL 6C

WORKING GROUP 6C

GRUPO DE TRABAJO 6C

PROJET D'EBAUCHE DES TRAVAUX DU GROUPE DE TRAVAIL 6C  
AVEC REFERENCES RENVOYANT AUX PROPOSITIONS CORRESPONDANTES

---

DRAFT OUTLINE OF THE WORK OF WORKING GROUP 6C  
WITH CROSS-REFERENCE TO RELATED PROPOSALS

---

CLASIFICACIÓN POR MATERIAS DE LAS PROPOSICIONES OBJETO  
DEL GRUPO DE TRABAJO 6C

---



1. Dispositions générales applicables aux stations de navire
1. General provisions to be applied to ship stations
1. Disposiciones generales aplicables a las estaciones de barco

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	(65)	MOD	457
<u>Rec. 27</u>	D/5(5)	SUP	709

2. Questions relatives au personnel

2. Questions related to personnel

2. Cuestiones relativas al personal

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3. Questions relatives aux appels en radiotélégraphie et en radiotéléphonie
3. Questions related to radiotelegrams and radiotelephone calls
3. Cuestiones relativas a las llamadas radiotelegráficas y radiotelefónicas

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# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/9-E

20 September 1967

Original : English

## WORKING GROUP 5A

### POWER LIMITS GIVEN IN ARTICLE 23

After consultation it has been agreed that Working Group 5A should consider the proposals mentioned below concerning power limits prescribed in Article 23 of the Radio Regulations. The proposals are those given in Document No. DT/2. It may therefore be other proposals concerning the same subject in later documents.

It is desirable that Working Group 5A could take early decisions with respect to power limits in Article 23 to enable Commission 5 to transmit its findings to Commission 6.

The proposals are the following :

G/76(27)	MOD 863
F/8(13)	MOD 863
J/84(6)	MOD 863
USA/29(66)	MOD 863
G/68(84)	ADD 866F
G/76(28)	MOD 903
F/8(14)	MOD 903
J/84(7)	MOD 903
USA/29(66)	MOD 903

Chairman of the Working Group 5A :

P. AAKERLIND



**MARITIME CONFERENCE**

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Document N° DT/10-F/E/S

22 septembre 1967

Original : français, anglais  
espagnolGROUPE DE TRAVAIL 6BWORKING GROUP 6BGRUPO DE TRABAJO 6B

1. Radiobalise de repérage en cas de sinistre
1. Emergency Position - indicating Beacon
1. Radiofaros de localización en caso de emergencia

PropositionProposal  
ProposiciónDT/2 page - páginaArt. 36

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HOL/75(24)	387	1388A
D/94(24)	387	1388A
NZL/135(5)	-	1388A
D/94(25)	400	1466A
D/94(26)	400	1473A
I/36(28)	409	1476
B/142(114-119)	-	1476A
D/94(27)	411-412	1476A
DNK/ISL/NOR/30(2)	405	1476A
F/14(83-88)	406	1476A
G/60(23)	407	1476A
HOL/75(24)	408	1476A
J/89(78-84)	410	1476A
USA/22(52)	412	1476A
CAN/45(34)	-	-



- 1.1 Définitions correspondantes  
1.1 Related definitions  
1.1 Definiciones correspondientes

Proposition  
Proposal  
Proposición

Art. 1

USA/22(50)  
G/60(18)  
J/89(72-73)  
D/94(20)  
B/142(109-110)  
NZL/135(2)

- 1.2 Caractéristiques techniques correspondantes  
1.2 Related technical characteristics  
1.2 Características técnicas correspondientes

Proposition  
Proposal  
Proposición

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Appendice 20A  
Appendix 20A  
Apéndice 20A

G/60(24)

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- 1.3 Identification  
1.3 Identification  
1.3 Identificación

Proposition  
Proposal  
Proposición

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NZL/135(3)  
G/60(20)  
G/60(20)

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-  
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736  
736  
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777A

2. Procédures pour les cas de détresse, d'urgence et de sécurité
2. Distress, urgency and safety procedures
2. Procedimientos de socorro, urgencia y seguridad

<u>Proposition</u> <u>Proposal</u> <u>Proposición</u>	<u>DT/2 page - página</u>	<u>RR</u>
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DNK/38(9)	387	1393
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J/88(61)	388	1400
F/111(160)	391	1408
F/111(161)	397	1426
F/111(162)	397	1427A
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G/58(7)	651	APP 20
G/63(72)	651	APP 20

H.A. FEIGLESON  
Président-Chairman-Presidente

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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Document No. DT/11-E/F/S  
21 September 1967  
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Spanish

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COMMITTEE 4

The attached document and proposal numbers concern the Agenda  
for the second meeting of Committee 4.

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1. Art. 5

RR No

158	MOD	CAN/46	(24)	9
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167	MOD	CAN/46	(25)	9
167	MOD	USA/25	(60)	9
200	MOD	CAN/145	(40)	-

2. Art. 7 Sec. IV

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437B	ADD	CAN/40	(12)	45
438	SUP	G/78	(89)	45
439	SUP	G/78	(89)	45
442	MOD	G/79	(97)	46
451	MOD	AUS/122	(17)	-
451	MOD	HOL/72	(9)	64
451A	ADD	HOL/72	(9)	64
452	MOD	G/77	(39)	60
452	MOD	AUS/122	(18)	-
452	MOD	F/8	(10)	59
452	MOD	HOL/72	(9)	64
452	MOD	I/33	(18)	67
452.1	MOD	AUS/122	(19)	-
452.1	MOD	G/77	(39)	60
452.1	MOD	HOL/72	(9)	65
453	MOD	AUS/122	(20)	-
453	MOD	G/77	(39)	61
453	MOD	HOL/72	(9)	65
453	MOD	I/33	(18)	67
453	MOD	NZL/133	(8)	-
453.1	MOD	AUS/122	(21)	-
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464B	ADD	CAN/40	(14)	81

3. App. 15A

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	MOD	B/138	(21)	-
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	MOD	F/14	(187)	536
	MOD	G/77	(36)	540
	MOD	G/77	(37)	538
	MOD	HOL/72	(12)	547
	ADD	I/32	(13)	549
	MOD	I/32	(15)	550
	MOD	ISR/130	(15)	-
	MOD	J/86	(34)	554
	MOD	J/86	(35)	554
	MOD	J/86	(36)	554
	MOD	J/86	(38)	554
	MOD	URS/50	(6)	555
	MOD	USA/18	(26)	556

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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COMMITTEE 4

DRAFT

FIRST REPORT OF

COMMITTEE 4

1. The attached texts, which concern Nos. 158, 167, 200, 437A, 438, 439, 451, 453, 974, 974.1, 975, 976, 978, 981, 995, 997, 1155, 1156 and 1157 of the Radio Regulations, have been unanimously adopted by Committee 4.
2. Concerning No. 992 of the Radio Regulations, the text has been co-ordinated with the Chairman of Committee 5 and the part in square brackets will be finally agreed upon in Committee 5.

F.G. PERRIN  
Chairman of Committee 4



Annex : 1



A N N E X

MOD	158	Limited to coast telegraph stations (A1 and F1 only). Exceptionally, the use of A7J is permissible subject to the bandwidth not exceeding that normally used for A1 or F1 emissions in the bands concerned.
MOD	167	Only classes A1 or F1, A4 or F4 emissions are authorized in the band 90 - 160 kc/s for stations of the fixed and maritime mobile services. Exceptionally, A7J emission is also authorized in the band 90 - 160 kc/s for stations of the maritime mobile service.
SUP	200	
ADD	437A	§ 7 (bis). Stations of the maritime mobile service employing single sideband radiotelegraph transmissions shall use upper sideband emissions. The discrete frequencies specified in the Radio Regulations for class A2H emission in the maritime mobile service such as 410, 425, 448, 454, 468, 480, 500, 512 and 8364 kc/s, shall be used as carrier frequencies.
NOC	438	
NOC	439	
MOD	451	

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Note to the Editorial Committee

ADD 437A should be inserted following the title "Section IV. Maritime mobile service" and before No. 438.

MOD 451 concerns only the French text.

- |                |       |   |
|----------------|-------|---|
| MOD<br>(title) | 453   | g) Coast stations, wideband and manual telegraphy, facsimile, special and data transmission systems and direct printing telegraph systems.  |
| MOD            | 974   | a) send class A2 or A2H <sup>1</sup> and receive A2 and A2H with carrier frequency on 500 kc/s;   |
| ADD            | 974.1 | <sup>1</sup> The type of A2 or A2H used shall be by the on-off keying of the modulated emission.  |
| MOD            | 975   | b) send, in addition, class A1 and either A2 or A2H emissions on at least two working frequencies;  |
| MOD            | 976   | c) receive, in addition, class A1, A2 and A2H emissions on all other frequencies necessary for their services.  |
| MOD            | 978   | § 17. In Region 2, any radiotelegraph station installed on board a ship which uses frequencies in the band 2088.5 - 2093.5 kc/s for call and reply shall be provided with at least one other frequency in the authorized bands between 1605 and 2850 kc/s.  |
| MOD            | 981   | b) changes of frequency in transmitting apparatus shall be effected as quickly as practicable, but within fifteen seconds in any event;   |
| MOD            | 992   | § 22. (1) Any aircraft following a maritime course and required by national or international regulations to communicate, for 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 kc/s or, [on the carrier frequency 2182 kc/s, transmitting class A3 or A3H and receiving class A3 and A3H emissions.] |

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Note to the Editorial Committee

In No. MOD 992 the part in square brackets will be finally agreed upon in Committee 5.

- MOD 995 - in the bands between 405 and 535 kc/s, be able to transmit with carrier frequency on 500 kc/s, using class A2 or A2H emissions, / (but see No. 677) 7. If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on the carrier frequency 500 kc/s;
- MOD 997 - in the bands between 4000 and 27 500 kc/s, be able to transmit on the carrier frequency 8364 kc/s using class A2 or A2H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A1, A2 and A2H emissions throughout the band 8320 to 8745 kc/s;
- SUP 1155
- MOD 1156 § 20. (1) Stations installed on ships shall, at the discretion of the administration controlling the ship station concerned, use either the high traffic band (see No. 1151) or the low traffic band (see No. 1153), depending on their traffic requirements.
- SUP 1157
-

INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/12-E

22 September 1967

Original : English

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COMMITTEE 4

## DRAFT REPORT TO THE PLENARY MEETING

The attached texts, which concern Nos. 158, 167, 200, 437A, 438, 439, 453, 974, 974.1, 975, 976, 978, 981, 992, 995, 997 and 1156 of the Radio Regulations, have been unanimously adopted by Committee 4 at its First, Second and Third Meetings.



- MOD 158            Limited to coast telegraph stations (A1 and F1 only).  
Exceptionally, the use of A7J is permissible subject to the  
bandwidth not exceeding that normally used for A1 or F1  
emissions in the bands concerned.
- MOD 167            Only classes A1 or F1, A4 or F4 emissions are authorized  
in the band 90 - 160 kc/s for stations of the fixed and  
maritime mobile services. Exceptionally, A7J emission is  
also authorized in the band 90 - 160 kc/s for stations of  
the maritime mobile service.
- SUP 200            (as far as radiotelegraphy is concerned).
- MOD 200            (Committee 5 is considering proposal CAN/145(40) which  
is supported by Brazil).

Following the title "Section IV. Maritime Mobile Service" and  
before No. 438, add the following :

- ADD 437A           § 7 (bis). (1) Stations of the maritime mobile service  
employing single sideband radiotelegraph transmissions  
shall use upper sideband emissions. Stations using single  
sideband radiotelegraph emissions on designated frequencies  
such as 410, 425, 448, 454, 468, 480, 500, 512 and  
8364 kc/s, shall use carrier (reference) frequencies of  
the same value.
- NOC 438
- NOC 439
- MOD 453            Coast stations, wide-band radiotelegraph systems,  
(title)            facsimile, special transmission systems, teleprinters,  
data transmission and manual telegraphy.
- MOD 974            a) send class A2 or A2H<sup>1</sup> and receive A2 and A2H with  
carrier frequency on 500 kc/s.
- 
- ADD 974.1           1    The type of A2 and A2H used shall be by the on-off  
keying of the modulated emission.
- MOD 975            b) send, in addition, class A1 and A2 or A2H emissions  
on at least two working frequencies.

- MOD 976 c) receive, in addition, class A1, A2 and A2H emissions on all other frequencies necessary to their services.
- MOD 978 § 17. in Region 2, any radiotelegraph station installed on board a ship which uses frequencies in the band 2088.5 - 2093.5 kc/s for call and reply shall be provided with at least one other frequency in the authorized bands between 1605 and 2850 kc/s.
- MOD 981 b) changes of frequency in transmitting apparatus shall be effected as quickly as practicable, but within fifteen seconds in any event.
- MOD 992 § 22.(1) any aircraft following a maritime course and required by national or international regulations to communicate, for 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 kc/s or, on the frequency 2182 kc/s, transmitting class A3 or A3H and receiving class A3 and A3H emissions.
- MOD 995 - in the bands between 405 and 535 kc/s, be able to transmit with carrier frequency on 500 kc/s using class A2 or A2H emissions, (but see No. 677). If a receiver is provided for any of these bands, it shall be able to receive class A2 and A2H emissions on 500 kc/s.
- MOD 997 - in the bands between 4000 and 27 500 kc/s, be able to transmit on 8364 kc/s using class A2 or A2H emissions. If a receiver is provided for any of these, it shall be able to receive class A1, A2 and A2H emissions throughout the band 8320 to 8745 kc/s.
- SUP 1155
- MOD 1156 § 20.1 Stations installed on ships shall, at the discretion of the Administration controlling the ship station concerned, use either the high traffic band (see No. 1151) or the low traffic band (see No. 1153), depending on their traffic requirements.
- SUP 1157
-

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/13-E

25 September 1967

Original: English

WORKING GROUP 6B

## DRAFT TERMS OF REFERENCE FOR WORKING GROUP 6B AD HOC

Recognizing that the Conference is not competent to modify or delete signals of Appendix 13 (Sections I and II)

- to consider proposals for the addition of new codes to Sections I and II (which would be indicated by a footnote stating for use by the Maritime Mobile Service) and a possible amendment to the title of Appendix 13 providing for use in radiotelephony communications,
- to consider proposals for the insertion of any modified codes for the Maritime Mobile Service in a new Section III of Appendix 13,
- to consider proposals for a draft resolution relating to the desirability of aligning the revised International Code of Signals to the pertinent Radio Regulations revised by the Maritime Conference, Geneva 1967,
- to consider proposals for a draft resolution relating to the areas of responsibility for signalling codes of the I.T.U. and of I.M.C.O.

H.A. FEIGLESON  
Chairman Working Group 6B



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/14-E  
25 September 1967  
Original : French

## WORKING GROUP 6A

### DRAFT

#### FIRST REPORT OF WORKING GROUP 6A TO COMMITTEE 6 (OPERATION)

General radiotelegraph procedure (Article 29, Sections I, II and III in part)

1. Having considered all proposals on the above provisions submitted to it, Working Group 6A unanimously agreed the statu quo or revision shown in the annex attached hereto.
2. Radio Regulations 1004 and 1005

The further consideration of these provisions is deferred pending decisions by Working Group 6B on related proposals which it must examine.

3. Radio Regulation 1012A

The Working Group agreed that this new provision should form a sub-paragraph to be inserted between sub-paragraphs 6(1) and 6(2) of Article 29.

Furthermore the attention of Working Group 6B is invited to the need to include in Appendix 13, Section II, the signal = (BT) appearing in Radio Regulation 1012A and which constitutes a signal to mark the separation between different parts of the same transmission.

A. CHASSIGNOL  
Chairman

Annex : 1





A N N E XArticle 29Section I

NOC 1000

NOC 1001

NOC 1002

NOC 1003

1004 / held in abeyance /

1005 / held in abeyance /

Section II

SUP 1006

NOC 1007  
1011Section III

NOC 1012

ADD 1012A (1) bis. However, in the maritime mobile service in the bands between 4000 and 27 500 kc/s the call consists of:

- the call sign of the station called, not more than three times;
  - the word DE;
  - the call sign of the calling station, not more than three times;
  - the signal = (BT);
  - the call sign of the station called, once only;
  - the letter K.
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/15-E

25 September 1967

Original : English

WORKING GROUP 6B

I.M.C.O. RESOLUTION RELATING TO THE ADOPTION  
OF THE REVISED INTERNATIONAL CODE OF SIGNALS

Attached hereto is the text of a resolution adopted by the Assembly of I.M.C.O. at its 4th Session in 1965. It is to be noted that the date of 1 January 1968 which appears twice in paragraph (d) under DECIDES has since been changed to 1 January 1969.

H.A. FEIGLESON  
Chairman

Annex : 1

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Note : Only the resolution is reproduced herein. The Annex to the I.M.C.O. resolution is not included.



A N N E X

I.M.C.O.

ASSEMBLY - 4th Session

27 September 1965

RESOLUTION A.80(IV)

INTERNATIONAL CODE OF SIGNALS

The Assembly,

Recalling Resolution A.3 (I) whereby the Assembly decided that the Organization should assume all the functions then being performed by the International Code of Signals Committee and requested the Maritime Safety Committee to assume the duties of providing the necessary machinery in accordance with Article 29 (b) of the I.M.C.O. Convention;

Taking note with satisfaction that the Maritime Safety Committee, at its tenth session, was able to approve a revised Code of Signals;

Taking note also that consideration is still being given by the International Telecommunication Union to those parts of the revised Code which are related to the Radio Regulations;

Bearing in mind the important contribution which the revised Code of Signals will make to Safety at Sea;

Decides

- (a) to adopt the revised Code of Signals;
- (b) to endorse the recommendations of the Maritime Safety Committee which appear in the Annex to this Resolution regarding the distribution, carriage and periodical revision of the Code and the knowledge of the spelling tables;
- (c) to authorize the Maritime Safety Committee to incorporate any amendments to the Code which may become necessary as a result of the next or any future Administrative Radio Conference for the maritime mobile service;

(d) to specify 1 January 1968 as the date for bringing the Code into force provided that an Administrative Radio Conference for the maritime mobile service has given final consideration to those parts of the Code on which I.T.U. concurrence is required; however, in the event that I.T.U. concurrence is not obtained or any necessary amendments to the Code cannot be incorporated by the Maritime Safety Committee by 1 January 1968, every effort should be made to bring the Code into force as soon thereafter as is feasible if necessary the figure spelling table and the procedural signals should be adopted on an experimental basis;

(e) to invite Governments to supply, in due course, any comments by users of the Code so that it can be revised and kept up to date, as necessary;

(f) to invite the Secretary-General to communicate the Code, together with a copy of this Resolution, to all I.M.C.O. Member States, and to all States which were invited to be represented at the International Conference on Safety of Life at Sea, 1960.

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Note : The Annex is not reproduced herein.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No.DT/16-E

25 September 1967

Original : English

COMMITTEE 4

During the fourth meeting of Committee 4 there appeared to be general agreement that an ad-hoc working group should be established to examine proposals relating to the revision of Appendix 15, Section A. Should the Committee decide to maintain its decision to establish this ad-hoc working group the attached draft terms of reference (composed by delegates from France, Italy and U.S.A.) are submitted for consideration at the fifth meeting of Committee 4, at 0930 hours on Tuesday, September 26 1967.

F.G. PERRIN

Chairman

Annex : 1



A N N E X

To draft a proposed Appendix 15-A taking into account :

- a) All relevant documents and proposals;
- b) the decisions of Committee 4 to reduce the frequency bands available to radiotelegraphy (low traffic bands in particular);
- c) the decisions of Committee 4 with respect to :
  - 1) channel spacings in the several sub-bands;
  - 2) number of channels per band;
  - 3) harmonic relationship;
  - 4) separate bands for teleprinter and manual high traffic.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/17-E  
26 September 1967  
Original : English

WORKING GROUP 6B

DRAFT

FIRST REPORT OF WORKING GROUP 6B TO COMMITTEE 6  
(OPERATION)

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Revision of Appendix 16 - Phonetic Alphabet and Figure Code

Abrogation of Recommendation No. 30 - Draft resolution

Article 1, new RR 68A - Emergency position-indicating radio beacon station

Article 36, new Section VIIIA - Emergency position-indicating radiobeacon signals

Having considered all proposals submitted to it on the above subjects, Working Group 6B unanimously agreed the draft new provisions reproduced in the Annex attached hereto.

H.A. FEIGLESON  
Chairman



Annex : 1

A N N E X

(ex-DT/2 p. 574)

## APPENDIX 16

## Phonetic alphabet and figure code

(see Article 33)

MOD

1. When it is necessary to spell out call signs, service abbreviations and words, the following letter spelling table shall be used :

Letter to be transmitted	Word to be used	Spoken as *)
A	Alfa	<u>AL</u> FAH
B	Bravo	<u>BRAH</u> VOH
C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
D	Delta	<u>DELL</u> TAH
E	Echo	<u>ECK</u> OH
F	Foxtrot	<u>FOKS</u> TROT
G	Golf	GOLF
H	Hotel	HOH <u>TELL</u>
I	India	<u>IN</u> DEE AH
J	Juliett	<u>JEW</u> LEE <u>ETT</u>
K	Kilo	<u>KEY</u> LOH
L	Lima	<u>LEE</u> MAH
M	Mike	MIKE
N	November	NO <u>VEM</u> BER
O	Oscar	<u>OSS</u> CAH
P	Papa	PAH <u>PAH</u>
Q	Quebec	KEH <u>BECK</u>
R	Romeo	<u>ROW</u> ME OH

---

\*) The syllables to be emphasized are underlined.



Appendix 16 (cont.)

Letter to be transmitted	Word to be used	Spoken as *)
S	Sierra	SEE <u>AIR</u> RAH
T	Tango	<u>TANG</u> GO
U	Uniform	<u>YOU</u> NEE FORM or <u>OO</u> NEE FORM
V	Victor	<u>VIK</u> TAH
W	Whiskey	<u>WISS</u> KEY
X	X-ray	<u>ECKS</u> <u>RAY</u>
Y	Yankee	<u>YANG</u> KEY
Z	Zulu	<u>ZOO</u> LOO

ADD 2. When it is necessary to spell out figures, the following table shall be used :

Figure to be transmitted	Code word	Spoken as
0	NADAZERO	NAH-DAH-ZAY-RCH
1	UNAONE	OO-NAH-WUN
2	BISSOTWO	BEES-SOH-TOO
3	TERRATHREE	TAY-RAH-TREE
4	KARTEFOUR	KAR-TAY-FOWER
5	PANTAFIVE	PAN-TAH-FIVE
6	SOXISIX	SOK-SEE-SIX
7	SETTESEVEN	SAY-TAY-SEVEN
8	OKTOEIGHT	OK-TOH-AIT
9	NOVENINE	NO-VAY-NINER
Decimal point	DECIMAL	DAY-SEE-MAL

Note : Each syllable should be equally emphasized.

MOD 3. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

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\*) The syllables to be emphasized are underlined.

DRAFT RESOLUTION

RELATING TO THE ABROGATION OF RESOLUTION No. ... AND  
RECOMMENDATIONS Nos. 30. .... AND ... OF THE  
ADMINISTRATIVE RADIO CONFERENCE, GENEVA, 1959

The Maritime Conference, Geneva, 1967,

considering

that the texts in question are now obsolete

decides.

that the undermentioned Resolutions and Recommendations of the  
Administrative Radio Conference, Geneva, 1959, are abrogated:

Recommendation No. 30 relating to the Phonetic Figure Table.

---

Note to the Editorial Committee

It is anticipated that several other Resolutions or Recommendations may  
be included in this Resolution.

Article 1 - Terms and Definitions

[ex-G/60(18)]      ADD      68A

Emergency position-indicating radio beacon station : A station in the mobile service the emissions of which are intended to facilitate search and rescue operations.

Article 36 - Distress Signal and Traffic,  
Alarm, Urgency and Safety Signals

[ex-G/60(23)]      ADD

Section VIIIA - Emergency position-indicating radiobeacon signals

ADD      1476A

§44(bis) (1)      The emergency position-indicating radiobeacon signal consists of :

ADD      1476B

a)      for medium frequencies,  
         i)      a keyed emission modulated by a tone of 1300 cycles per second having a ratio of the period of the emission to the period of silence equal to or greater than one, and an emission duration between one and five seconds;

or

ADD      1476C

         ii)      the radiotelephone alarm signal (see No. 1465) followed by the morse letter 'B' and/or the call-sign of the ship to which the beacon belongs transmitted by keying a carrier modulated by a tone of 1300 cycles per second or of 2200 cycles per second.

or

[ex-DT/2 p.405]      ADD      1476D

b)      for VHF

         a swept tone modulation sweeping downward over a range of not less than 700 c/s, within the range 1600 to 300 e/s, with a repetition rate between two and three sweeps per second.

Article 36 Section VIIIA (cont.)

[ex-DT/2 p.407] ADD 1476E

(2) The signal in No. 1476B shall be sent continuously or as in No. 1476C.

ADD 1476F

(3) The keying cycle of the signal in No. 1476C (and of the signal in No. 1476B, when used on a high power beacon - Type H), shall consist alternately of the keying signal having a duration between thirty and fifty seconds followed by a period of silence having a duration between thirty and sixty seconds.

[ex-DT/2 p.407] ADD 1476G

(4) However, the keying cycles in Nos. 1476E and 1476F may be interrupted for speech transmission if administrations so desire.

ADD 1476H

(5) The purpose of the emergency position-indicating radiobeacon signals is to indicate the position of survivors and to facilitate search and rescue operations.

[ex-DT/2 p.405] ADD 1476I

(6) This signal shall indicate that a person(s) is in a distress situation, may no longer be on board an aircraft or ship and that receiving facilities may not be available.

F/14(88)

[ex-DT/2 p.406] 1476J

(7) Any mobile service station receiving one of these signals, while no distress or urgent traffic is being passed, shall consider that the circumstances are as described in No. 1453.

[ex-DT/2 p.407] ADD 1476K

(8) Equipment designed to transmit emergency position-indicating radiobeacon signals shall meet the requirements specified in Appendix 20A.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/18-E

25 September 1967

Original: English

WORKING GROUP 6B ad hoc

TERMS OF REFERENCE FOR WORKING GROUP 6B AD HOC

- To consider proposals for the addition of new codes to Sections I and II (which would be indicated by a footnote stating for use by the Maritime Mobile Service) and a possible amendment to the title of Appendix 13 providing for use in radiotelephony communications,
- to consider proposals for the insertion of any modified codes for the Maritime Mobile Service in a new Section III of Appendix 13,
- to consider what this Conference should do with signals which Administrations have proposed for deletion,
- to consider proposals for a draft resolution relating to the alignment of the revised International Code of Signals to the pertinent Radio Regulations revised by the Maritime Conference, Geneva 1967,
- to consider proposals for a draft resolution relating to the areas of responsibility for signalling codes of the I.T.U. and of I.M.C.O.

H.A. FEIGLESON  
Chairman Working Group 6B



# UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS

## CONFERENCE MARITIME

GENÈVE, 1967

Addendum N° 1 au  
Document N° DT/19-F/E/S  
Original : français, anglais,  
espagnol

COMMISSION 5  
COMMITTEE 5  
COMISION 5

I.

Numéro du Règlement des Radiocommunications  Number of the Radio Regulations  Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición  N°
<u>Page/Página 2</u>  <u>Art. 7</u>	
442	lire/read/léase URSS/48(1) au lieu de/instead of en lugar de URSS/49(2)
<u>Page/Página 4</u>  <u>Art. 35</u>	
Ajouter/Add/Añádase:  1336 A	HOL/183(37)
<u>Page/Página 6</u>  <u>Art. 7</u>	
447	Ajouter/Add/Añádase: NZL/133 (Annexe/Annex/ Anexo)
448	Ajouter/Add/Añádase: NZL/133 (Annexe/Annex/ Anexo)
<u>Art. 35</u>	
1352	Ajouter/Add/Añádase: DNK/NOR/115(1)
<u>Page/Página 7</u>  <u>Art. 35</u>	
Ajouter/Add/Añádase:  1358 A	F/15(91)



Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art. 35</u> (suite)	
AP.15-B	Ajouter/Add/Añádase : B/138(1) GRC/160(2) G/178 (101)
AP.17	Ajouter/Add/Añádase : GRC/160(2)
<u>Page/Página 9</u>	
AP. 25	Ajouter/Add/Añádase : GRC/160(3)
<u>Page/Página 11</u>	
<u>Art. 1</u>	
37 A	Ajouter/Add/Añádase : USA/177
<u>Art. 35</u>	
Biffer/Delete/Suprímase :	
1358 A	F/15(91)
1363 A	Ajouter/Add/Añádase : USA/177
1363 B	Ajouter/Add/Añádase : USA/177
AP. 18	Ajouter/Add/Añádase : USA/177

II. Page/Página 8

Sous le titre 1 ajouter/Under title 1 add/Sobre el título 1 añádase :  
USA/125/16(11)(Rev.)

Page/Página 12

Sous le titre 1 ajouter/Under title 1 add/Sobre el título 1 añádase :  
D/184(30)

Ajouter la page 5 bis ci-annexée entre les pages 5 et 6.

Add attached page 5 bis between pages 5 and 6.

Añádase la página adjunta 5 bis entre las páginas 5 y 6.



6. Proposition relative à l'attribution en exclusivité au service mobile maritime d'une fréquence de la bande 3155-3200 kHz pour les communications radiotéléphoniques entre les navires effectuant des opérations de recherches et de sauvetage.

Proposal relating to the allocation exclusively to the Maritime Mobile Service of a frequency in the band 3155-3200 kc/s for the radiotelephone traffic between ships engaged in search and rescue operations.

Proposición relativa a la atribución exclusivamente al servicio móvil marítimo de una frecuencia de la banda 3155-3200 kc/s para el tráfico radiotelefónico entre barcos dedicados a operaciones de búsqueda y salvamento.

URSS/49(3)

# CONFERENCE MARITIME

GENÈVE, 1967

Document N° DT/19-F-E-S

25 septembre 1967

Original: français/anglais/  
espagnol

COMMISSION 5

COMMITTEE 5

COMISIÓN 5

## ORGANISATION DES TRAVAUX

Le présent document contient une liste par ordre numérique des dispositions du Règlement des radiocommunications ainsi que des Appendices audit Règlement dont l'examen est confié respectivement à chacun des Groupes de travail créé par la Commission 5 au cours de sa première séance. Il contient, en outre, une liste de questions à examiner par ces groupes de travail et au sujet desquelles il conviendra de décider sous quelle forme et dans quelle partie des Actes Finaux de la Conférence les décisions prises à cet égard seront publiées.

En regard de chaque numéro de disposition et sous chaque titre de question figurent les références des propositions présentées par les Administrations.

\* \* \*

## ORGANIZATION OF WORK

The present document contains a list by numerical order of the provisions of the Radio Regulations and of the Appendices to those regulations to be examined respectively by each of the Working Groups set up by Committee 5 during its first meeting. It also contains a list of questions to be dealt with by these Working Groups and about which it should be decided in what form and in which part of the Final Acts of the Conference the decisions taken in this respect will be published.

Opposite each provision number and under the title of each question appear the references of the proposals presented by the Administrations.

\* \* \*

## ORGANIZACION DEL TRABAJO

El presente documento contiene, por orden numérico, una lista de las disposiciones del Reglamento de Radiocomunicaciones así como de los apéndices a dicho Reglamento cuyo examen se confía respectivamente a cada uno de los Grupos de trabajo creados por la Comisión 5 en su primera reunión. Además, contiene una lista de las cuestiones a examinar por estos Grupos de trabajo respecto a las cuales convendrá que se decida en qué forma serán publicadas y en qué parte de las Actas finales de la Conferencia serán incluidas.

Junto a cada número de disposición y debajo del título de cada cuestión se incluyen las referencias de las proposiciones presentadas por las administraciones.



GROUPE DE TRAVAIL 5A - WORKING GROUP 5A

GRUPO DE TRABAJO 5A

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art.5</u> 200	B/143(124) CAN/145(40) USA/16(13)
Table (2000-2194 kHz)	J/84(1)
<u>Art.7</u> 442	F/8(1) G/79(97) URSS/49(2)
443-444	I/31(9) F/8(2) F/8(3) G/76(26)
445	F/8(4) J/84(2) USA/125(82)
<u>Art.23</u> 863	G/76(27) F/8(13) J/84(6) USA/29(66) HOL/167(35)
866	G/86(84) for C6
903	F/8(14) G/76(28) J/84(7) USA/29(66)
<u>Art.28</u> 983	B/76(29) USA/16(12)
(984)	URSS/51(7) (Item 5)
984	B/140(68) CAN/43(17) F/8(15) HOL/70(2) I/35(24) J/84(8) USA/20(34) USA/16(12)
985	B/140(69) F/8(16) HOL/70(2) I/31(10) J/84(9) USA/16(12)
986	B/140(70) F/8(17) HOL/70(2) I/31(10) J/84(10) USA/16(12)
986 A	B/140(71) USA/16(12)

Groupe de travail 5A (suite)  
Working Group 5A (cont.)  
Grupo de trabajo 5A (cont.)

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art.28</u> (suite)	
987	F/8(18)
987 A	G/76(29)
987 B	G/76(29)
987 C	G/76(29)
987 D	G/76(29)
987 E	G/76(29)
992	B/140(72) CAN/43(18) F/8(19) G/58(5) G/66(80) I/35(24) J/84(11) USA/20(35)
996	B/140(74) CAN/43(20) F/8(20) G/76(29) HOL/73(14) I/35(24) USA/20(37) J/84(12)
<u>Art.33</u>	
1227-1235	F/111(149-150)
1227 AA	I/31(1)
1233 AA	I/31(1)
1242	F/111(150)
1242 A	G/113(59)
1247	F/111(150)
1248 A	G/79(98)
1251	F/8(27) AUS/122(44)
1254	F/111(150)
1290	F/111(154)
<u>Art.35</u>	
1320	(à examiner aussi par le GT 5B) G/78(95) (to be considered also by WG 5B) (a ser examinada también por el GT 5B)

p./6

Groupe de travail 5A (suite)  
Working Group 5A (cont.)  
Grupo de trabajo 5A (cont.)

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art.35</u> (suite)	
1321 A	F/8(30)
1322 A	G/76(30) F/8(31) J/84(17)
1323	F/8(32) RFA/94(22)
1323 A	J/84(18)
1325	G/79(99) F/8(33) RFA/4(2) J/84(19) HOL/70(4) I/31(2) USA/16(1-2)
1326 A	F/111(158)
1326 B	F/111(159)
1329 A	F/109(104)
1330 AA	I/31(2)
1334	POL/83(3) RFA/94(23)
1335	POL/83(3)
1336	F/8(34) J/84(20)
1337	F/8(35) J/84(21) CAN/43(22) G/76(30) HOL/73(16) I/35(26) USA/20(39) B/140(78) USA/16(3)
1339 A	USA/16(4) G/79(99) J/84(22)
1339 AA	I/31(2)
1339 B	J/84(22)
1339 C	J/84(22)
1341	F/8(36) G/76(30) HOL/70(4) I/31(5) POL/81(1)
1342	F/8(37) G/76(30) HOL/70(4) I/31(5) POL/81(1)
1344	F/8(38)
1344 A	G/76(30)
1344 B	G/79(99)
1345	F/8(39)
1345 A	G/76(30)
1350	F/8(40) G/79(99) HOL/70(4) I/31(5) J/84(23) USA/16(7)
1351	F/8(41) J/84(24) USA/16(8) et/and/y (8 Rev.)

GROUPE DE TRAVAIL 5A (suite)  
WORKING GROUP 5A (cont.)  
GRUPO DE TRABAJO 5A (cont.)

1. Propositions concernant la division des voies DBL en voies BLU dans la bande 1605 - 4000 kHz  
Proposals concerning the division of DSB channels in SSB channels in the band 1605 - 4000 kc/s  
Proposiciones relativas a la división de canales de DBL en canales BLU en la banda 1605 - 4000 kc/s  
  
F/8 (52 Corr.)  
G/Add.76(62)
2. Propositions concernant la mise en application de la technique de la bande latérale unique sur la fréquence 2182 kHz  
Proposal concerning the implementation of single-sideband mode of operation on frequency 2182 kc/s  
Proposiciones relativas a la implantación de la técnica de la banda lateral única en la frecuencia 2182 kc/s  
  
G/76(35)
3. Propositions relatives à la veille sur la fréquence 2182 kHz  
Proposal concerning the watch on frequency 2182 kc/s  
Proposiciones relativas a la escucha en la frecuencia 2182 kc/s  
  
POL/83(4)
4. Propositions relatives aux spécifications techniques pour les émetteurs BLU  
Proposals concerning the technical specifications for SSB transmitters  
Proposiciones relativas a las especificaciones técnicas de los transmisores de BLU  
  
(A examiner également par le Groupe de travail 5B)  
(To be considered also by Working Group 5B)  
(A ser examinadas también por el Grupo de trabajo 5B)  
  
CAN/39(1)                      J/86(40)  
I/31(4)                        B/136(3)  
USA/16(6)                    F/8(51)  
I/31(8)                        G/76(32)  
USA/16(11)                   HOL/70(6)
5. Propositions concernant le calendrier à adopter pour la mise en application de la technique de la bande latérale unique  
Proposals concerning the dates to be adopted for the implementation of the single-sideband mode of operation  
Proposiciones relativas a las fechas que han de adoptarse para la implantación de la técnica de banda lateral única  
  
(A examiner également par le Groupe de travail 5B)  
(To be considered also by Working Group 5B)  
(A ser examinadas también por el Grupo de trabajo 5B)  
  
URS/48(1)                    USA/16(10)                    J/84(32)  
CAN/39(1)                    B/136(5)  
I/31(3)                        F/8(54)  
USA/16(5)                    G/76(34)  
I/31(7)                        HOL/70(1)

GROUPE DE TRAVAIL 5BWORKING GROUP 5BGRUPO DE TRABAJO 5B

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art. 7</u> 447	AUS/122(12) F/8(5) G/77(39) HOL/72(9) I/33(18) IND/97(2)
448	AUS/122(13) F/8(6) G/77(39) HOL/72(9) I/33(18) IND/97(2)
448 A	AUS/122(14)
449	AUS/122(15) F/8(7) G/77(39) HOL/72(9) I/33(18) CAN/40(13) J/84(3) USA/17(20) B/138(28)
450	AUS/122(16) F/8(8) G/77(39) HOL/72(9) I/33(18) J/84(4) USA/17(21) B/138(29)
451	AUS/122(17)
456	B/138(30)
<u>Art. 33</u> 1295	(pour ( F/8(29) ( for ( c 6) (para (
<u>Art. 35</u> 1320	G/78(95)5A/B
1351 A	B/136(2) F/8(42) G/76(31)
1352	AUS/122(45) B/138(54) F/8(43) G/77(42) HOL/72(11) I/33(21) J/84(25) NZL/133(15)
1352 A	B/143(125)
1353	AUS/122(46) F/8(44) URSS/49(3)
1353 A	G/78(95)
1354	AUS/122(47) F/8(45) G/77(42) J/84(26) NZL/133(15)
1355	J/84(27)
1355 A	F/8(46)
1356	AUS/122(48) B/137(6) B/138(57) F/8(47) G/77(42) HOL/72(11) I/31(6) J/84(28) NZL/133(15) USA/16(9)

GROUPE DE TRAVAIL 5B (suite)

WORKING GROUP 5B (cont.)

GRUPO DE TRABAJO 5B (cont.)

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición N°
<u>Art. 35</u> 1357	AUS/122(48) B/137(7) F/8(48) G/77(42) HOL/72(11) I/31(6) J/84(29) USA/16(9)
1358	B/137(8) F/8(49) G/76(31) I/31(6) J/84(30) USA/16(9)
<u>AP 15-B</u>	CAN/41(15)a/4 F/10(60) G/77(37) G/77(36)a/4 HOL/72(12) J/86(37) J/86(39) NZL/133(8) NZL/133(9) NZL/133(10)a/4 URSS/50(6)a/4 USA/18 USA/17(15) USA/18(26) G/56(1) IND/97(2) F/9(55) CAN/40(28) NZL/132(24) CAN/40(29) G/56(62) DNK/NOR/115(1)
<u>AP 17</u>	AUS/122(11) B/138(23) B/138(26) B/138(24-25) CAN/39(2) DNK/ISL/NOR/S/37(1) F/10(61) G/77(38) HOL/71(30) HOL/72(13) I/33( ) I/33(16) J/86(41) J/86(42) J/86(43) J/86(43bis) NZL/133(8) USA/18(28)

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1. Propositions relatives aux spécifications techniques pour les émetteurs BLU  
Proposals concerning the technical specifications for SSB transmitters  
Proposiciones relativas a las especificaciones técnicas de los transmisores BLU

(Doit aussi être examiné par le Groupe de travail 5A)  
(To be considered also by Working Group 5A)  
(Debe ser examinado también por el Grupo de trabajo 5A)

CAN/39(1)	J/86(40)
I/31(4)	B/136(3)
USA/16(6)	F/8(51)
I/31(8)	G/76(32)
USA/16(11)	HOL/70(6)

2. Propositions relatives au calendrier à adopter pour la mise en application de la technique de la bande latérale unique  
Proposals concerning the dates to be adopted for the implementation of the single-sideband mode of operation  
Proposiciones relativas a las fechas que han de adoptarse para la implantación de la técnica de banda lateral única

(Doit aussi être examiné par le Groupe de travail 5A)  
(To be considered also by Working Group 5A)  
(Debe ser examinado también por el Grupo de trabajo 5A)

USSR/48(1)	USA/16(10)	J/84(32)
CAN/39(1)	B/136(5)	
I/31(3)	F/8(54)	
USA/16(5)	G/76(34)	
I/31(7)	HOL/70(1)	

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

Numéro du Règlement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición  N°
<u>Art.7</u> 457	F/8(12) G/77(39) J/84(5) J/86(45) NZL/134(17) B/138(31)
<u>Art.9</u> 488	J/86(46) USA/18(27) USA/18
500	J/86(47) USA/18(29) HOL/80(29) I/33(19) B/138(32) NZL/134(18)
540	HOL/80(29) I/33(19) J/86(48) USA/18(30) B/138(33) NZL/134(19)
541-551	HOL/80(29) I/33(19) J/86(49) USA/18(31) NZL/134(20) B/138(34)
541	F/10(63)
544	F/10(64)
547	F/10(65)
573	HOL/80(29) I/33(19) J/86(50) USA/18(31a) AUS/122(23) NZL/134(21) B/138(35)
577-586	HOL/80(29) I/33(19) J/86(15) USA/18(32) B/138(36) NZL/134(22)
581	F/10(66)
586	F/10(67)
635	HOL/80(29) I/33(19) J/86(52) USA/18(32a) NZL/134(23) B/138(37)
<u>Ap. 25</u>	CAN/41(31) B/138(27) F/10(186) HOL/80(34) I/33(17) J/86(44) NZL/134(16) MDG/47(1) URSS/50(1) USA/18(28)

GROUPE DE TRAVAIL 5D (suite)  
WORKING GROUP 5D (cont.)  
GRUPO DE TRABAJO 5D (cont.)

Propositions relatives au traitement des assignations de  
fréquences au cours de la période de transition  
Proposals concerning the treatment of the frequency  
assignments during the transition period  
Proposiciones relativas al tratamiento de las asignaciones  
de frecuencia durante el periodo de transición

A. Téléphonie/Telephony/Telefonía

F/8 (52 Corr.)  
F/8 (54)  
J/86 (54)  
F/10 (62) (to be dealt with also by 5B)  
HOL/80 (28)  
I/33 (17)  
USA/124 (75-81)

B. Télégraphie/Telegraphy/Telegrafía

(Après décision par la Commission 4)  
(After decision in Committee 4)  
(Después de una decisión en la Comisión 4)

F/8 (53 Corr.)  
G/77 (43)  
I/33 (22)  
NZL/133 (11)  
URSS/49 (5)

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

Numéro du Reglement des Radiocommunications Number of the Radio Regulations Número del Reglamento de Radiocomunicaciones	Proposition/Proposal/Proposición  N°
<u>Act.1</u> 37 A	B/139(58)
37	AUS/54(1)
37 A	AUS/54 (2)
37 A	USA/55(45)
<u>Act.5</u> 287	AUT/120(1) B/142(122) F/14(89) HOL/75(26) USA/55(50)
<u>Act.7</u> 457 A	NZL/131(25)
<u>Act.28</u> 998 A	NZL/131(26)
<u>Act.35</u> 1358 A 1359 1359 A 1363 1363 A 1363 B 1363 C 1367 A	F/15(91) NZL/131(28) F/109(105) USA/55(51) B/139(59) USA/55(46) B/139(60) USA/55(46) USA/55(46) G/78(95)
<u>AP 18</u>	AUT/120(2) B/142(123) B/139(62) CAN/42(32) F/14(90) G/112(55) HOL/75(27) USA/55(47) G57(4)
<u>AP 19</u>	G/Add.112(100) F/11(69) RFA/95(29) USA/55(48) B/139(63)

GROUPE DE TRAVAIL 5C (suite)

WORKING GROUP 5C (cont.)

GRUPO DE TRABAJO 5C (cont.)

1. Propositions relatives à l'espacement entre canaux dans la bande 156-175 MHz  
Proposals concerning the channel spacing in the band 156-175 Mc/s  
Proposiciones relativas a la separación de los canales en la banda 156-175 Mc/s

(Voir aussi AP 18)

(See also AP 18)

(Véase también AP 18)

F/11 (70)

G/112 (54)

G/112 (56)

I/34 (23)

ISL/NOR/S/105 (1)

J/87 (55)

USA/55 (49)

2. Propositions concernant l'utilisation de la bande 450-470 MHz pour les communications radiotéléphoniques  
Proposal concerning the use of the band 450-470 Mc/s for radiotelephone communications  
Proposiciones relativas a la utilización de la banda 450-470 Mc/s para las comunicaciones radiotelefónicas

G/114 (60)

3. Propositions relatives à l'établissement d'une catégorie spéciale pour le trafic radiotéléphonique sur les voies d'eau intérieures (Point 7.6)  
Proposals concerning the establishment of a separate category for mobile radiotelephone traffic in inland waterways (Item 7.6)  
Proposiciones relativas al establecimiento de una categoría especial para el tráfico móvil radiotelefónico en las vías interiores de navegación (Punto 7.6)

AUT/120(3)

F/14(89)

CAN/45(38)

HOL/75(26, 27)

G/60(65)

B/142 (123)

USA/22(56)

4. Proposition relative à l'utilisation des techniques de télécommunications spatiales dans le service mobile maritime  
Proposal concerning the utilization of space communication techniques in the Maritime Mobile Service  
Proposición relativa a la utilización de las técnicas de las telecomunicaciones espaciales en el servicio móvil marítimo

USA/126 (83)

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/20-E  
26 September 1967  
Original : English

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WORKING GROUP 6C AD HOC

TERMS OF REFERENCE FOR WORKING GROUP 6C AD HOC

To investigate and prepare a draft Recommendation relating to the desirability of revising the certificate structure for radio operator certificates, including the concept of a general class of certificate.

F. WIEFELSPÜTZ  
Chairman, Working Group 6C



# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/21-E  
28 September 1967  
Original : English

WORKING GROUP 6B

## REPORT BY WORKING GROUP 6B AD HOC

### TO WORKING GROUP 6B

Terms of Reference : Document No. DT/18

### Participants

Delegations of the U.S.A., France, Norway, the Federal Republic of Germany, the United Kingdom, the U.S.S.R. and Yugoslavia. The Observers of I.M.C.O. and the International Chamber of Shipping.

### Appendix 13

1. All proposals concerning the revision of Appendix 13 to the Radio Regulations were considered and the Working Group unanimously recommends to Working Group 6B the adoption of a draft new Appendix 13A which appears in Annex A attached hereto, subject to the indications listed in Annex B attached hereto.
2. Consequential amendments in Articles 29 and 33

The Group invites attention to the need for considering amendments in Articles 29 and 33 as follows :

### Article 29

#### General Radiotelegraph procedure ...

- |     |      |  |
|-----|------|--|
| MOD | 1004 | § 3. (1) In order to facilitate radiocommunications, stations of the mobile service, other than the Maritime Mobile Service, shall use the service abbreviations given in Appendix 13. |
| MOD | 1005 | (2) In the Maritime Mobile Service, only the service abbreviations given in Appendix 13A are to be used.   |



Article 33

General Radiotelephone procedure in the Maritime Mobile Service

MOD 1216A. To facilitate radiocommunications in the Maritime Mobile Service the service abbreviations given in Appendix 13A may be used.

3. The Group was not convinced of the necessity to include new codes relating to charges which form part of Proposal No. DNK/38(15) DT/2, pages 491 and following. It felt that the code QSJ covered the requirement; however, it invited the Delegation of Denmark to raise the question, if it so desires, at a later stage.
4. The Group did not have time to complete its consideration of the proposed deletion of codes and abbreviations. A summary of the related proposals is given in Annex C to the present report for final disposal in Working Group 6B.
5. In view of the difficulties surrounding the convening of a further meeting of the Group and in agreement with the Chairman of Working Group 6B, the Group referred back the proposals concerning draft resolutions relating to questions of mutual interest to I.T.U. and I.M.C.O. in connection with signal codes (see Document No. DT/26).

F.J. CLARKE  
Chairman  
Working Group 6B ad hoc

Annexes : 3



A N N E X . A

KEY TO SYMBOLS USED IN THE MARGIN

(ex-App.13)		means	code carried over from Appendix 13 without amendment since no proposal was received.
(ex-App.13)	NOC	means	the Group recommends the inclusion of this code taken from Appendix 13 without amendment.
(ex-App.13 MOD)		means	code taken from Appendix 13 with an editorial amendment.
(ex-App.13 MOD)		means	code taken from Appendix 13 with an amendment of substance (applies to Introduction).
(ex-App.13 SUP)		means	code carried over from Appendix 13 but for which there is at least one proposal either for deletion or for no longer required by the Maritime Mobile Service (Working Group 6B will dispose of these proposals, see paragraph 3 of the report of Working Group 6B ad hoc).
(ex-App.13)	SUP	means	the Group recommends that this code should not be included in the new Appendix 13A.
(ex-p.487)		means	code taken from page 487 of Document No. DT/2 with or without amendment.

ADD

APPENDIX 13 A

(ex-App.13  
MOD)

MISCELLANEOUS ABBREVIATIONS AND SIGNALS TO BE USED FOR  
RADIOCOMMUNICATIONS IN THE MARITIME MOBILE SERVICE

(See Articles 29 and 33)

SECTION I. Q CODE

Introduction

- (ex-App.13  
MOD) 1. The series of groups listed in this Appendix range from QOA to QVZ.
- (ex-App.13  
MOD) 2. Of these, the QOA to QQZ series are reserved for the Maritime Mobile Service.
- (ex-App.13  
MOD)  
(ex-p.511) 3. Certain Q code abbreviations may be given an affirmative or negative sense by sending, immediately following the abbreviation,
- a) YES or NO in the case of radiotelegraphy communications,
- b) the letter C (spoken as CHARLIE) or NO (spoken as NO) in the case of radiotelephony communications.
- (ex-App.13) 4. The meanings assigned to Q code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear shall be sent in the same order as shown in the text of the following tables.
- (ex-p.488) 5. Q code abbreviations are given the form of a question when followed by a question mark in radiotelegraphy and RQ (ROMEO QUEBEC) in radiotelephony. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark (or RQ) should follow this information.
- (ex-App.13) 6. Q code abbreviations with numbered alternative significations shall be followed by the appropriate figure to indicate the exact meaning intended. This figure shall be sent immediately following the abbreviation.
- (ex-App.13) 7. All times shall be given in Greenwich Mean Time (G.M.T.) unless otherwise indicated in the question or reply.

ABBREVIATIONS AVAILABLE FOR THE MARITIME MOBILE SERVICE

A. List of Abbreviations in Alphabetical Order

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.489) ADD Q..	Can you communicate by radiotelegraphy (500 kc/s)?	I can communicate by radiotelegraphy (500/kc/s).
(ex-p.490) ADD Q..	Can you communicate by radiotelephony (2182 kc/s)?	I can communicate by radiotelephony (2182 kc/s).
(ex-p.490) ADD Q..	Can you communicate by radiotelephony (channel 16-156.80 Mc/s)?	I can communicate by radiotelephony (channel 16-156.80 Mc/s).
(ex-p.490) ADD Q..	Can you communicate with me in.. 0. Dutch 5. Italian 1. English 6. Japanese 2. French 7. Norwegian 3. German 8. Russian 4. Greek 9. Spanish?	I can communicate with you in.. 0. Dutch 5. Italian 1. English 6. Japanese 2. French 7. Norwegian 3. German 8. Russian 4. Greek 9. Spanish
(ex-p.490) ADD Q..		The groups which follow are from the International Code of Signals.
(ex-p.491) ADD Q..	Have you received the safety signal sent by ... (name and/or call sign)?	I have received the safety signal sent by ... (name and/or call sign).
(ex-p.498) ADD Q..	What is your MAGNETIC course?	My MAGNETIC course is ..... degrees.
(ex-p.499) ADD Q..	What is the commercial value of my signals?	Your signals are : 1. Uncommercial 2. Commercial with difficulty 3. Commercial.
(ex-p.499) ADD Q..	How many tapes have you to send?	I have ..... tapes to send.

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.499)	ADD Q..	Shall I send a phasing signal for ..... seconds?	Send a phasing signal for ..... seconds.
(ex-p.499)	ADD Q..	Shall I send my tape?	Send your tape.
(ex-p.528)	ADD Q..	Listen on 2182 kc/s or 121.5 Mc/s or 243 Mc/s for signals of emergency position-indicating radiobeacons.	I am listening on 2182 kc/s or 121.5 or 243 Mc/s for signals of emergency position-indicating radiobeacons.
(ex-p.528)	ADD Q..	Have you received the signal of an emergency position-indicating radiobeacon on 2182 kc/s or 121.5 Mc/s or 243 Mc/s?	I have received the signal of an emergency position-indicating radiobeacon on 2182 kc/s or 121.5 Mc/s or 243 Mc/s.

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.512)	QRA	What is the name of your vessel (or station)?	The name of my vessel (or station) is .....
(ex-App.13)	QRB	How far approximately are you from my station?	The approximate distance between our station is .... nautical miles (or kilometres)
(ex-App.13)	QRC	By what private enterprise (or State Administration) are the accounts for charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ..... (or State Administration)
(ex-App.13 SUP)	QRD	Where are you bound for and where are you from?	I am bound for ... from ...
(ex-App.13 SUP)	QRE	What is your estimated time of arrival at ... (or over ...) (place)?	My estimated time of arrival at ... (or over ...) (place) is ... hours
(ex-App.13 SUP)	QRF	Are you returning to ... (place)?	I am returning to ... (place) or Return to ... (place)
(ex-App.13)	QRG	Will you tell me my exact frequency (or that of ....)?	Your exact frequency (or that of ...) is ... kc/s (or Mc/s)
(ex-App.13)	QRH	Does my frequency vary?	Your frequency varies
(ex-App.13)	QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad
(ex-App.13)	QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book
(ex-p.512)	QRK	What is the intelligibility of my transmission (or that of ... (name and/or call sign))?	The intelligibility of your transmission (or that of ... (name and/or call sign)) is ... 1. bad 2. poor 3. fair 4. good 5. excellent

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.512)	QRL	Are you busy?	I am busy (or I am busy with ... (name and/or call sign)) Please do not interfere.
(ex-p.496)	QRM	Is my transmission being interfered with?	Your transmission is being interfered with : (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
(ex-App.13)	QRN	Are you troubled by static?	I am troubled by static. (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
(ex-App.13)	QRO	Shall I increase transmitter power?	Increase transmitter power.
(ex-App.13)	QRP	Shall I decrease transmitter power?	Decrease transmitter power.
(ex-App.13 MOD)	QRQ	Shall I transmit faster?	Transmit faster (... words per minute)
(ex-App.13)	QRR	Are you ready for automatic operation?	I am ready for automatic operation. (Send at ... words per minute.)
(ex-App.13 MOD)	QRS	Shall I transmit more slowly?	Transmit more slowly (... words per minute).
(ex-App.13 MOD)	QRT	Shall I stop transmission?	Stop transmission.
(ex-App.13)	QRU	Have you anything for me?	I have nothing for you.
(ex-App.13)	QRV	Are you ready?	I am ready.
(ex-App.13)	QRW	Shall I inform ... that you are calling him on ... kc/s ( <u>or</u> Mc/s)?	Please inform ... that I am calling him on ... kc/s ( <u>or</u> Mc/s).
(ex-App.13)	QRX	When will you call me again?	I will call you again at ... hours (on ... kc/s ( <u>or</u> Mc/s)).

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13)	QRY	What is my turn? ( <u>Relates to communication</u> )	Your turn is Number ... ( <u>or according to any other indication</u> ). ( <u>Relates to communication</u> )
(ex-App.13)	QRZ	Who is calling me?	You are being called by ... (on ... kc/s (or Mc/s)).
(ex-p.514)	QSA	What is the strength of my signals (or those of ... (name and/or call sign))?	The strength of your signals (or those of ... (name and/or call sign) is ... 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good
(ex-App.13)	QSB	Are my signals fading?	Your signals are fading.
(ex-p.509)	QSC	Are you a low traffic ship station? (see Article 32, Section V)	I am a low traffic ship station.
(ex-p.497)	QSD	Are my signals mutilated?	Your signals are mutilated.
(ex-App.13 (SUP))	QSE	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is ... ( <u>figures and units</u> )
(ex-App.13 (SUP))	QSF	Have you effected rescue?	I have effected rescue and am proceeding to ... base (with ... persons injured requiring ambulance).
(ex-App.13)	QSG	Shall I send ... telegrams at a time?	Send ... telegrams at a time.
(ex-p.514)	QSH	Are you able to home with your direction-finding equipment?	I am able to home with my direction-finding equipment (on ... (name and/or call sign)).
(ex-App.13 (SUP))	QSI		I have been able to break in on your transmission.  or Will you inform ... ( <u>call sign</u> ) that I have been unable to break in on his transmission (on ... kc/s ( <u>or Mc/s</u> )).

	<u>Abbre- viation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13)	Q SJ	What is the charge to be collected to ... including your internal charge?	The charge to be collected to ... including my internal charge is ... francs.
(ex-App.13)	Q SK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
(ex-App.13)	Q SL	Can you acknowledge receipt?	I am acknowledging receipt.
(ex-App.13 SUP)	Q SM	Shall I repeat the last telegram which I sent you ( <u>or</u> some previous telegram)?	Repeat the last telegram which you sent me ( <u>or</u> telegram(s) number(s) ...).
(ex-App.13 SUP)	Q SN	(Do <u>not</u> include text of QSN)	
(ex-p.514)	Q SO	Can you communicate with ... (name and/or call sign) direct (or by relay)?	I can communicate with ... (name and/or call sign) direct (or by relay).
(ex-p.515)	Q SP	Will you relay to ... (name and/or call sign) free of charge?	I will relay to ... (name and/or call sign) free of charge.
(ex-App.13 NOC)	Q SQ	Have you a doctor on board ( <u>or</u> is ... ( <u>name of person</u> ) on board)?	I have a doctor on board ( <u>or</u> ( <u>name of person</u> ) is on board)
(ex-App.13)	Q SR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you ( <u>or</u> have interference).
(ex-p.515)	Q SS	What working frequency will you use?	I will use the working frequency ... kc/s (or .. Mc/s) ( <u>in the high frequency bands; normally only the last three figures of the frequency need be given</u> ).



	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.515)	QSU	Shall I transmit or reply on this frequency (or on ... kc/s ( <u>or</u> ... Mc/s)); (with emissions of class ...)?	Transmit or reply on this frequency (or on ... kc/s (or ... Mc/s)); (with emissions of class ...).
(ex-p.515)	QSV	Shall I transmit a series of V's (or signs for adjustment on this frequency (or ... kc/s ( <u>or</u> ... Mc/s)))?	Transmit a series of V's (or signs for adjustment on this frequency (or ... kc/s (or ... Mc/s))).
(ex-App.13)	QSW	Will you send on this frequency ( <u>or</u> on ... kc/s ( <u>or</u> Mc/s)) (with emissions of class ...)?	I am going to send on this frequency ( <u>or</u> on ... kc/s ( <u>or</u> Mc/s)) (with emissions of class ...).
(ex-p.515)	QSX	Will you listen to ... (name and/or call sign) on ... kc/s (or ... Mc/s))?	I am listening to ... (name and/or call sign) (on ... kc/s (or ... Mc/s)).
(ex-App.13)	QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency ( <u>or</u> on ... kc/s ( <u>or</u> Mc/s)).
(ex-p.515)	QSZ	Shall I transmit each word or group more than once?	Transmit each word or group twice (or ... times).
(ex-p.515)	QTA	Shall I cancel telegram (or message or signal number ...)?	Cancel telegram (or message or signal number ...).
(ex-p.516)	QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
(ex-p.516)	QTC	How many telegrams have you to send?	I have ... telegrams for you (or for ... (name and/or call sign)).
(ex- App.13 SUP)	QTD	What has the rescue vessel or rescue aircraft recovered?	... ( <u>identification</u> ) has recovered ... 1. ... ( <u>number</u> ) survivors 2. wreckage 3. ... ( <u>number</u> ) bodies.

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.516)	QTE What is my TRUE bearing from you? or What is my TRUE bearing from ... (name and/or call sign) from ... or What is the TRUE bearing of ... (name and/or call sign) from ... (name and/or call sign)?	Your TRUE bearing from me is ... degrees at ... hours. or Your TRUE bearing from ... (name and/or call sign) was ... degrees at ... hours. or The TRUE bearing of ... (name and/or call sign) from ... (name and/or call sign) was ... degrees at ... hours.
(ex-p.516)	QTF Will you give me my position according to the bearings taken by the direction-finding stations which you control?	Your position according to the bearings taken by the direction-finding stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours.
(ex-p.516)	QTC Will you transmit two dashes (or carrier frequency) of ten seconds each followed by your call sign (or name) (repeated ... times) (on ... kc/s ( ... Mc/s))? or Will you request ... (name and/or call sign) to send two dashes of ten seconds each (or carrier) followed by his call (and/or name) (repeated ... times on ... kc/s (or ... Mc/s))?	I am going to transmit two dashes (or carrier frequency) of ten seconds each followed by my call sign (or name) (repeated ... times) (on ... kc/s (or ... Mc/s)). I have requested ... (name and/or call sign) to send two dashes of ten seconds each (or carrier) followed by his call sign (and/or name) (repeated ... times) on ... kc/s (or ... Mc/s)
(ex-App.13 SUP)	QTH What is your position in latitude and longitude (or <u>according to any other indication</u> )?	My position is ... latitude ... longitude ( <u>or according to any other indication</u> ).
(ex-p.497)	QTI What is your TRUE course?	My TRUE course is ..... degrees.

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13 SUP)	QTJ	What is your speed?  (Requests the speed of a ship or aircraft through the water or air respectively)	My speed is ... knots ( <u>or</u> kilometres per hour <u>or</u> ... statute miles per hour).  (Indicates the speed of a ship or aircraft through the water or air respectively)
(ex-App.13 SUP)	QTK	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is ... knots ( <u>or</u> ... kilometres per hour <u>or</u> ... statute miles per hour)
(ex-App.13 SUP)	QTL	What is your TRUE heading?	My TRUE heading is ... degrees.
(ex-App.13 SUP)	QTM	What is your MAGNETIC heading?	My MAGNETIC heading is ... degrees.
ex-App.13 SUP)	QTN	At what time did you depart from ... ( <u>place</u> )	I departed from ... ( <u>place</u> ) at ... hours.
(ex-App.13)	QTO	Have you left dock ( <u>or</u> port)?  Are you airborne? <u>or</u>	I have left dock ( <u>or</u> port).  I am airborne. <u>or</u>
(ex-App.13)	QTP	Are you going to enter dock ( <u>or</u> port)?  Are you going to alight (or land)? <u>or</u>	I am going to enter dock ( <u>or</u> port).  I am going to alight ( <u>or</u> land). <u>or</u>
(ex-App.13 MOD)	QTQ	Can you communicate with my station by means of the International Code of Signals (INTERCO)?	I am going to communicate with your station by means of the International Code of Signals (INTERCO).
(ex-App.13)	QTR	What is the correct time?	The correct time is ... hours.
(ex-p.498)	QTS	Will you transmit your call sign (and/or name) for ... seconds?	I will transmit my call sign and/or name) for ... seconds

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13 SUP)	QTT		The identification signal which follows is superimposed on another transmission.
(ex-App.13)	QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
(ex-App.13 MOD)	QTV	Shall I stand guard for you on ... kc/s ( <u>or</u> ... Mc/s) (from ... to ... hours)?	Stand guard for me on ... kc/s ( <u>or</u> Mc/s) (from ... to ... hours).
(ex-App.13 SUP)	QTW	What is the condition of survivors?	Survivors are in ... condition urgently need ...
(ex-App.13)	QTX	Will you keep your station open for further communication with me until further notice ( <u>or</u> until ... hours)?	I will keep my station open for further communication with you until further notice ( <u>or</u> until ... hours).
(ex-App.13 SUP)	QTY	Are you proceeding to the position of incident and of so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at ... hours (on ... <u>date</u> )
(ex-App.13 SUP)	QTZ	Are you continuing the search?	I am continuing the search for ... (aircraft, ship, survival craft, survivors or wreckage).
(ex-p.517)	QUA	Have you news of ... (name and/or call sign)?	Here is news of ... (name and/or call sign)
(ex-App.13 SUP)	QUB	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at .... ( <u>place of observation</u> )?	Here is the information requested: ( <u>The units used for speed and distances should be indicated</u> ).

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-p.489)	QUC	What is the number ( <u>or other indication</u> ) of the last message you received from me ( <u>or from ...</u> (name and/or call sign))?	The number ( <u>or other indication</u> ) of the last message I received from you ( <u>or from ...</u> (name and/or call sign)) is ...
(ex-p.518)	QUD	Have you received the urgency signal sent by ... (name and/or call sign)?	I have received the urgency signal sent by ... (name and/or call sign) at ... hours.
(ex-App.13)	QUE	Can you use telephony in ... ( <u>language</u> ), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... ( <u>language</u> ) on ... kc/s ( <u>or</u> Mc/s).
(ex-p.518)	QUF	Have you received the distress signal sent by ... (name and/or call sign)?	I have received the distress signal sent by ... (name and/or call sign) at ... hours.
(ex-App.13 SUP)	QUG	Will you be forced to alight ( <u>or land</u> )?	I am forced to alight ( <u>or land</u> ) immediately. <u>or</u> I shall be forced to alight ( <u>or land</u> ) at ... ( <u>position or place</u> ) at ... hours.
(ex-App.13 SUP)	QUH	Will you give me the present barometric pressure at sea level?	The present barometric pressure at sea level is ... ( <u>units</u> )
(ex-App.13 SUP)	QUI	Are your navigation lights working?	My navigation lights are working.
(ex-App.13 SUP)	QUJ	Will you indicate the TRUE track to reach you ( <u>or ...</u> )?	The TRUE track to reach me ( <u>or ...</u> ) is ... degrees at ... hours.
(ex-App.13 SUP)	QUK	Can you tell me the condition of the sea observed at ... ( <u>place or co-ordinates</u> )?	The sea at ... ( <u>place or co-ordinates</u> ) is ...
(ex-App.13 SUP)	QUL	Can you tell me the swell observed at ... ( <u>place or co-ordinates</u> )?	The swell at ... ( <u>place or co-ordinates</u> ) is ...

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13)	QUM	May I resume normal working?	Normal working may be resumed.
(ex-p.498)	QUN	<p>1. When directed to all stations :</p> <p>Will vessels in my immediate vicinity .....</p> <p style="text-align: right;">or</p> <p>(in the vicinity of ..... latitude ..... longitude)</p> <p style="text-align: right;">or</p> <p>(in the vicinity of .....)</p> <p>Please indicate their position, TRUE course and speed?</p> <p>2. When directed to a single station :</p> <p>Please indicate your position, TRUE course and speed.</p>	<p>My position, TRUE course and speed are .....</p>
(ex-App.13 SUP)	QUO	<p>Shall I search for ....</p> <p>1. aircraft</p> <p>2. ship</p> <p>3. survival craft</p> <p>in the vicinity of ..... latitude ....., longitude (or according to any other indication)?</p>	<p>Please search for ....</p> <p>1. aircraft</p> <p>2. ship</p> <p>3. survival craft</p> <p>in the vicinity of ..... latitude ..... longitude (or according to any other indication).</p>
(ex-App.13 SUP)	QUP	<p>Will you indicate your position by ....</p> <p>1. searchlight</p> <p>2. black smoke trail</p> <p>3. pyrotechnic lights?</p>	<p>My position is indicated by ....</p> <p>1. searchlight</p> <p>2. black smoke trail</p> <p>3. pyrotechnic lights.</p>
(ex-App.13 SUP)	QUQ	<p>Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen, deflect the beam up wind and on the water (or land) to facilitate your landing?</p>	<p>Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.</p>

	<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
(ex-App.13 SUP)	QUR	Have survivors .... 1. received survival equipment 2. been picked up by rescue vessel 3. been reached by ground rescue party?	Survivors .... 1. are in possession of survival equipment dropped by .... 2. have been picked up by rescue vessel 3. have been reached by ground rescue party.
(ex-App.13 SUP)	QUS	Have you sighted survivors or wreckage? If so, in what position?	Have sighted .... 1. survivors in water 2. survivors on rafts 3. wreckage in position .... latitude .... longitude ( <u>or according to any other indication</u> ).
(ex-App.13 SUP)	QUT	Is position of incident marked?	Position of incident is marked by .... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. .... ( <u>specify other marking</u> ).
(ex-App.13 SUP)	QUU	Shall I home ship or aircraft to my position?	Home ship or aircraft .... ( <u>call sign</u> ) .... 1. to your position by transmitting your call sign and long dashes on .... kc/s ( <u>or Mc/s</u> ) 2. by transmitting on .... kc/s ( <u>or Mc/s</u> ) TRUE track to reach you.
(ex-App.13 SUP)	QUW	Are you in the search area designated as .... ( <u>designator or latitude and longitude</u> )?	I am in the .... ( <u>designation</u> ) search area.
(ex-App.13 SUP)	QUY	Is position of survival craft marked?	Position of survival craft was marked at .... hours by.... 1. flame or smoke float 2. sea marker 3. sea marker dye 4. .... ( <u>specify other marking</u> ).

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

(This table can be prepared only after Section I A  
has been adopted)

SECTION II. MISCELLANEOUS ABBREVIATIONS AND SIGNALS

	<u>Abbreviation or Signal</u>	<u>Definition</u>
(ex-p.494)	AA	All after ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
(ex-p.494)	AB	All before ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
(ex-p.494)	ADS	Address (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
	AR	End of transmission.
	AS	Waiting period.
	BK	Signal used to interrupt a transmission in progress.
(ex-p.494)	BN	All between ... and ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
	BQ	A reply to an RQ.
(ex-p.505)	C	Affirmative - yes or "The significance of the previous group should be read in the affirmative".
	CFM	Confirm (or I confirm).
	CL	I am closing my station.
	COL	Collate (or I collate).
(ex-p.505)	CORRECTION (KOR-REK-SHUN)	Cancel my last word or group. The correct word or group follows.
	CP	General call to two or more specified stations (see Article 31).
	CQ	General call to all stations (see Articles 31 and 33 (No. 1302)).

Note: When used in radiotelegraphy a bar over the letters composing a signal denotes that the letters are to be sent as one symbol.



<u>Abbreviation or Signal</u>	<u>Definition</u>
CS	Call sign ( <u>used to request a call sign</u> ).
DDD	Used to identify the transmission of the distress message by a station not itself in distress ( <u>see No. 1459</u> ).
(ex-p.506 MOD) DE	"From ....." (used to precede the name or other identification of the calling station) - see No. 1216 A.
DF	Your bearing at ... hours was ... degrees, in the doubtful sector of this station, with a possible error of ... degrees.
DO	Bearing doubtful. Ask for another bearing later ( <u>or</u> at ... hours).
E	East (Cardinal).
ER	Here ...
ETA	Estimated time of arrival.
(ex-p.506 MOD) INTERCO (IN-TER-CO)	International Code of Signals groups follow.

Comments by Working Group 6B ad hoc concerning  
Section II

1. The following abbreviations are the subject of at least one proposal for cancellation as no longer required for the Maritime Mobile Service:  
 DDD DF DO E ER ETA KMH KTS MIN MPH N NW  
 S SOS SS TTT W XXX YES  
 and are for clearance in Working Group 6B.
2. The MOD to the following nine abbreviations was agreed subject to decisions on the regulatory aspect of use for radiotelephony:  
 AA AB ADS BN PBL SIG TXT WA WB
3. The ADD of BT and KA (p.495 DT/2) were deferred pending an explanation by the Delegation of Denmark in Working Group 6B.
4. The MOD to TR (DT/2 p.507) was agreed, subject to decisions of Working Group 6A.
5. The MOD to CQ (DT/2 p. 505) was deferred pending decisions of Working Group 6A on RR 1302.

<u>Abbreviation or signal</u>	<u>Definition</u>
ITP	The punctuation counts.
K	Invitation to transmit.
KMH	Kilometres per hour.
KTS	Nautical miles per hour ( <u>knots</u> ).
MIN	Minute ( <u>or</u> Minutes).
MPH	Statute miles per hour.
MSG	Prefix indicating a message to or from the master of a ship concerning its operation or navigation.
N	North (Cardinal).
NIL	I have nothing to send to you.
NO	No ( <u>Negative</u> ).
NW	Now.
OK	We agree ( <u>or</u> It is correct).
OL	Ocean Letter.
P	Prefix indicating a private radiotelegram.
(ex-p.494) PBL	Preamble ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
R	Received.
REF	Reference to ... ( <u>or</u> Refer to ...).
RPT	Repeat ( <u>or</u> I repeat) ( <u>or</u> Repeat ...).
RQ	Indication of a request.
S	South (Cardinal).
(ex-p.494) SIG	Signature ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
SLT	Radiomaritime Letter.
SOS	Distress Signal (... _ _ _ ... <u>to be sent as one signal</u> ).
SS	Indicator preceding the name of a ship station.
SVC	Prefix indicating a service telegram.
SYS	Refer to your service telegram.

<u>Abbreviation or signal</u>	<u>Definition</u>
TFC	Traffic.
TR	Used by a land station to request the position and next port of call of a mobile station ( <u>see No. 1083 and 1314</u> ); used also as a prefix to the reply.
TTT	This group when sent three times constitutes the safety signal ( <u>see No. 1488</u> ).
TU	Thank you.
(ex-p.494) TXT	Text ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
<u>VA</u>	End of work.
W	West (Cardinal).
(ex-p.494) WA	Word after ... ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
(ex-p.494) WB	Word before ... ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
WD	Word(s) or Group(s).
(ex-p.507) WX	Weather report follows.
XQ	Prefix used to indicate an operating communication in the fixed service.
XXX	This group when sent three times constitutes the urgency signal ( <u>see No. 1477</u> ).
YES	Yes ( <u>Affirmative</u> ).
(ex-p.510) YZ	The words which follow are in plain language.

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Note : When used in radiotelegraphy a bar over the letters composing a signal denotes that the letters are to be sent as one symbol.

A N N E X B

1. ADD Q . . . Have you received the safety signal sent by . . . . (name and/or call sign) ? DT/2 p. 491.

Deferred pending decision on a draft resolution on the division of responsibility ITU/IMCO.

2. ADD Q . . . What is your ship charge ? etc. DT/2 pp. 491 -- 494.

Deferred pending presentation by the Delegation of Denmark -- see paragraph 2 of the Report by Working Group 6B ad hoc.

3. ADD Q . . . What is your MAGNETIC course ? DT/2 p. 498.

Deferred pending decision on a draft resolution on the division of responsibility ITU/IMCO.

4. ADD Q . . . What is the commercial value of my signals ? plus three related codes appearing on page 499 of DT/2.

Agreed in principle, but are deferred in order to give the Delegation of the U.S.A. an opportunity to provide an amendment widening the application.

5. ADD QSC DT/2 p. 509.

Agreed subject to Committee 4 decision on retention of the term "low traffic ship station".

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A N N E X E C - A N N E X C - A N E X O C

PROPOSITIONS  
PROPOSALS  
PROPOSICIONES

SUP

	D	G	J	USA
QRD	x	-	-	x
QRE	x	x	-	x
QRF	x	x	x	x
QSE	x	x	x	x
QSF	x	x	x	x
QSI	x			
QSM	x			
QSN				
QTD	x		x	x
QTH				x
QTJ	x			x
QTK	x	x		x
QTL	x	x		x
QTM	x	x		x
QTN	x	x	x	x

SUP

PROPOSITIONS  
PROPOSALS  
PROPOSICIONES

SUP

	D	G	J	USA
QTT	x			
QTW	x		x	x
QTY	x		x	x
QTZ	x		x	x
QUB	x		x	x
QUG	x	x	x	x
QUH	x		x	x
QUI	x	x	x	x
QUJ	x	x	x	x
QUK	x	x	x	x
QUL	x	x	x	x
QUO	x		x	x
QUP	x		x	x
QUQ	x	x	x	x
QUR	x		x	x

PROPOSITIONS  
PROPOSALS  
PROPOSICIONES

SUP

	D	G	J	USA
QUS	x		x	x
QUT	x		x	x
QUU	x		x	x
QUW	x	x	x	x
QUY	x		x	x
<u>DDD</u>		x		
DF				x
DO				x
E				x
ER				x
ETA				x
KMH				x

PROPOSITIONS  
PROPOSALS  
PROPOSICIONES

SUP

	D	G	J	USA
KTS				x
MIN				x
N				x
NW				x
S				x
<u>SOS</u>		x		
SS		x		
TTT		x		
W				x
XXX		x		
YES		x		

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/22-E  
26 September 1967  
Original : English/French

## WORKING GROUP 5D AD HOC

### TERMS OF REFERENCE FOR WORKING GROUP 5D AD HOC

1. To draft a procedure for the conversion from DSB to SSB operation in the HF maritime mobile radiotelephony bands, taking into account
  - a) the principle of retaining Appendix 25 to the Radio Regulations (Geneva, 1959); and
  - b) the inclusion in this Appendix of all additional HF radiotelephone channels made available by this Conference.
2. To draft a recommendation concerning the convening, before a date to be suggested by the Ad Hoc Group, of a World Administrative Radio Conference to establish a Frequency Allotment Plan for the High Frequency radiotelephony bands, such a Conference to be preceded by a preparatory meeting of experts.

P.E. WILLEMS  
Chairman Working Group 5D



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/23-E

26 September 1967

Original : English

WORKING GROUP 6C

DRAFT

FIRST REPORT OF WORKING GROUP 6C  
TO COMMITTEE 6 (OPERATION)

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Article 28, RR 956

Abrogation of Recommendation No. 27 - Draft resolution

Having considered all proposals submitted to it on the above subjects, Working Group 6C unanimously agreed the draft new provisions reproduced in the Annex attached hereto.

F. WIEFELSPÜTZ  
Chairman

Annex : 1





A N N E X

Article 28

SUP 956

DRAFT RESOLUTION

RELATING TO THE ABROGATION OF RESOLUTION No. ... AND  
RECOMMENDATIONS Nos. 27 ..... AND ... OF THE  
ADMINISTRATIVE RADIO CONFERENCE, GENEVA, 1959

The Maritime Conference, Geneva, 1967,

considering

that the texts in question are now obsolete

decides

that the undermentioned Resolutions and Recommendations of the  
Administrative Radio Conference, Geneva, 1959, are abrogated :

Recommendation No. 27 relating to "Hours of Service for Ship  
Stations"

Note to the Editorial Committee

It is anticipated that several other Resolutions or Recommendations  
may be included in this Resolution.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/24-E  
26 September 1967  
Original : English

## WORKING GROUP 6C

### REPORT OF WORKING GROUP 6C AD HOC

(Reference Document No. DT/20)

#### Participants :

Chairman : P.J. CHAPMAN (Australia)

Indonesia	: E.J.S. LAHAY	U.S.A.	: D. CHILD
Italy	: Captain CARLOTTI	U.K.	: Capt. F.J. WYLIE P.V.G. LINTZGY
Fed. Republic Germany	: R.W. HARDER	I.S.F.	: M.J. ALLEN
Sweden	: SVEN-RAHMN	I.F.R.O.	: M. HANSEN
Norway	: P.A. TORVIK	C.I.R.M.	: Col. J.D. PARKER
France	: M. MARTINEZ		

The Working Group agreed that it was not competent to discuss the full terms of reference as understood by the Delegation of the United Kingdom at the last meeting of Working Group 6C, i.e. whether or not the ad hoc Working Group could consider the wishes of countries desiring to adopt the proposed single class of general radiotelegraphists' certificate.

However, it was finally agreed that this problem would be referred back to Working Group 6C and that Working Group 6C ad hoc could only consider the preparation of a draft Recommendation as dictated by Document No. DT/20.

A copy of the agreed draft Recommendation is attached hereto.



It was further agreed to recommend to the Chairman of Working Group 6C that the discussion on the United Kingdom proposal as mentioned above should precede discussion on the draft Recommendation.

P.J. CHAPMAN  
Chairman, Working Group 6C ad hoc

Annex : 1

A N N E X

DRAFT RECOMMENDATION

The Administrative Radio Conference, Geneva, 1967;

Considering

that Article 23 of the Radio Regulations provides for two classes of certificate as well as a special certificate for radiotelegraph operators;

that the majority of radiotelegraph operators, said to be about 70%, are the holders of the Second Class Certificate;

that it is doubtful if the higher morse speed qualification would be necessary in the future;

that there is a future need for a greater emphasis on the practical maintenance of radio equipment in service;

Recommends

that administrations consider the desirability of replacing the present two classes of certificate with one class of certificate for radiotelegraph operators more closely related to future needs.

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# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/25-E  
28 September 1967  
Original : French

## WORKING PARTY 6A

### DRAFT OF SECOND REPORT OF WORKING PARTY 6A TO COMMITTEE VI (OPERATION)

#### USE OF SELECTIVE CALLING DEVICES

##### 1. General principle

The Working Party unanimously decided that a selective calling system should be used in the Maritime Mobile Service and that provisions to this effect should be introduced into the Radio Regulations.

##### 2. Final objective

The Working Party unanimously decided that a single international system should be adopted operating on all bands allocated to the Maritime Mobile Service.

However, this system does not rule out the possibility of using national systems operating on frequencies other than international calling frequencies.

The Working Party also recognized that the final objective of a single international system could not be attained during the lifetime of the new provisions of the Radio Regulations at present being worked out.

##### 3. Identification of calling station by ship stations

For this system to be fully effective, ship stations should be provided with a means of identifying the calling station but this should not necessarily be compulsory during the lifetime of the new provisions of the Radio Regulations at present being worked out.

##### 4. Frequency requirements

Selective calls should normally be made on the international calling frequencies (500 kc/s, 2182 kc/s, 156.8 Mc/s) but this does not exclude the use of working frequencies or national frequencies.



As regards the HF range, the Working Party unanimously decided that a frequency is required in each of the bands allocated exclusively to the Maritime Mobile Service.

5. Conclusion

The Working Group recommended that the selective calling system adopted should be such as to enable a coast station to contact a ship irrespective of the type of radio equipment used by the ship or the nature of the traffic to be exchanged (radio telegrams or radiotelephone calls).

Chairman :

Albert CHASSIGNOL

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/26-E  
29 September 1967  
Original : English

WORKING GROUP 6B

DRAFT RESOLUTION ...

RELATING TO THE EXAMINATION OF PERTINENT PORTIONS OF  
THE REVISED INTERNATIONAL CODE OF SIGNALS

(submitted by the Chairman of Working Group 6B  
as a basis for discussion)

The ~~Maritime~~ Conference, Geneva, 1967,

considering

- a) that the Intergovernmental Maritime Consultative Organization (I.M.C.O.) has prepared a revised International Code of Signals which may be used in all methods of signalling including radio;
- b) that the revised International Code of Signals was adopted by the 4th Assembly of the I.M.C.O. in 1965, to come into effect on first of January 1968; later amended to be first of January 1969;
- c) that the I.M.C.O. Assembly at its 4th Session invited the International Telecommunication Union (I.T.U.) to make such recommendations relative to the revised International Code of Signals at an Administrative Radio Conference for the Maritime Mobile Service;
- d) that the present Conference has amended certain portions of the Radio Regulations, exclusively with respect to the Maritime Mobile Service, which relate to the revised International Code of Signals in order to reduce to a minimum differences between the two documents;
- e) that it is necessary to determine the responsibility of the I.T.U. and the I.M.C.O. regarding the choice and conditions of use of international signals related to radiocommunication;



resolves

1. that the International Telecommunication Union is responsible for determining the choice and conditions for the use of international signals relating to radiocommunication procedures;
2. that the Intergovernmental Maritime Consultative Organization is responsible for determining the choice and conditions of use of signals relating to other matters, such as navigation and search and rescue activities;
3. that where considered desirable, signals within the responsibility of one organization may be included for information or use in the publications of the other organization, suitably annotated as to indicate their source;
4. that after an examination of the revised International Code of Signals, the International Telecommunication Union can see no objection to the adoption of that Code;
5. that the attention of the Intergovernmental Maritime Consultative Organization should be drawn to certain differences existing between the Radio Regulations and the revised International Code of Signals;

requests the Secretary General

1. to refer to the Secretary General of the I.M.C.O. the fact that there is no objection to the adoption of the revised International Code of Signals;
2. to refer to the Secretary General of the I.M.C.O. the report prepared by the World Maritime Radio Conference (Geneva, 1967) annexed hereto.

Annex : 1



A N N E X TO THE DRAFT RESOLUTION

(OUTLINE OF ITEMS WHICH  
MIGHT BE INCLUDED)

1. Certain procedure signals from Section II of Appendix 13 have one meaning in the Radio Regulations for radiocommunications and a second meaning in the revised International Code of Signals for other uses. Those signals listed in Conference Document F/13(80), (page 781 of Document No. DT/2), require review to insure that modifications, additions, and deletions made to prepare Appendix 13A have not made necessary any revision of this list of signals.
  2. A recommendation that signals pertaining to use of the emergency position-indicating radiobeacon, which will now be a part of the Radio Regulations, be included in the revised International Code of Signals.
  3. A recommendation that I.M.C.O. examine the section of the revised International Code of Signals dealing with radiocommunications procedures and, wherever possible, align to signals of the International Telecommunication Union used for radiocommunication procedures. The I.T.U. has no objection to the use of these radiocommunications signals for communication procedures by means other than radio.
  4. A recommendation that the I.T.U. would urge I.M.C.O. to make the carriage of the revised International Code of Signals mandatory.
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Addendum to  
Document No. DT/27-E  
29 September 1967  
Original : English

WORKING GROUP 6B

DRAFT  
SECOND REPORT OF WORKING GROUP 6B  
TO COMMITTEE 6  
(OPERATION)

Emergency position-finding radiobeacons

Article 36 ADD 1388A

ADD Appendix 20A

The cover page to Document No. DT/27 apparently should have mentioned that the delegate of the U.S.S.R. reserved the right to express further views on the substance of this subject in Committee 6.

H.A. FEIGLESON  
Chairman



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/27-E  
28 September 1967  
Original : English

WORKING GROUP 6B

DRAFT

SECOND REPORT OF WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

Emergency position-indicating radiobeacons

Article 36 ADD 1388A

ADD Appendix 20A

Working Group 6B unanimously agreed to recommend the draft provisions appearing in the Annex attached hereto.

H.A. FEIGLESON  
Chairman

Annex : 1



A N N E X

Ex.DT/2,  
p.387/

ADD

1388A

§5(bis) The characteristics of the emergency position-indicating radiobeacon signals are given in Nos. 1476B, 1476C and 1476D.

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Note to Editorial Committee

In the English version of the Radio Regulations, at least one edition contains an error in the paragraph numbering of RR 1388 which should read " (2)" instead of "5 (1)"; also the fifth word should read "radiotelephone".

ADD

APPENDIX 20A

/ex.DT/2,  
p.655/

Technical characteristics of emergency position-indicating  
radiobeacons operating on the carrier frequency 2182 kc/s

(See Section VIIIA of Article 36)

Emergency position-indicating radiobeacons shall  
fulfill the following conditions :

a) Low power beacon (Type L)

The power radiated shall be of a value necessary  
to produce at a distance of 30 nautical miles at  
sea level a field strength equal to or less than  
10 microvolts per metre, with a minimum initial field  
strength of at least 2.5 microvolts per metre.

b) High power beacon (Type H)

The power radiated shall be of a value necessary  
to produce a field strength greater than 10 microvolts  
per metre at a distance of 30 nautical miles at sea  
level.

c) After a period of 48 hours continuous operation  
the radiated power shall not be less than 20 per  
cent of the initial power.

d) Shall be capable of Class A2 or A2H emission,  
with a depth of modulation between 30 and 90 per cent.

e) The keying signal for Type L beacon shall consist  
of a keyed emission modulated by a tone of 1300 cycles  
per second ( $\pm 20$  cycles per second), having a ratio  
of the period of the emission to the period of silence  
equal to or greater than one, and an emission duration  
between one and five seconds.

ex.DT/2,  
p. 656

- f) The keying signal for a Type H beacon shall either consist of the radiotelephone alarm signal (see No. 1465) or be the same as in d) above; if the radiotelephone alarm signal be used, the morse letter 'B' and/or the call-sign of the ship to which the beacon belongs, shall be included by keying a carrier modulated by a tone of 1300 cycles per second ( $\pm 20$  c/s) or of 2200 cycles per second ( $\pm 35$  c/s).
- g) Speech transmission may be provided if administrations so desire.
- h) Equipment shall be so designed as to comply with relevant C.C.I.R. recommendations.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/28-E

28 September 1967

Original : English

WORKING GROUP 5A (AD HOC)

The ad hoc Working Group consisting of delegates of the U.S.S.R., U.S.A., Canada, Japan, Federal Republic of Germany and the United Kingdom, has considered the wording of footnote 985.3 to the Radio Regulations.

Having regard to para. 14 of the Report of the Special Meeting of C.C.I.R. Study Group XIII (Mobile Services), Geneva, 1967, the ad hoc Group considered that the special case of Japan should also be included in the footnote, and accordingly submits the following text for consideration by Working Group 5A :

985.3 "During the transition period,

- a) In certain areas administrations may reduce this requirement to Class A3 and A3J, or Class A3H and A3J emissions on working frequencies;
- b) For Japanese ships, emissions on working frequencies may be confined to Class A3J emission only for communication with their own coast stations where the circuits are not extended to the public telephone network."

R. WILSON  
Chairman, ad hoc Working Group



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/29-E  
28 September 1967  
Original : English

WORKING GROUP 5A

DRAFT

FIRST REPORT OF WORKING GROUP 5A  
TO COMMITTEE 5

Article 23

Nos. 863 and 903

The examination of these provisions by Working Group 5A was limited to the question of designation of the power, the final drafting of these provisions being of the competence of Committee 6.

The Working Group has decided that :

1. The first sub-paragraph of No. 863 should read as follows :
  - "the peak envelope power of the transmitter does not exceed 200 Watts".
2. The two last lines of the second sub-paragraph of No. 863 should read as follows :
  - "the peak envelope power of the transmitter does not exceed 1 Kilowatt".
3. The part of sentence "the carrier power of the transmitter does not exceed 100 Watts" which appears in the present text of No. 903 should be replaced by :
  - "The peak envelope power of the transmitter does not exceed 400 Watts".





Article 7

No. 442 - Guard-band for the distress frequency 2182 kc/s.

The Working Group decided to modify as follows the provisions of No. 442 relating to the guard-band for frequency 2182 kc/s :

- "2173.5-2190.5 kc/s : Guard-band for the distress and calling frequency 2182 kc/s".

It was also decided that the two bands 2170-2173.5 kc/s and 2190.5-2194 kc/s would be reserved exclusively for the Maritime Mobile Service, but that the exact allocation of these bands would be decided later.

No. 443 - The Working Group agreed that the provisions contained in No. 443 should be kept in force during the period of transition, but that it should be decided later on in what form and in which part of the Final Acts of the conference they would appear.

It was also agreed that the spacing between the frequencies assigned to stations using single-sideband would be decided later on.

No. 444

The Working Group decided to delete these provisions from the Radio Regulations.

No. 445

The Working Group adopted the new text appearing in the Annex I to this report [See USA/125(82)].

Article 28

No. 983

The Working Group agreed that the text of this number remains unaltered.

No. 984

The Working Group adopted the new text appearing in Annex II to this report [See B/140(68)]

A N N E X I

Article 7

.....

SUP 444

MOD 445 (4) In Regions 2 and 3, frequencies 2636.4 (carrier frequency 2635 kc/s) and 2639.4 kc/s (carrier frequency 2638 kc/s) are used as single sideband intership radiotelephony working frequencies in addition to the specific frequencies prescribed for common use in certain services. Class A3A and A3J emissions only may be used on 2636.4 kc/s. In region 3, these frequencies are protected by a guard-band between 2634 and 2642 kc/s.

A N N E X    II

Article 28

- NOC Section IV - Ship Stations using Radiotelephony.
- NOC - Bands between 1605 and 4000 kc/s.
- NOC 983
- MOD 984 (a) - Send class A3 or A3H emissions with carrier frequency on 2182 kc/s, and receive class A3 and A3H emission with carrier frequency on 2182 kc/s.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/30-E(Rev.)

29 September 1967

Original : English

WORKING GROUP 6C

ADOPTED TERMS OF REFERENCE FOR WORKING GROUP 6C AD HOC

In the light of the discussion in Working Group 6C, to investigate and prepare a recommendation relating to the desirability of revising the certificate structure for radio operator certificates, including the concept of permitting a general class of certificate to be issued as an alternative to the existing first and second class radiotelegraph operators' certificates by the administrations who wish to do so and the international recognition of this certificate in relation to the first and second class radiotelegraph operators' certificates.

F. WIEFELSPÜTZ  
Chairman, Working Group 6C



INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/30-E

28 September 1967

Original : English

## WORKING GROUP 6C

### REVISED TERMS OF REFERENCE FOR WORKING GROUP 6C AD HOC

In the light of the discussion in Working Group 6C, to investigate and prepare a recommendation relating to the desirability of revising the certificate structure for radio operator certificates, including the concept of permitting a general class of certificate to be issued as an alternative to the existing first and second class radio-telegraph operators' certificates by the administrations who wish to do so.

F. WIEFELSPÜTZ

Chairman, Working Group 6C



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/31-E

29 September 1967

Original : French

WORKING GROUP 5B

DRAFT

FIRST REPORT BY WORKING GROUP 5B TO COMMITTEE 5

Article 35

No. 1320

The Working Group considered that the decision whether or not to omit this number should be taken by Committee 7 in connexion with its study of the advisability of rearranging those parts of the Radio Regulations relating to the maritime mobile service.

No. 1352

A majority of the Working Group decided in favour of retaining the frequencies for calling ships by coast stations in the high-frequency band.

Consideration of this number will be resumed when Committee 4 has finished examination of Appendix 15.

Nos. 1352 A and 1353

As the proposals on these numbers would change or introduce new safety or distress frequencies in the high-frequency bands, the Working Group decided that Committee 6 should be consulted. The latter is asked to specify the bands in which such safety and distress frequencies should lie.

No. 1354

The Working Party adopted the text shown in Annex I.

J. BES  
Chairman

Annex : 1



A N N E X

MOD

1354

§ 16. The hours of service of coast stations open to public correspondence and the frequency or frequencies on which watch is maintained shall be indicated in the List of Coast Stations.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/32-E

29 September 1967

Original : French

WORKING GROUP 6A

DRAFT

THIRD REPORT OF WORKING GROUP 6A  
TO COMMITTEE 6 (OPERATION)

SPECIAL CALLING FREQUENCIES

(Article 29, Section III, RR 1013A)

1. Proposal ISR/130(8) implies that special calling frequencies should be established. On the whole, the Group felt that such frequencies are not desirable.
2. The delegations of Australia, Israel, the Republic of South Africa and the United States of America reserved the right to raise the matter again in Committee 6 if necessary.

A. CHASSIGNOL  
Chairman





INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/33-E  
30 September 1967  
Original : English

WORKING GROUP 6C

DRAFT

SECOND REPORT OF WORKING GROUP 6C  
TO COMMITTEE 6 (OPERATION)

Chapter IX - Radiotelegrams and Radiotelephone Calls - Articles 37, 38, 39  
and 40.

Appendices 21 and 22 - Additional Radio Regulations in part

Having considered all the proposals submitted to it on the above  
provisions, Working Group 6C unanimously adopted the status quo or revision  
as shown in the Annex attached hereto.

F. WIEFELSPÜTZ  
Chairman

Annex : 1



A N N E XArticles 37, 38 and 39

NOC 1496 - 1504 / subject to adoption DT/34 /

Article 40

NOC 1505 - 1529 / subject to adoption DT/34 /

(ex-DT/2  
p.427)

(MOD) 1530 (concerns French and Spanish texts only - replace "or" by "and")

NOC 1531 - 1559 / subject to adoption DT/34 /

NOC Appendices 21 and 22 / subject to adoption DT/34 /

Additional Radio RegulationsArticles 1, 2 and 3

NOC 2001 - 2017 / subject to adoption DT/34 /

Article 4

NOC 2018 - 2030 / subject to adoption DT/34 /

SUP 2031

NOC 2032 - 2039 / subject to adoption DT/34 /

(MOD) 2040

§11. The land station or ship or aircraft station charges for radio-telegrams 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 ship or aircraft station charges pertaining to radio-telegrams intended 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) in question or, in the absence of such notification, they are the maximum charges prescribed in No. 2025.

(ex-DT/2 p.681)	NOC	2041 - 2053	/ subject to adoption DT/34 /
	MOD	2054	Meteorological radiotelegrams must bear the service instruction =OBS= at the beginning of the preamble and the paid service indication =OBS= before the address. This paid service indication is the only one admitted.
(ex-DT/2 p.682)	NOC	2055 - 2057	/ subject to adoption DT/34 /
	NOC		D. Press radiotelegrams
	ADD	2057A	Press telegrams from a mobile station to the mainland shall be admitted as press radiotelegrams.
	NOC	2058	/ subject to adoption DT/34 /
	MOD	2059	§18. (1) The land station and ship or aircraft charges are reduced by 50 per cent. These radiotelegrams are subject to the conditions of acceptance laid down in Articles 65 to 69 of the Telegraph Regulations (Geneva revision, 1958). For those radiotelegrams which are addressed to a destination in the country of the land station, the telegraph charge to be collected is one-half of the telegraph charge applicable to an ordinary radiotelegram.
	NOC	2060 - 2062	/ subject to adoption DT/34 /
			<u>Articles 5 and 6</u>
	NOC	2063 - 2106	/ subject to adoption DT/34 /

Article 7

	NOC	2107	
(ex-DT/2 p.685)	MOD	2108	a) Press radiotelegrams in the conditions specified in Nos. 2057A to 2060.
(ex-DT/2 p.685)	MOD	2109	b) Meteorological radiotelegrams in the conditions mentioned in Nos. 2053 to 2057.
	NOC	2110 - 2111	/subject to adoption DT/34/
	NOC	2112	
	NOC	2113 - 2117	/subject to adoption DT/34/
	ADD	2117A	The supplementary charges levied by the offices of origin or by mobile stations for the special radiotelegram category mentioned in Nos. 2110 to 2117 inclusive shall be the charges specified in the Telegraph Regulations.
(ex-DT/2 p.686)	MOD	2118	k) Radiotelegrams to be retransmitted by one or two mobile stations at the sender's request (=RM=), (in the conditions specified in Nos. 2152 to 2154).
(ex-DT/2 p.686)	MOD	2119	l) Radiomaritime letters and radio air letters (in the conditions specified in Article 6 AR).
(ex-DT/2 p.686)	MOD	2120	m) Radiotelegrams concerning persons protected in time of war by the Geneva Conventions of 12 August 1949 (=RCT=) (in the conditions specified in Nos. 2061 and 2062).
	SUP	2121	

(ex-DT/2  
p.686)

MOD

2122

§2. In addition, the following paid service indications shall be permitted in radio-telegrams : =GP=, =GPR=, =MP=, =TR=, =TFx= (from ship or aircraft to land), =TLXx= (from ship or aircraft to land), =Jx= (from land to ship or aircraft), =Réexpédié de x= (only when the charge for forwarding can be collected), =Jour=, =Nuit=, =Etat Priorité Nations=, =Etat Priorité=, =Etat=, =Remettre x= (from ship or aircraft to land).

NOC

2123

/ subject to adoption DT/34 /

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/34-E  
2 October 1967  
Original : English

WORKING GROUP 6C

SUPPLEMENTARY REPORT  
BY THE CHAIRMAN OF WORKING GROUP 6C  
LISTING THE RR AND AR, IN PART, TO WHICH  
NO PROPOSALS HAVE BEEN SUBMITTED TO THIS CONFERENCE

RR

Articles 37, 38, 39	: Nos. 1496 - 1504
Article 40	: Nos. 1505 - 1529, 1531 - 1559
Appendix 21	
Appendix 22	

AR

Articles 1, 2, 3	: Nos. 2001 - 2017
Article 4	: Nos. 2018 - 2030, 2032 - 2039
	Nos. 2041 - 2053, 2055 - 2057
	Nos. 2058, 2060 - 2062
Articles 5, 6	: Nos. 2063 - 2106
Article 7	: Nos. 2110 - 2111, 2113 - 2117
	No. 2123

F. WIEFELSPUTZ  
Chairman



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/35-E

2 October 1967

Original : English

WORKING GROUP 5A

DRAFT

SECOND REPORT OF WORKING GROUP 5A  
TO COMMITTEE 5

Article 28

No. 985

The Working Group adopted the new text appearing in the Annex to this report as well as the text of two additional footnotes 985.2 and 985.3.

No. 986

The Working Group adopted the new text which appears in the Annex to this report.

No. 987

The Working Group decided that the text of this number would remain unaltered.

No. 992

The Working Group adopted the following text for the last part of this number :

"OZ, on the carrier frequency 2182 kc/s, transmitting class A3 or A3H emissions and receiving class A3 and A3H emissions."  
(The drafting of the first part of this number has been dealt with by Committee 4).

No. 996

The Working Group adopted the new text which appears in the Annex to this report.

The Chairman :

P. AAKERLIND

Annex : 1



A N N E X

Article 28

.....

- |       |       |  |
|-------|-------|--|
| MOD   | 985   | b) send in addition class A3 or A3H, A3A and A3J emissions on at least two working frequencies; 1) 2) 3)   |
| MOD   | 986   | c) receive in addition class A3 and A3H or A3H, A3A and A3J emissions on all the other frequencies necessary for their service. 3)   |
| NOC   | 987   |  |
| <hr/> |       |  |
| NOC   | 985.1 |  |
| ADD   | 985.2 | 2) "During the transition period   |
|       |       | a) In certain areas administrations may reduce this requirement to class A3 and A3J, or class A3H and A3J emissions on working frequencies.  |
|       |       | b) For Japanese ships, emissions on working frequencies may be confined to class A3J emission only for communication with their own coast stations where the circuits are not extended to the public telephone network." |
| ADD   | 985.3 | 3) After the transition period class A3 and A3H emissions are no longer authorized.  |

.....

- |     |     |   |
|-----|-----|---|
| MOD | 996 | - in the bands between 1605 and 2850 kc/s, be able to transmit on carrier frequency 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on carrier frequency 2182 kc/s. |
|-----|-----|---|



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

Document No. DT/36-E  
2 October 1967  
Original : French/English/  
Spanish

WORKING GROUP 5D

REPORT OF WORKING GROUP 5D AD HOC

Participants :

Chairman : Mr. P.V. Larsen (Denmark)

Delegations of :

Brazil

Canada

United States of America

France

India

Netherlands

United Kingdom

Union of Soviet Socialist Republics

Representatives of the I.F.R.B. also participated

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The Ad Hoc Working Group submits to Working Group 5D the following  
Report, which covers the task entrusted to the Group according to  
Document No. DT/22.



FUTURE USE OF THE HF RADIOTELEPHONE CHANNELS  
FOR COAST STATIONS, TAKING INTO ACCOUNT THE NEW CHANNELS  
MADE AVAILABLE BY THE PRESENT CONFERENCE

According to its terms of reference (Document No. DT/22), Working Group 5D Ad hoc unanimously recommends the following to Working Group 5D :

1. A World Administrative Radio Conference should be convened in 1973 to prepare, on the basis of SSB operation, a Frequency Allotment Plan for High Frequency radiotelephone coast stations in the frequency bands specified in No. 448 of the present Radio Regulations and in the additional frequency bands made available to maritime radiotelephony by the present Conference; a draft Recommendation to this effect is contained in Annex 1 hereto.
2. Between the date (possibly 1971) when the new channels in such additional frequency bands are made available to radiotelephony, and the date (possibly 1974) of entry into force of the new Frequency Allotment Plan prepared by the 1973 Radio Conference, the new channels should be used for maritime radiotelephony according to the provisions of the draft Resolution contained in Annex 2 hereto. It is recommended that

Working Group 5B should consider the matter of power limitations referred to in paragraph 1 of the draft Resolution.

3. It is also recommended that the new channels should be included by the present Conference in Appendix 17 and in a separate section (Section III) to be added to Appendix 25; however no allotments to countries should appear in this section.

P.V. LARSEN

Chairman of Working Group 5D Ad hoc

A N N E X 1

DRAFT

RECOMMENDATION No.

RELATING TO THE PREPARATION OF A NEW FREQUENCY

ALLOTMENT PLAN FOR HF - RADIOTELEPHONE COAST STATIONS

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that the present Frequency Allotment Plan for coast radiotelephone stations contained in Appendix 25 to the Radio Regulations (Geneva, 1959), was initially prepared by the Provisional Frequency Board in the years from 1948 to 1950 and was subject to amendments by the Extraordinary Administrative Radio Conference, Geneva (1951), and by the Administrative Radio Conference, Geneva (1959);
- b) that the Plan has already been implemented to a great extent, this being illustrated by the assignments, corresponding to allotments, recorded in the Master Register;
- c) that a number of additional assignments has also been recorded in the Master Register;

- d) that the introduction of SSB technique in the maritime HF radio-telephone bands has already started on the basis of the provisions of Appendix 17 to the Radio Regulations (Geneva, 1959), and that the conversion from DSB to SSB will continue, guided by the timetable and the supplementary technical specifications adopted by the present Conference;
- e) that DSB operation in the frequency bands concerned will continue until ..... for coast stations and ..... for ship stations;
- f) that the Conference has decided to create as from ..... new HF - radiotelephone channels to be used in accordance with the provisions of Resolution No. ....., to include such new channels in Appendix 17 and, without allotting them to countries, in Section III of Appendix 25;
- g) that it was found impracticable for the present Conference to prepare a new Frequency Allotment Plan, but it was found necessary that such a Plan be prepared by a subsequent conference;
- h) that it is expedient to have our expert group to lay down in advance of a planning conference the technical basis necessary for the preparation of a frequency plan;

in view of

the provisions of Nos. 60 and 61 of the International Telecommunication Convention, Montreux (1965);

recommends

1. that a World Administrative Radio Conference be convened in order :
    - 1.1 to prepare on the basis of SSB operation a new Frequency Allotment Plan for HF - radiotelephone coast stations, covering the frequency bands in the present Appendix 25 as well as the new channels referred to in f) above;
    - 1.2 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 Convention;
  4. that this conference be preceded by a preparatory meeting, in accordance with No. 73 of the Convention.
-

A N N E X 2

DRAFT

RESOLUTION No.

RELATING TO THE USE OF THE NEW HF CHANNELS

MADE AVAILABLE TO MARITIME RADIOTELEPHONY

BY THE PRESENT CONFERENCE

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that the Conference has decided to create as from ..... new HF radiotelephone channels to be included in Appendix 17 and, without allotting them to countries, in a new section (Section III) of Appendix 25;
- b) that the Conference also decided to recommend that a World Administrative Radio Conference be convened in 1973 to prepare a new frequency allotment plan for HF radiotelephone coast stations, covering the frequency bands in the present Appendix 25 as well as the new channels referred to in a) above;

c) that, however, interim measures have to be taken by administrations and by the I.F.R.B. in order to provide for an orderly use of the new channels between the date when they are made available to maritime radio-telephony and the date of entry into force of the new frequency allotment plan;

decides that

1. during the interim period referred to in c) above, the new channels should be used for SSB operation, and also for DSB operation where technically feasible, in accordance with the time table for conversion to SSB operation laid down by the present Conference; [the peak envelope power of the transmitters shall be limited to ..... for coast stations and ..... for ship stations;]

2. the I.F.R.B. shall collect from administrations requirements for use of these new channels;

urges administrations

3. to submit only those requirements considered essential for use during the interim period referred to in c) above, in view of the limited number of new channels available for maritime radiotelephony;



further decides that

4. after compilation of the requirements collected from administrations, the Board, in consultation, where appropriate, with the administrations concerned, shall endeavour to distribute such requirements amongst the new channels, by dealing with them in the following order:

4.1 requirements from those countries which have no allotments in the present Appendix 25, which have no assignments to HF radiotelephone coast stations recorded in the Master Register and which are in urgent need of frequencies for HF maritime radiotelephony;

4.2 requirements from those countries which have assignments to HF radiotelephone coast stations recorded in the Master Register, but which have a large volume of traffic to handle and whose present assignments are causing or experiencing harmful interference;

5. the distribution of requirements amongst the new channels in accordance with paragraph 4 above shall be circulated to all administrations at least six months before the new channels are made available for maritime radiotelephony;

6. the channels distributed in accordance with paragraph 4 above shall be regarded as allotments to the countries concerned from the point of

view of the frequency notification and registration procedure to be applied as from the date these become available;

7. as from that date, the relevant provisions of Nos. 541 to 551 of the Radio Regulations, insofar as they refer to Section I of Appendix 25, shall apply also to the frequency bands covered by the new channels (Section III of Appendix 25), for the examination by the I.F.R.B. of frequency assignment notices for transmission or reception by coast stations;

8. the dates to be entered in Column 2a or Column 2b of the Master Register according to the findings reached by the Board after the examination referred to in paragraph 7 above, shall be in accordance with the relevant provisions of Nos. 577 to 586 of the Radio Regulations;

9. the above procedure, which should be discontinued on the date of entry into force of the new frequency allotment plan to be prepared by the 1973 Radio Conference, is of an interim nature and shall not prejudice the decisions to be taken by the 1973 Radio Conference; a suitable remark to this effect shall be entered in the Master Register for the frequency assignments in the bands concerned.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/37-E  
3 October 1967  
Original : French

WORKING GROUP 5B

USE ON BOARD SHIPS OF FREQUENCIES  
OF THE ORDER OF 27 Mc/s  
(Proposal F/15(91))

The following draft text was prepared to take account of views expressed at the meeting held on 2 October 1967.

Article 35

ADD

Section III bis

Bands between 26100 and 27500 kc/s

ADD

1358A

Frequencies in the 26960 - 27280 kc/s band may be used for radiotelephony between different parts of a ship<sup>1</sup>.

ADD

1358B

Class A3 emission is to be used. The carrier wave power may not exceed [ ] milliwatts.

The mean power of any spurious radiation from a transmitter must not be more than ..... db less than the mean power on the fundamental frequency.

ADD

1358C

Any harmful interference with connexions established by virtue of No. 1358A that may be caused by the operation of industrial, scientific and medical equipment (No.225) or by other emissions authorized by these Regulations, must be accepted.

1358A.1

<sup>1</sup> This provision does not apply in the territorial waters of .....



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/38-E

3 October 1967

Original : French

WORKING GROUP 5B

DRAFT

## SECOND REPORT BY WORKING GROUP 5B TO COMMITTEE 5

### Article 35

#### Nos. 1351A and 1355A

It is proposed that the texts of Nos 1351A and 1351B as shown in Annex I hereto should be adopted. They incorporate the provisions which it was proposed to include in Nos. 1351A and 1355A. It was agreed that :

- 1) the bandwidth required should be determined at a later date;
- 2) the conference to be convened to prepare a new plan should decide whether the use of class A3B emission should be retained after the transition period.

#### No. 1358

It was decided that the technical characteristics of transmitters (and receivers) should be the subject of a special appendix (Appendix 17A). A reference to this appendix will be made in No. 1358 (Article 35), the new text of which is given in Annex I hereto.

### Appendix 17A

The Working Group adopted the text of paragraph 1 with regard to classes of emission A3J and A3A (points a) and b)) (see Annex II). The text of point c) on the A3H class of emission will be completed once the appropriate decision has been reached.

J. BES  
Chairman

Annexes : 2



A N N E X I

Article 35

.....

ADD 1351A Unless otherwise provided in these Regulations [see Nos. ....], the classes of emission used for radiotelephony in the bands between 4000 and 23 000 kc/s shall be A3, A3H, A3A or A3J and exceptionally A3B.

After the end of the transition period, unless otherwise provided [see Nos. ....], only A3A and A3J classes of emission shall be permissible; the upper sideband shall be used and the necessary bandwidth shall not exceed [ ] kc/s.

ADD 1351B The normal mode of operation of each coast station is shown in the List of Coast Stations.

.....

MOD 1358 The technical characteristics of transmitters (and receivers) used in the maritime mobile service for radiotelephony in the bands between 4000 and 23 000 kc/s are specified in Appendix 17A.

.....

A N N E X    II

ADD

APPENDIX 17A

Technical characteristics of transmitters /and receivers/  
used in the maritime mobile service for radiotelephony in  
the bands between 4000 and 23 000 kc/s

1.
  - a) Foremissions in class A3J the power of the carrier shall be more than 40 db less than the peak power of the emission.
  - b) For emissions in class A3A the power of the carrier shall be  $16 \pm 2$  db less than the peak power of the emission.
  - c) For emissions in class A3H the power of the carrier shall be  $\left[ \quad \right]$  db less than the peak power of the emission.

.....

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/39-E  
3 October 1967  
Original : French/English

WORKING GROUP 6A

DRAFT

FOURTH REPORT OF WORKING GROUP 6A TO COMMITTEE 6

(OPERATION)

General Radiotelegraph Procedure (Article 29, Section III continued to Section VII)

Calls by Radiotelegraphy (Article 30)

Radiotelegraphic Calls to Several Stations (Article 31)

Working Group 6A unanimously agreed the new provisions and revision of the Radio Regulations reproduced in the Annex attached hereto.

A. CHASSIGNOL  
Chairman



Annex : 1

A N N E XArticle 29, Section III (cont.)

	NOC	1013	<u>/held in abeyance/</u>
	ADD	1013A	<u>/held in abeyance/</u>
	NOC	1014	
	MOD	1015	<u>/held in abeyance/</u>
	ADD	1015A	<u>/held in abeyance/</u>
	NOC	1016	
(ex DT/2, page 218)	MOD	1017	(2) When, in the aeronautical mobile service, as an exception to this rule, the call is not followed by an indication of the frequency to be used for the traffic, this indicates :
	NOC	1018	
	NOC	1019	
(ex DT/2, page 218)	ADD	1019A	(3) When, in the maritime mobile service, as an exception to No. 1016 the call is not followed by an indication of the frequency to be used for the traffic, this indicates that the calling station is a coast station and that it proposes to use for traffic its normal working frequency shown in the List of Coast Stations.
	NOC	1020- 1022	
(ex DT/2, page 218)	MOD	1023	§11.(1) Except as otherwise provided for in these regulations, for transmitting the reply to calls and to preparatory signals, the station called shall use the frequency on which the calling station keeps watch, unless the calling station has specified a frequency for the reply.



Article 29, Section III (cont.)

SUP	1024
SUP	1025
SUP	1026
NOC	1027- 1040

Sections IV - VII

NOC	1041- 1062
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Article 30

	NOC	1063- 1068	
(ex DT/2, page 224)	ADD	1068A	(2) bis. However, in the bands between 4000 and 27 500 kc/s a coast station may transmit its call sign at intervals to enable mobile stations to select the calling band with the most favourable propagational characteristics for effecting reliable communication (see No. 1162).
(ex DT/2, page 223)	MOD	1069	(3) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands. This transmission shall be preceded by a call to all stations (CQ).
(ex DT/2, page 223)	MOD	1070	(4) The call to all stations preceding the traffic list may be sent on a calling frequency in the following form :  <ul style="list-style-type: none"> <li>- CQ, not more than three times;</li> <li>- the word DE;</li> <li>- the call sign of the calling station, not more than three times;</li> <li>- QSW followed by the indication of the working frequency or frequencies on which the traffic list is about to be sent.</li> </ul>

In no case may this preamble be repeated.

Article 30 (cont.)

(ex DT/2, page 224)	MOD	1071	(5) The provisions of No. 1070 :
	ADD	1071A	a) are obligatory when 500 kc/s is used;
	(MOD)	1072	b) do not apply when frequencies in the bands between 4000 and 27 500 kc/s are used.
	NOC	1073- 1076	
	MOD	1077 )	
	ADD	1077A )	
	SUP	1078 )	[held in abeyance]
	NOC	1079 )	
	SUP	1080 )	
	NOC	1081- 1087	

Article 31

NOC	1088- 1094
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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/40-E

4 October 1967

Original : English

WORKING GROUP 6A

REPORT BY WORKING GROUP 6A AD HOC

General Radiotelegraph Procedure (Article 29 in part)

Calls by Radiotelegraphy (Article 30 in part)

Participants in Working Group 6A ad hoc :

Chairman : Mr. Raymond E. SIMONDS (U.S.A.)

Delegations of Denmark, France, Ghana, Japan, Norway, the Netherlands, the United Kingdom and Switzerland.

Working Group 6A ad hoc unanimously agreed to recommend the adoption of the texts which appear in the Annex attached hereto.

The Group recalls that in the First Report of Working Group 6A (Document No. 181) the text of No. 1012A should be deleted as the same text has been incorporated in Article 30 with the numbering 1077A.

Raymond E. SIMONDS

Chairman

Annex : 1



A N N E X

Article 29 - Section III

ADD 1013A

The procedure given in No. 1013 is not applicable to the maritime mobile service (see Nos. 1077A, 1077B and 1077C).

Article 30

[ex Doc.181] ADD

1077A

(1) bis. However, in the maritime mobile service bands between 4000 kc/s and 27 500 kc/s the call consists of:

- the call sign of the station called, not more than three times;
- the word DE;
- the call sign of the calling station, not more than three times;
- the signal  $\overline{BT}$ ;
- the call sign of the station called, once only;
- the letter K.

[ex DT/2  
p.217]

ADD

1077B

(1) ter. For normal calling in the maritime mobile bands between 4000 kc/s and 27 500 kc/s when the requirements of No. 1162 have been met, the call specified in No. 1077A may be repeated at intervals of not less than one minute for a period not exceeding five minutes and shall not be renewed until after an interval of ten minutes.

[ex DT/2  
p.215]

ADD

1077C

(1) quater. However, in the maritime mobile bands between 4000 kc/s and 27 500 kc/s, when the conditions of establishing contact are difficult, the call sign may be transmitted not more than ten times in succession. The call shall consist of:

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

Ex DT/2  
p. 215/  
(cont.)

- the signal BT;
- the call sign of the station called, once only;
- the letter K.

If necessary, this call may be repeated a second time, (see No. 1079). Each group of two consecutive calls may be repeated three times at intervals of two minutes; thereafter it shall not be repeated until an interval of 10 minutes has elapsed.

SUP

1080

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COMMISSION 4

COMMITTEE 4

COMISIÓN 4

PROPOSITIONS-CONCERNANT L'ARTICLE 32

La liste ci-jointe contient les numéros des documents et des propositions concernant l'article 32 du Règlement des radiocommunications, ainsi que des références au Document N° DT/2.

Le Président de la Commission 4 :

F.G. PERRIN

PROPOSALS CONCERNING ARTICLE 32

The attached list contains document and proposal numbers concerning Article 32 of the Radio Regulations and references to Document No. DT/2.

F.G. PERRIN

Chairman of Committee 4

PROPOSICIONES RELATIVAS AL ARTÍCULO 32

En la lista que adjunto se acompaña se indican los números de los documentos y proposiciones relativos al artículo 32 del Reglamento de Radiocomunicaciones, así como las referencias al Documento N.° DT/2.

El Presidente de la Comisión 4,

F.G. PERRIN



Article/Artículo 32

Section/Sección I

SUP 1095	}			
SUP 1096				
SUP 1097		G/61(68)	DT/2	page/página 227
SUP 1098				
SUP 1099		GRC/160(5)		
SUP 1100		USA/26(61)	DT/2	page/página 227
SUP 1101				
SUP 1102				
SUP 1103	}			
SUP 1104				
SUP 1105				

Section/Sección II

ADD 1106A	F/12(75) B/140(75)	DT/2	page/página 233
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MOD 1113	F/111(140)	"	" 233
SUP 1113	B/140(76)		
ADD 1113A	F/111(141)	"	" 233
ADD 1113B	F/111(142)	"	" 234
ADD 1115A	F/111(143)	"	" 234
ADD 1115B	F/111(144)	"	" 234
MOD 1116	F/111(145)	"	" 234
MOD 1117	F/111(146)	"	" 235
MOD 1121	F/111(147)	"	" 235
MOD 1122	G/78(92)	"	" 236
MOD 1122.1	AUS/54(8)	"	" 236
SUP 1122.1	G/78(92)	"	" 236
MOD 1123	G/66(81)	"	" 236
	USA/23(57)	"	" 236
MOD 1124	USA/23(57)	"	" 236
MOD 1125	USA/23(57)	"	" 237
MOD 1134	B/140(77)		
	CAN/43(21)	"	" 238
	F/12(76)	"	" 238
	G/58(6)	"	" 238
	HOL/73(15)	"	" 239
	I/35(25)	"	" 239
	USA/20(38)	"	" 239

Section/Sección III

MOD 1137 B/140(78)

<u>SUP Section/Sección IV</u>	AUS/54(9)	DT/2	page/página	243
SUP 1139	AUS/54(9)	"	"	243
MOD 1139	J/90(89)	"	"	243
SUP 1140	AUS/54(9)	"	"	243
MOD 1140	J/90(90)	"	"	243
SUP 1141	AUS/54(9)	"	"	243
SUP 1142	" "	"	"	243
SUP 1143	" "	"	"	243
SUP 1144	" "	"	"	243

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(MOD) Section/Sección V	AUS/54(9)	"	"	243
MOD 1145	F/10(58),F/10(59)	"	"	249
MOD 1145	B/142(98)			
MOD 1145	G/77(40)	"	"	249
MOD 1145	USA/22(45)	"	"	252
MOD 1146	F/10(58),F/10(59)	"	"	249
MOD 1146	B/138(40)			
MOD 1146	G/77(40)	"	"	249
MOD 1148	G/78(92)	"	"	250
ADD 1148A	G/78(92)	"	"	250
ADD 1148A	USA/27(62)	"	"	252
MOD 1149	AUS/122(24)	"	"	249
MOD 1149	B/142(99)			
MOD 1149	G/77(40)	"	"	250
MOD 1149	HOL/72(10)	"	"	254
MOD 1149	USA/22(46)	"	"	253
ADD 1149A	B/142(100)			
MOD 1150	B/142(101)			
NOC 1150	HOL/72(10)	"	"	254
NOC 1150	USA/22(46)			
ADD 1150A	AUS/122(25)			
ADD 1150A	G/60(14)	"	"	250
ADD 1150A	HOL/72(10)	"	"	254



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MOD	1151	B/142(102)			
MOD	1151	USA/22(46)	"	"	253
NOC	1151	HOL/72(10)	"	"	254
ADD	1151A	B/142(103)			
ADD	1151A	USA/22(46)	"	"	253
MOD	1152	B/142(104)			
NOC	1152	HOL/72(10)	"	"	254
NOC	1152	USA/22(46)	"	"	253
MOD	1153	B/142(105)			
NOC	1153	HOL/72(10)	"	"	254
NOC	1153	USA/22(46)	"	"	253
NOC	1154	USA/22(46)	"	"	253
MOD	1158	B/138(41)			-
MOD	1158	F/10(58),F/10(59)	"	"	249
MOD	1158	G/77(40)	"	"	251
ADD	1159A	USA/ADD 22(85)			
ADD	1159B	USA/ADD 22(85)			
MOD	1168	ISR/130(11)			
MOD	1173	AUS/122(26)			
MOD	1173	F/8(21)	DT/2	page/página	261
SUP	1173	G/77(40)	"	"	261
MOD	1173	HOL/72(10)	"	"	261
MOD	1173	I/33(20)	"	"	261
MOD	1174	AUS/122(27)			
ADD	1174A	ISR/130(12)			
MOD	1175	AUS/122(28)			
MOD	1175	B/138(42)			
MOD	1175	F/10(59)	DT/2	page/página	262
MOD	1175	G/77(40)	"	"	262
MOD	1175	HOL/72(10)	"	"	262
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MOD	1176	G/77(40)	"	"	262
MOD	1176	HOL/72(10)	"	"	262
MOD	1177	AUS/122(30)			-
ADD	1177A	ISR/130(12)			-
ADD	1179A	G/60(15)	"	"	268
MOD	1180	B/138(43)			-
MOD	1180	F/10(59)	"	"	267

MOD	1180	G/77(40)	DT/2	page/página	268
NOC	1180	USA/123(67)			-
ADD	1180A	AUS/122(31)			
MOD	1181	B/138(44)			
MOD	1181	F/10(59)	"	"	267
SUP	1181	AUS/122(32)			
MOD	1181	G/70(40)	"	"	268
MOD	1181	HOL/72(10)	"	"	272
MOD	1181	I/33(20)	"	"	274
MOD	1181	USA/123(68)			
SUP	1182	AUS/122(32)			
MOD	1182	B/138(45)			
MOD	1182	F/8(22)	"	"	267
MOD	1182	G/77(40)	"	"	268
MOD	1182	HOL/72(10)	"	"	272
MOD	1182	I/33(20)	"	"	274
NOC	1182	USA/123(69)	"	"	275
SUP	1183	AUS/122(32)			
MOD	1183	G/77(40)	"	"	269
MOD	1183	USA/123(70)	"	"	275
SUP	1184	AUS/122(32)			
MOD	1184	B/138(46)			-
MOD	1184	F/10(59)	"	"	267
MOD	1184	G/77(40)	"	"	269
NOC	1184	USA/123(71)	"	"	275
SUP	1185	AUS/122(32)			
MOD	1185	G/77(40)	"	"	269
MOD	1185	HOL/72(10)	"	"	272
MOD	1185	I/33(20)	"	"	274
MOD	1185	USA/123(72)	"	"	275
SUP	1186	AUS/122(32)	"	"	267
MOD	1186	F/8(23)	"	"	267
MOD	1186	G/77(40)	"	"	269
MOD	1186	HOL/72(10)	"	"	272
MOD	1186	I/33(20)	"	"	274
NOC	1186	USA/123(73)	"	"	275
SUP	1187	AUS/122(32)			
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MOD	1187	G/77(40)	"	"	269
MOD	1187	HOL/72(10)	"	"	272
NOC	1187	USA/123(74)			
MOD	1188	AUS/122(33)			
MOD	1188	HOL/72(10)	"	"	273
MOD	1189	B/138(48)			
MOD	1189	F/10(59)	"	"	267
MOD	1189	G/77(40)	"	"	270
MOD	1191	B/138(49)			
MOD	1191	F/10(59)	"	"	267
MOD	1191	G/77(40)	"	"	270
ADD	1191A	G/60(16)	"	"	271
ADD	1191A	HOL/72(10)	"	"	273
ADD	1191B	G/60(16)	"	"	271
ADD	1191B	HOL/72(10)	"	"	273
ADD	1191C	HOL/72(10)	"	"	273
MOD	1192	AUS/122(34)			
MOD	1192	B/142(106)			
MOD	1192	G/77(40)	DT/2	page/página	270
MOD	1192	HOL/72(10)	"	"	274
MOD	1192	I/33(20)	"	"	275
MOD	1192	ISR/130(14)			
MOD	1192	USA/22(48)	"	"	275
ADD	1192A	B/142(107)			
ADD	1192A	USA/22(48)	"	"	275
MOD	1193	B/138(50)			
MOD	1193	F/10(59)	"	"	267
MOD	1193	G/77(40)	"	"	270
MOD	1196	AUS/122(35)			
MOD	1196	F/8(24)	"	"	267
MOD	1196	G/77(40)	"	"	271
MOD	1196	HOL/72(10)	"	"	274
MOD	1196	I/33(20)	"	"	275
SUP	1197	AUS/122(36)			
MOD	1197	B/138(51)			
MOD	1197	F/10(59)			

MOD	1197	G/77(40)	DT/2	page/página	271
SUP	1198	AUS/122(36)			
SUP	1199	AUS/122(36)			
MOD	1200	AUS/122(37)			
SUP	1201	AUS/122(38)			
ADD	1201A	AUS/122(39)			
ADD	1201B	AUS/122(40)			
SUP	1205	AUS/122(41)			
SUP	1206	AUS/122(41)			
ADD	1206A	B/137(15)			
ADD	1206A	USA/17(23)	"	"	276
ADD	1206B	B/137(16)			
ADD	1206B	USA/17(23)	"	"	276
ADD	1206C	B/137(17)			
ADD	1206C	USA/17(23)	"	"	276

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/42-E

4 October 1967

Original: English

WORKING GROUP 6C

MEMORANDUM BY THE CHAIRMAN OF WORKING GROUP 6C

The attention of delegations is invited to Document No. 201, page 1, which contains decisions of Committee 5 pertaining to Nos. 863 and 903 of Article 23 (Operators' certificates for ship and aircraft stations).

Document No. 201, page 1, therefore, will be taken up by Working Group 6C when the revision of Article 23 is reconsidered.

Additionally, I wish to advise that the Second Report of Working Group 6C ad hoc is contained in Document No. DT/43 (agenda item 2 for Thursday morning - GT 6C(Rev.)~~x~~ refers).

F. WIEFELSPÜTZ

Chairman



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

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WORKING GROUP 6C

SECOND REPORT OF WORKING GROUP 6C AD HOC

DRAFT RESOLUTION

Relating to the Issue of a General Class of Radiocommunication  
Operators General Certificate for the Maritime Mobile Service

1. Participants in the Working Group 6C ad hoc :  
  
Chairman : Mr. P.J. CHAPMAN (Australia)  
  
Delegations of the U.S.A., France, Greece, Indonesia, Italy,  
Norway, Fed. Rep. of Germany, the United Kingdom and Sweden.  
  
Observers of the C.I.R.M. and I.S.F.
2. Working Group 6C ad hoc unanimously agreed to recommend the  
adoption of the draft resolution reproduced in the Annex hereto.
3. The present report cancels and replaces the First Report  
(Document No. DT/24).

P.J. CHAPMAN  
Chairman



Annex : 1

A N N E X

DRAFT RESOLUTION

Relating to the Issue of a General Class of Radiocommunication Operators General Certificate for the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that Article 23 of the Radio Regulations, Geneva, 1959, provides for two classes of certificate as well as a special certificate for radiotelegraph operators;
- b) that the majority of radiotelegraph operators are the holders of the second class certificates;
- c) that it is doubtful if the higher morse speed qualification of the first class certificate would be necessary in the future;
- d) that there is a future need for a greater emphasis on the practical maintenance of radio equipment in service;

is of the opinion

- 1. that administrations should consider the desirability of replacing the present two classes of certificate with a general class of certificate for radiotelegraph operators more closely related to future needs;
- 2. that in considering the issue of such a certificate administrations take into account the desirability of modified certificate qualification as appended hereto in Annexes 1, 2 and 3; and in connection therewith

resolves

that administrations which wish to issue a general class of certificate are authorized to do so, and such general class of certificate shall be recognized as an alternative to present first and second class certificates for purposes of the Radio Regulations provided the certificate maintains at least the practical technical standards of present first and second class certificates in all respects except for the morse code speed which shall not be less than in No. 884 of the Radio Regulations.

Annex 1

Conditions for the issue of the radiocommunication operator's general  
certificate - Maritime

1. The radiocommunication general certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below.
2. Knowledge of the principles of electricity, the theory of radio and marine aerial systems, sufficient to meet the requirements of paragraphs 3, 4 and 5 below.
3. Theoretical knowledge of marine radiotelegraph and radiotelephone transmitters and receivers; automatic alarm devices; radio equipment for lifeboats and other survival craft; direction-finding equipment; together with all auxiliary items, including power supply auxiliaries (such as motors, alternators, generators, inverters, rectifiers, and accumulators) with particular reference to maintaining the equipment in service.
4. Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in paragraph 3) above, including the taking of direction-finding bearings and the calibration of radio direction-finding apparatus.
5. Practical knowledge necessary for the location and remedying (with the means available on board) of faults which may occur during a voyage, in the apparatus mentioned in paragraph 3) above.
6. Ability to send correctly by hand and to receive correctly by ear, in the Morse Code, code groups (mixed letters, figures and punctuation marks), at a speed of sixteen groups a minute, and a plain language text at the speed of twenty words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and receiving shall be, as a rule, five minutes.
7. Ability to send correctly and to receive correctly by telephone.



8. Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.

9. A sufficient knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.

10. Knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.

---

Annex 2

Qualifying service

1. An operator holding a radiocommunication operator's general certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932 of the Radio Regulations).
  2. Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A of the Radio Regulations) an operator shall hold a radiocommunication operators general certificate and shall have had at least six months experience as operator on board ship or in a coast station.
  3. Before becoming chief operator of a ship station of the first category (see No. 930 of the Radio Regulations) an operator shall hold a radiocommunication operator's general certificate, and shall have had at least two years experience as operator on board ship or in a coast station.
-

Annex 3

Class and minimum number of operators for ship stations

1. In the public correspondence service, each government shall take the necessary steps to ensure that ship stations of its own nationality have personnel adequate to perform efficient service.
  2. The personnel of these ship stations shall, having regard to the provisions of Article 23 and Section IV of Article 25 of the Radio Regulations include at least :
  3. Ship stations of the first category; a chief operator holding a radiocommunication operators general certificate.
  4. Ship stations of the second and third categories; one operator holding a radiocommunication operator's general certificate.
  5. Ship stations of the fourth category, except in the case provided for in paragraph 6) below; one operator holding a radiocommunication operator's general certificate.
  6. 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 radiotelegraph operator's special certificate as provided for in Nos. 889 to 893 of the Radio Regulations.
  7. Ship station equipped with a radiotelephone installation; one operator holding a radiocommunication operator's general certificate or a radiotelephone operator's certificate as provided for in No. 918 of the Radio Regulations.
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/44-E  
4 October 1967  
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WORKING GROUP 5A

DRAFT

THIRD REPORT OF WORKING GROUP 5A

TO COMMITTEE 5

Article 35

No. 1319

It was decided that the text of this number would remain unaltered.

No. 1320

No decision has been taken with respect to this number since it had already been dealt with by Working Group 5B which referred it to Committee 7.

No. 1321

No proposal having been submitted with respect to this number, it thus remains unchanged.

No. 1321A

The Working Group adopted the new text which appears in the annex. The delegation of U.S.S.R. reserved its right to raise again this question when submitted for approval.

No. 1322

No proposal having been submitted with respect to this number, it thus remains unchanged.

No. 1322A

The Working Group adopted the new text which appears in the annex.

Annex : 1



A N N E X

Article 35

. . . . .

NOC 1319

. . . . .

NOC 1321

ADD 1321A      Frequencies on which SSB emissions are sent shall be designated by the assigned frequency followed, in brackets, by details of the carrier frequency.

NOC 1322

. . . . .

ADD 1322A      Unless otherwise specified in the present Regulations (see Nos. 987, 996, 1323, 1336 and 1337), the class of emission to be used in the bands between 1605 and 4000 kc/s shall be class A3A or class A3J using the upper sideband and with the necessary bandwidth not exceeding 2.7 kc/s. Before the end of the transition period, class A3 or A3H emissions are also required. The normal method of operation for each coast station shall be indicated in the List of Coast Stations.

\_\_\_\_\_

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/45-E

5 October 1967

Original : English

WORKING GROUP 5A

## TENTATIVE ADVANCE DRAFTS OF TEXTS

### FOR WORKING GROUP 5A

USA	MOD NOC	1323	S3.(1) The frequency 2182 kc/s <sup>1</sup> is the international distress frequency for radiotelephony; it shall be used for this purpose by ships, aircraft, survival craft stations and by <u>floatable emergency position-indicating radio beacons</u> using frequencies in the authorized bands between 1605 and 4000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for signals of <u>floatable emergency position-indicating radio beacons</u> , for the urgency signal and urgency messages and for the safety signal, safety messages shall be transmitted where practicable, on a working frequency after a preliminary announcement on 2182 kc/s. <u>The class of emission to be used for the frequency 2182 kc/s shall be A3 or A3H (see 984).</u>
RFA			
RFA			
F F	amended amended		
F J	ADD	1323.1	<u>(1) Whatever the class of emission used, the value indicated, 2182 kc/s, always designates the carrier frequency of the emission.</u>
RFA, USA	NOC	1324	
Chairman G, F, J, RFA, HOL, I, USA	MOD	1325	<u>(3) Except for transmissions authorized on the carrier frequency 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190.5 kc/s are forbidden<sup>1</sup>.</u>



USA	ADD	1325.1	(1) Transmissions on the two channels of 3.5 kc/s bandwidth each with assigned frequencies
	amended		
		1330AA	..... and ..... kc/s formed by reduction of the
I	amended		band 2170 - 2194 kc/s to 2173.5 - 2190.5 kc/s,
		1329A	are limited to single sideband emissions A3H,
F	amended		A3A and A3J. The higher of the two channels is
			also used with class A2H emission by coast
			stations for selective calling.
	Compare	442	F the same G the reverse
	Compare J	1339A-C	G the lower of the two channels is used by
	Compare I	1339AA	coast stations for selective calling, the higher
			for ship stations calling and working to coast
			stations.
RFA, USA	NOC	1326	
F, two proposals combined		1326A and B	Before transmitting on 2182 kc/s, a station in the mobile service should listen on this frequency for a reasonable period to make sure that no distress traffic is being sent (see number 1007). This provision does, however, not apply to stations in distress.
USA	NOC	1327	
USA	NOC	1328	
USA	NOC	1329	
USA	NOC	1330	
USA	NOC	1331	
USA	NOC	1332	
USA	NOC	1333	

POL	MOD	1334	(3) In addition <u>all</u> ship stations should keep the maximum watch practicable on 2182 kc/s for receiving by any appropriate means the radiotelephone alarm signal described in No. 1465, as well as distress, urgency and safety signals <u>including the signals of emergency position-indicating radio beacons described in Article 36, Section VIIIA.</u>
RFA			
POL	SUP	1335	USA NOC
F	MOD	1336	Par.8 (1) Coast stations which use 2182 kc/s for calling shall be able to use at least one other frequency in the authorized bands between 1605 and 2850 kc/s. <u>This other frequency shall be capable of being used with class A3H<sup>1</sup> for the transmission of messages concerning safety of shipping announced on 2182 kc/s. These stations should be able to use the frequency 2192 kc/s for simplex operation, if required by their service. The frequency 2171.5 kc/s may be used as an additional frequency.</u>
J	Compare	1325.1	
		1330AA, 1329A, 442	
USA	NOC		
Chairman		1336.1	<u>(1) Before the conversion date for coast stations either A3 or A3H may be used.</u>
HOL	ADD	1336A	See Document No. 183.
J etc.	MOD Compare	1337 984	(2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting class A3 <sup>1</sup> <u>or A3H emissions with carrier frequency on 2182 kc/s, and receiving class A3 and A3H emissions with carrier frequency on 2182 kc/s.</u>
Chairman	ADD	1337.1	<u>(1) Coast stations are authorized to transmit on A3 only to the conversion date for coast stations.</u>
USA	NOC	1338	
USA	NOC	1339	



USA                    ADD            1339A            The peak envelope power supplied to the antenna transmission line by transmitters operating on carrier frequencies 2170 and 2190.5 kc/s shall not exceed 400 W (P<sub>p</sub>).

                      ADD            1339AI           See G/79(99), DT 2, page 340.

                      ADD            1339AA           See I/31(2), DT 2, page 340.

   1339AA-AF (Timetable for transition to SSB, later  
   1339BA-BZ (Technical specifications for SSB, later.

USA                    NOC            1340

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING PARTY 5B

DRAFT  
THIRD REPORT OF WORKING GROUP 5B  
TO COMMITTEE 5

Article 35

No. 1358A

The proposal for insertion of a new number 1358A in the Radio Regulations was withdrawn.

Appendix 3

The Working Group decided to amend Appendix 3 to the Radio Regulations with respect to the frequency tolerances for radiotelephone stations in the maritime mobile service in the bands between 4000 and 23 000 kc/s. The amendments are given in Annex I.

Appendix 17A

The Working Group approved the text of paragraphs 2, 3 and 4 appearing in Annex II. When a decision has been reached on the required bandwidth the relevant text will be added to this Appendix.

J. BES  
Chairman

Annexes : 2



A N N E X I

APPENDIX 3

MOD	Band : from 4 to 29.7 Mc/s .....		
	2. Land stations :		
	a) coast stations :		
	- power 500 W or less	50	50 h)
	- power above 500 W and 5 kW or less	50*	30* h)
	- power above 5 kW	50	15 h)
.....			
	3. Mobile stations :		
	a) ship stations .....		
MOD	2. emissions other than class A1		
	- power 50 W or less	50 c)	50 c) i)
	- power above 50 W	50	50 i)
.....			

Footnotes to the table of frequency tolerances

ADD h) For coast station single side-band radio-  
telephone transmitters installed after  
[1 January 1970] the tolerance is 20 c/s.

ADD i) For ship station single side-band radio-  
telephone transmitters installed after  
[1 January 1970] the tolerance is 100 c/s.

A N N E X II

ADD Appendix 17A

- .....
2. Coast and ship stations shall use upper sideband emissions.
  3. The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.
  4. The carrier frequency of transmitters shall be maintained within the following tolerances :
    - a) coast stations :  $\pm 20$  c/s.
    - b) ship stations :  $\pm 100$  c/s.

In the case of ship stations, the short-term limits (of the order of 15 minutes) shall be  $\pm 40$  c/s.

.....

INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/47-E

5 October 1967

Original : English

WORKING GROUP 6C

DRAFT

THIRD REPORT OF WORKING GROUP 6C TO COMMITTEE 6 (OPERATION)

ADDITIONAL RADIO REGULATIONS IN PART

Having considered all the proposals submitted to it on the above provisions, Working Group 6C unanimously adopted the status quo or revision as shown in the Annex attached hereto.

F. WIEFELSPUTZ

Chairman

Annex : 1



A N N E X

ADDITIONAL RADIO REGULATIONS

Article 10

(ex-DT/2  
page 697)

MOD

2152

Mobile stations shall, if the sender so requests, serve as intermediaries for the routing of radiotelegrams; the number of intermediary mobile stations is, however, limited to two.

NOC

2153-  
2156

subject to adoption DT/487

MOD

2157

(3) The station assisting in the free retransmission in accordance with the provisions of Nos. 2155 and 2156 must enter the service abbreviation QSP ... (name of the mobile station) at the end of the preamble of the radiotelegram.

NOC

2158

subject to adoption DT/487

Article 11

NOC

2159

subject to adoption DT/487

(ex DT/2  
page 701)

MOD

2160

82. When a radiotelegram received at a mobile station cannot be delivered, that station so informs the office or mobile station of origin by a service advice. In the case of a radiotelegram originating on land, this service advice is sent, whenever possible, to the land station through which the radiotelegram passed, or, if necessary, to another land station of the same country, or of a neighbouring country quoting the name or call sign of the station from which the radiotelegram was received, as far as existing conditions or special arrangements permit.

Articles 12, 13 and 14

NOC

2161-  
2165

subject to adoption DT/487

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

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5 October 1967  
Original : English

WORKING GROUP 6C

SUPPLEMENTARY REPORT  
BY THE CHAIRMAN OF WORKING GROUP 6C  
LISTING THE AR, IN PART, TO WHICH NO PROPOSALS HAVE  
BEEN SUBMITTED TO THIS CONFERENCE

AR

Article 10	:	Nos. 2153 - 2156, 2158
Article 11	:	No. 2159
Articles 12, 13, 14	:	Nos. 2161 - 2165

P. WIEFELSPÜTZ  
Chairman



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/49-E  
5 October 1967  
Original : English

COMMITTEE 5

D R A F T

FIRST REPORT BY WORKING GROUP 5D TO COMMITTEE 5

1. At its first meeting, the Group considered, under its terms of reference (Document No. 170), all relevant proposals relating to Appendix 25 to the Radio Regulations (Geneva, 1959), as well as the possibility of establishing a new Frequency Allotment Plan for HF radiotelephone coast stations by the present Conference.
2. It was found that a majority of the delegations participating in the meeting of the Working Group were in favour of the principle of retaining the present Appendix 25 to the Radio Regulations.
  - 2.1 There was general agreement as to the desirability of convening a future World Administrative Radio Conference to establish a new Frequency Allotment Plan for HF radiotelephone coast stations.
  - 2.2 In addition, it was agreed that the present Conference should draw up provisions for the orderly use of the new radiotelephone channels made available by the present Conference.





3. At its second meeting the Working Group set up an ad hoc Group under the Chairmanship of Mr. P.V. Larsen (Denmark), with the following terms of reference :

"1. To draft a procedure for the conversion from DSB to SSB operation in the HF maritime mobile radiotelephony bands, taking into account :

- a) the principle of retaining Appendix 25 to the Radio Regulations (Geneva, 1959); and
- b) the inclusion in this Appendix of all additional HF radiotelephone channels made available by this Conference.

2. To draft a recommendation concerning the convening, before a date to be suggested by the ad hoc Group, of a World Administrative Radio Conference to establish a Frequency Allotment Plan for the High Frequency radiotelephony bands, such a Conference to be preceded by a preparatory meeting of experts."

4. At its third meeting the Group unanimously adopted the texts of the draft Recommendation and Resolution annexed to this Report and recommended their approval by Committee 5.
5. The Working Group also recommended that Working Group 5B should consider the matter of power limitations referred to in paragraph 1 of the draft Resolution.

P.E. WILLEMS

Chairman of Working Group 5D

A N N E X 1

DRAFT

RECOMMENDATION No. \_\_\_\_\_

RELATING TO THE PREPARATION OF A NEW FREQUENCY

ALLOTMENT PLAN FOR HF - RADIOTELEPHONE COAST STATIONS

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that the present Frequency Allotment Plan for coast radiotelephone stations contained in Appendix 25 to the Radio Regulations (Geneva, 1959), was initially prepared by the Provisional Frequency Board in the years from 1948 to 1950 and was subject to amendments by the Extraordinary Administrative Radio Conference, Geneva (1951), and by the Administrative Radio Conference, Geneva (1959);
- b) that the Plan has already been implemented to a great extent, this being illustrated by the assignments, corresponding to allotments, recorded in the Master Register;
- c) that a number of additional assignments has also been recorded in the Master Register;

- d) that the introduction of SSB technique in the maritime HF radio-telephone bands has already started on the basis of the provisions of Appendix 17 to the Radio Regulations (Geneva, 1959), and that the conversion from DSB to SSB will continue, guided by the timetable and the supplementary technical specifications adopted by the present Conference;
- e) that DSB operation in the frequency bands concerned will continue until ..... for coast stations and ..... for ship stations;
- f) that the Conference has decided to create as from ..... new HF - radiotelephone channels to be used in accordance with the provisions of Resolution No. ....., to include such new channels in Appendix 17 and, without allotting them to countries, in Section III of Appendix 25;
- g) that it was found impracticable for the present Conference to prepare a new Frequency Allotment Plan, but it was found necessary that such a Plan be prepared by a subsequent conference;
- h) that it is expedient to have a preparatory meeting to lay down in advance of a planning conference the technical bases necessary for the preparation of a frequency allotment plan;

in view of

the provisions of Nos. 60 and 61 of the International Telecommunication Convention, Montreux (1965):

recommends

1. that a World Administrative Radio Conference be convened in order :
    - 1.1 to prepare on the basis of SSB operation a new Frequency Allotment Plan for HF - radiotelephone coast stations, covering the channels in the present Appendix 25 as well as the new channels referred to in f) above;
    - 1.2 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 Convention;
  4. that this conference be preceded by a preparatory meeting, in accordance with No. 73 of the Convention.
-

A N N E X 2

DRAFT

RESOLUTION No.

RELATING TO THE USE OF THE NEW HF CHANNELS

MADE AVAILABLE TO MARITIME RADIOTELEPHONY

BY THE PRESENT CONFERENCE

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that the Conference has decided to create as from ..... new HF radiotelephone channels to be included in Appendix 17 and, without allotting them to countries, in a new section (Section III) of Appendix 25;
- b) that the Conference also decided to recommend that a World Administrative Radio Conference be convened in 1973 to prepare a new frequency allotment plan for HF radiotelephone coast stations, covering the channels in the present Appendix 25 as well as the new channels referred to in a) above;

c) that, however, interim measures have to be taken by administrations and by the I.F.R.B. in order to provide for an orderly use of the new channels between the date when they are made available to maritime radiotelephony and the date of entry into force of the new frequency allotment plan;

decides that

1. during the interim period referred to in c) above, the new channels should be used for SSB operation, and also for DSB operation where technically feasible, in accordance with the time table for conversion to SSB operation laid down by the present Conference; the peak envelope power of the transmitters shall be limited to ..... for coast stations and ..... for ship stations;<sup>7</sup>

2. the I.F.R.B. shall collect from administrations requirements for use of these new channels;

urges administrations

3. to submit only those requirements considered essential for use during the interim period referred to in c) above, in view of the limited number of new channels available for maritime radiotelephony;

further decides that

4. after compilation of the requirements collected from administrations, the I.F.R.B., in consultation, where appropriate, with the administrations concerned, shall endeavour to distribute such requirements amongst the new channels, by dealing with them in the following order in each of the frequency bands covered by Appendix 25 :

4.1 requirements from those countries which have no allotments in the present Appendix 25, which have no assignments to HF radiotelephone coast stations recorded in the Master Register and which are in urgent need of frequencies for HF maritime radiotelephony;

4.2 requirements from those countries which have assignments to HF radiotelephone coast stations recorded in the Master Register, but which have a large volume of traffic to handle and whose assignments are causing or experiencing harmful interference;

5. the distribution of requirements amongst the new channels in accordance with paragraph 4 above shall be circulated to all administrations at least six months before the new channels are made available for maritime radiotelephony;

6. the channels distributed in accordance with paragraph 4 above shall be regarded as allotments to the countries concerned from the point of

view of the frequency notification and registration procedure to be applied as from the date these become available;

7. as from that date, the relevant provisions of Nos. 541 to 551 of the Radio Regulations, insofar as they refer to Section I of Appendix 25, shall apply also to the frequency bands covered by the new channels (Section III of Appendix 25), for the examination by the I.F.R.B. of frequency assignment notices for transmission or reception by coast stations;

8. the dates to be entered in Column 2a or Column 2b of the Master Register according to the findings reached by the I.F.R.B. after the examination referred to in paragraph 7 above, shall be in accordance with the relevant provisions of Nos. 577 to 586 of the Radio Regulations;

9. the above procedure, which should be discontinued on the date of entry into force of the new frequency allotment plan to be prepared by the 1973 Radio Conference, is of an interim nature and shall not prejudice the decisions to be taken by the 1973 Radio Conference; a suitable remark to this effect shall be entered in the Master Register for the frequency assignments in the bands concerned.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/50-E(Rev.)  
9 October 1967  
Original : English

WORKING GROUP 6C

WORKING GROUP 6C

Tuesday, 10 October 1967, at 1500 hours

Article 8 AR

- MOD 2130 (2) The coast station which carries out the redirection adds at the end of the preamble the service abbreviation QSP .... (name or call sign of the coast station to which the radiotelegram is redirected) which must be transmitted throughout the course of the radiotelegram.
- MOD 2131 (3) If, within the limits of the requisite period of retention of radiotelegrams, the coast station which has redirected a radiotelegram to another coast station is subsequently in a position to transmit the radiotelegram direct to the mobile station of destination, it shall then transmit to the coast station to which the radiotelegram had been redirected a service advice informing the latter of the transmission of the said radiotelegram.

Article 9 AR

- MOD 2139 Delete: "If the transmitting station is a mobile station ..."
- SUP 2143
- ADD 2144A When a land station subsequently transmits a radiotelegram thus held to the mobile station which incompletely received it, it does so by inserting the service indication "ampliation" before the preamble.
- MOD 2145 Amend last line to read: "... the radiotelegram to this other land station, applying the relevant provisions of Article 8 of these Regulations to the radiotelegram".



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/50-E  
6 October 1967  
Original : English

WORKING GROUP 6C

WORKING GROUP 6C

Friday, 6 October 1967, at 1500 hours

Agenda Item 3

Article 8 AR

- |     |      |  |
|-----|------|--|
| MOD | 2130 | (2) The coast station which carries out the re-direction adds at the end of the preamble the service abbreviation QSP .... (name or call sign of the coast station to which the radiotelegram is redirected) which must be transmitted throughout the course of the radiotelegram.   |
| MOD | 2131 | (3) If, within the limits of the requisite period of retention of radiotelegrams, the coast station which has redirected a radiotelegram to another coast station is subsequently in a position to transmit the radiotelegram direct to the mobile station of destination, it shall then transmit to the coast station to which the radiotelegram had been redirected a service advice informing the latter of the transmission of the said radiotelegram. |
- 



INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

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Spanish

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COMMITTEE 4

## APPENDIX 15A

The attached table contains the Appendix 15A prepared by the ad hoc Working Group and tentatively approved by the Committee in its thirteenth meeting.

Annex : 1

A N N E X

Title :

APPENDIX 15A

FREQUENCIES ASSIGNABLE TO SHIP RADIOTELEGRAPH  
STATIONS USING THE MARITIME MOBILE SERVICE  
BANDS BETWEEN 4 AND 27.5 Mc/s

Assignable frequencies wide-band telegraphy, facsimile and special transmission system	Oceanographic data transmission *	Assignable working frequencies for direct printing telegraphy and data systems	Assignable working frequencies for high traffic ships **	Calling frequencies	Assignable working frequencies for low traffic ships	
					Group A	Group B
4142.5 4144.5.....4160.5 5 frequencies spaced 4	4162.5 4162.9.....4165.6 10 frequencies spaced 0.3	4166 4166.5.....4172 12 frequencies spaced 0.5	4178 4172.5.....4177.5 11 frequencies spaced 0.5	4187 4178.5.....4186.5 17 frequencies spaced 0.5	4187 4187.5.....4208 84 frequencies spaced 0.5	4231.5 4208.5.....4229
6216.5 6218.5.....6242.5 7 frequencies spaced 4	6244.5 6244.9.....6247.6 10 frequencies spaced 0.3	6248 6248.5.....6258 20 frequencies spaced 0.5	6267 6258.75...6266.25 11 frequencies spaced 0.75	6280.5 6267.75...6279.75 17 frequencies spaced 0.75	6312 6281.25.....6312 84 frequencies spaced 0.75	6344 6312.75.....6343.5
8328 8290.....8326 10 frequencies spaced 4	8328 8328.4.....8331.1 10 frequencies spaced 0.3	8331.5 8332.....8341.5 20 frequencies spaced 0.5	8356 8342.....8355 14 frequencies spaced 1	8374 8357.***.8373 17 frequencies spaced 1	8416 8375.....8416 84 frequencies spaced 1	8460 8417.....8458
12431.5 12433.5....12477.5 12 frequencies spaced 4	12479.5 12479.9....12482.6 10 frequencies spaced 0.3	12483 12484.....12503 20 frequencies spaced 1	12534 12504....12532.5 20 frequencies spaced 1.5	12561 12535.5....12559.5 17 frequencies spaced 1.5	12689.5 12562.5....12624 84 frequencies spaced 1.5	12689.5 12625.5....12687
16576 16578.....16634 15 frequencies spaced 4	16636.5 16636.9....16639.6 10 frequencies spaced 0.3	16640 16641.....16660 20 frequencies spaced 1	16712 16662....16710 25 frequencies spaced 2	16748 16714.....16746 17 frequencies spaced 2	16917.5 16750.....16832 84 frequencies spaced 2	16917.5 16834.....16916
22112 22114.....22158 12 frequencies spaced 4	22160.5 22160.9....22163.6 10 frequencies spaced 0.3	22164 22165.....22184 20 frequencies spaced 1	22222.5 22187....22221 18 frequencies spaced 2	22267.5 22225.....22265 17 frequencies spaced 2.5	22372 22270.....22320 41 frequencies spaced 2.5	22372 22322.5....22370
Assignable frequencies to ships of all categories ****						
25070 See footnotes in page 4		Calling frequencies		Working frequencies		
		25073.5.....25081 6 frequencies spaced 1.5	25084.....25106.5 16 frequencies spaced 1.5	25110		

Footnotes :

- \* ) The frequency bands may also be used by buoy stations for ocean data transmission and by stations interrogating these buoys, in accordance with the conditions set forth in Resolution No. ...
- \*\* ) Manual or automatic morse telegraphy at speeds not exceeding 40 bands.
- \*\*\* ) For particular conditions concerning the use of 8364 kc/s, see No. 1179.
- \*\*\*\* ) For use of this band, see No. 224.

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
**CONFERENCE MARITIME**  
GENÈVE, 1967

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COMMISSION 4  
COMMITTEE 4  
COMISION 4

LA LISTE CI-JOINTE CONTIENT DES REFERENCES RENVOYANT  
AUX PROPOSITIONS CONCERNANT L'APPEL SELECTIF ET LES  
RADIOBALISES DE REPERAGE

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THE ATTACHED LIST CONTAINS CROSS-REFERENCE TO  
PROPOSALS CONCERNING SELECTIVE CALLING AND  
POSITION-INDICATING RADIOBEACONS

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EN LA LISTA ADJUNTA SE INDICAN LOS NÚMEROS DE REFERENCIA  
DE LAS PROPOSICIONES RELATIVAS A LA LLAMADA SELECTIVA Y LOS  
RADIOFAROS DE LOCALIZACIÓN

---



1. Appel sélectif  
Selective calling  
Llamada selectiva

	DT/2 page - página
ADD 999F G/91 (50)	207
ADD 999F G/113 (58)	207
ADD 1235A F/109 (96)	289
ADD 1240A F/109 (97)	295
CAN/107 (35)	

2. Radiobalises de repérage  
Position-indicating radiobeacons  
Radiofaros de localización

	DT/2 page - página
ADD 999A DNK/ISL/NOR/30 (1)	199
ADD 999A F/14 (81)	200
ADD 999A G/60 (21)	
ADD 999A HOL/75 (23)	200
ADD 999AA I/36 (27)	201
ADD 999A J/89 (76)	202
ADD 999A.1 J/89 (77)	202
ADD 999A NZL/135 (4)	
ADD 999A RFA/94 (21)	203
ADD 999A USA/22 (51)	202
ADD 999B DNK/ISL/NOR/30 (1)	199
ADD 999B HOL/75 (23)	200
ADD 999AB I/36 (27)	201
ADD 999B NZL/135 (4)	



DT/2 page - página

ADD	999B	USA/22	(51)	202
ADD	999B	NZL/135	(4)	
ADD	999C	DNK/ISL/NOR/30	(1)	199
ADD	999C	HOL/75	(23)	200
ADD	999AC	I/36	(27)	201
ADD	999C	NZL/135	(4)	
ADD	999C	USA/22	(51)	202
ADD	999C	NZL/135	(4)	
ADD	999D	DNK/ISL/NOR/30	(1)	199

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

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6 October 1967.  
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WORKING GROUP 6C

DRAFT RESOLUTION

Relating to the Issue of a General Class of  
Radiocommunication Operator's Certificate  
for the Maritime Mobile Service

The text appearing in the Annex attached hereto is the text of the draft Resolution prepared by Working Group 6C ad hoc (Document No. DT/43) as amended in Working Group 6C up to the end of its Sixth Meeting on 6 October 1967.

Working Group 6C has agreed on the principles outlined in the draft Resolution subject to :

- editorial improvement of the text, and
- further consideration of the three annexes to the draft Resolution.

F. WIEFELSPÜTZ  
Chairman

Annex : 1



A N N E X

DRAFT RESOLUTION

Relating to the Issue of a General Class of Radiocommunication  
Operator's Certificate for the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that Article 23 of the Radio Regulations, Geneva, 1959, provides for two classes of certificate as well as a special certificate for radiotelegraph operators;
- b) that many radiotelegraph operators are the holders of the second class certificates;
- c) that it is doubtful if the higher morse speed qualification of the first class certificate would be necessary in the future;
- d) that there is a future need for a greater emphasis on the practical maintenance of radio equipment in service;

is of the opinion

- 1. that administrations should consider the desirability of replacing the present two classes of certificate with a general class of certificate for radiotelegraph operators more closely related to future needs;
- 2. that in considering the issue of such a certificate administrations take into account the desirability of modified certificate qualification as appended hereto in Annexes 1, 2 and 3; and in connection therewith

resolves

- 1. that administrations which wish to issue a general class of certificate are authorized to do so,

/ex.DT/43  
page 2  
resolves/

[ex.DT/43 2.  
page 2  
resolves/

that, for the purposes of the Radio Regulations, such general class of certificate shall be recognized as an alternative to present first and second class certificates,

[new/ 3.

that countries employing operators of a foreign nationality may decide upon the status of the general radiocommunication operator's certificate in so far as employment in their own ships is concerned,

[ex.DT/43 4.  
page 2  
resolves/

that the certificate shall maintain at least the practical technical standards of present first and second class certificates in all respects,

[ex.DT/43 5.  
page 2  
resolves/

that the morse code speed shall not be less than in No. 884 of the Radio Regulations.

Annex 1

Conditions for the issue of the radiocommunication operator's general  
certificate - Maritime

1. The radiocommunication general certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below.
2. Knowledge of the principles of electricity, the theory of radio and marine aerial systems, sufficient to meet the requirements of paragraphs 3, 4 and 5 below.
3. Theoretical knowledge of marine radiotelegraph and radiotelephone transmitters and receivers; automatic alarm devices; radio equipment for lifeboats and other survival craft; direction-finding equipment; together with all auxiliary items, including power supply auxiliaries (such as motors, alternators, generators, inverters, rectifiers, and accumulators) with particular reference to maintaining the equipment in service.
4. Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in paragraph 3) above, including the taking of direction-finding bearings and the calibration of radio direction-finding apparatus.
5. Practical knowledge necessary for the location and remedying (with the means available on board) of faults which may occur during a voyage, in the apparatus mentioned in paragraph 3) above.
6. Ability to send correctly by hand and to receive correctly by ear, in the Morse Code, code groups (mixed letters, figures and punctuation marks), at a speed of sixteen groups a minute, and a plain language text at the speed of twenty words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and receiving shall be, as a rule, five minutes.
7. Ability to send correctly and to receive correctly by telephone.

8. Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.

9. A sufficient knowledge of world geography, especially the principal shipping and air routes and the most important telecommunication routes.

10. Knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in **writing**. Each administration shall decide for itself the language or languages required.

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Annex 2

Qualifying service

1. An operator holding a radiocommunication operator's general certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932 of the Radio Regulations).
  2. Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A of the Radio Regulations) an operator shall hold a radiocommunication operators general certificate and shall have had at least six months experience as operator on board ship or in a coast station.
  3. Before becoming chief operator of a ship station of the first category (see No. 930 of the Radio Regulations) an operator shall hold a radiocommunication operator's general certificate, and shall have had at least two years experience as operator on board ship or in a coast station.
-

Annex 3

Class and minimum number of operators for ship stations

1. In the public correspondence service, each government shall take the necessary steps to ensure that ship stations of its own nationality have personnel adequate to perform efficient service.
  2. The personnel of these ship stations shall, having regard to the provisions of Article 23 and Section IV of Article 25 of the Radio Regulations include at least :
  3. Ship stations of the first category; a chief operator holding a radiocommunication operators general certificate.
  4. Ship stations of the second and third categories; one operator holding a radiocommunication operator's general certificate.
  5. Ship stations of the fourth category, except in the case provided for in paragraphs 6) and 7) below; one operator holding a radiocommunication operator's general certificate.
  6. 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 radiotelegraph operator's special certificate as provided for in Nos. 889 to 893 of the Radio Regulations.
  7. Ship station equipped with radiotelephone installations only; one operator holding a radiocommunication operator's general certificate or a radiotelephone operator's certificate as provided for in No. 918 of the Radio Regulations.
-



WORKING GROUP 5A

## TENTATIVE ADVANCE DRAFT OF TEXTS

## FOR WORKING GROUP 5A

- |                                 |     |      |   |
|---------------------------------|-----|------|---|
|                                 | MOD | 1341 | (2) The power of mobile radiotelephone stations operating in the authorized bands between 1605 and 2850 kc/s shall not exceed the following : |
| USA                             | NOC |      |   |
| (see 863 (Rev.) and 903 (Rev.)) |     |      |   |
| G, I                            |     |      | 100 Watts ( $P_c$ ) for class A3 $\overline{\text{and A3H}}$ emissions.   |
| I.                              |     |      | 300 Watts   |
| F, G, HOL                       |     |      | 400 Watts ( $P_p$ ) for classes   |
| POL                             |     |      | 500 Watts A3A, A3H and A3J emissions  |
|                                 | MOD | 1342 | (3) The power of coast radiotelephone stations, operating in the authorized bands between 1605 and 3800 kc/s, shall be limited to :           |
| USA                             | NOC |      |   |
| (see 863 (Rev.) and 903 (Rev.)) |     |      |   |
| G, I                            |     |      | - Coast stations located north of latitude 32°N   |
|                                 |     |      | 2 kilowatts ( $P_c$ ) for class A3 $\overline{\text{and A3H}}$ emission   |
| F, G,                           |     |      | 8 $\overline{6}$ , 10 $\overline{7}$ kilowatts ( $P_p$ ) for classes A3A, A3H and A3J emissions   |
| HOL, I,                         |     |      |   |
| POL                             |     |      |   |
|                                 |     |      | - Coast stations located south of latitude 32°N :   |
| G, I                            |     |      | 3.5 kilowatts ( $P_c$ ) for class A3 $\overline{\text{and A3H}}$ emission.  |
| F, G,                           |     |      | 14 $\overline{10.5}$ , 15 $\overline{7}$ kilowatts ( $P_p$ ) for classes A3A, A3H and A3J emissions   |
| HOL, I,                         |     |      |   |
| POL                             |     |      |   |
| USA                             | NOC | 1343 |   |



F, G	MOD	1344	a) The following ship-shore working frequencies, if required by their service : 2046 kc/s (      ), 2049 <u>2049.3</u> kc/s (      ) <u>and 2170.8 kc/s (      )</u> for A3A and A3J emissions;  2049 kc/s (      ) for A3 and A3H emissions until the end of the transition period only.
G	ADD	1344A	<u>b)</u> The ship-shore working frequency 2191 kc/s (      ) for A3A and A3J emissions.
F, G	MOD	1345	c) The following intership frequencies, if required by their service : 2053 kc/s (      ) and 2056 <u>2056.3</u> kc/s for A3A and A3J emissions; 2056 kc/s (      ) for A3 and A3H emissions until the end of the transition period only. These frequencies may be used as additional ship-shore frequencies.
USA	NOC	1346	
USA	NOC	1347	
USA	NOC	1348	
USA	NOC	1349	
F, G, HOL, I, J, USA	MOD	1350	(2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmission shall cease within the band <u>2173.5 - 2190.5 kc/s</u> .
F, J USA  USA	MOD	1351	13. All stations on ships making international voyages should be able to use the intership frequency 2638 kc/s (      ) <u>and, with A3A or A3J emissions only, the intership frequencies 2170 kc/s (      ) and 2190.5 kc/s (      )</u> if required by their service.

Article 5

	MOD	200	No. 200 has been deleted by Committee 4.
B	CAN		
J	MOD	Table	2170 - <u>2173.5</u> <u>maritime mobile</u>  <u>2173.5</u> - <u>2190.5</u> mobile (distress and calling) 201  <u>2190.5</u> - 2194 <u>maritime mobile</u>
USA	MOD	201	The frequency 2182 kc/s is the international distress and calling frequency for radio-telephony. The conditions for the use of <u>the band 2170 - 2194 kc/s</u> are prescribed in Article 35.
			<u>Article 33</u>
F	MOD	1226	a) As far as possible, a working frequency, particularly in areas where the traffic density is high.
F	MOD	1227	b) The carrier frequency 2182 kc/s wherever it is not possible to use a working frequency.
F	MOD	1228 1230 1232 1234 1235 1242 1247 1254 1290	Replace, wherever necessary, "the frequency 2182 kc/s" with " <u>the carrier frequency 2182 kc/s</u> "  (This has already been covered in a general request from Committee 5 to Committee 7.)
I	ADD	1227AA	(c) The frequency 2190.5 kc/s ( ) with single sideband emissions and peak envelope power not exceeding 400 watts./
F	MOD	1233	(5) <u>Subject to the provisions of No. 1235A</u> , coast stations shall, in accordance with .... ..... <u>carrier</u> frequency 2182 kc/s.

- |        |     |       |  |
|--------|-----|-------|--|
| F      | ADD | 1235A | (8) Coast stations shall call ships equipped to receive selective call signals by sending class A2H emissions on 2191.3 kc/s ( ). After transmission of the ship call number, they shall transmit an identification number to inform the ship of the name of the calling coast station (Nos. 788F and 1318E to K). |
| I      | ADD | 1233A | (5 bis) When using selective calling coast stations shall use the frequency 2170 kc/s ( ) with A3A or A3J emission.  |
| G      | ADD | 1242A | When a ship is called by selective calling on 2170.5 kc/s ( ) it shall reply on 2191 kc/s ( ).   |
| G      | ADD | 1248A | c) On a working frequency to calls made on the frequency 2191 kc/s ( ).  |
| F, AUS | MOD | 1251  | Should be referred to Working Group 5B.  |
-

COMMITTEE 5LIMITATION OF OUT-OF-BAND SPECTRUM OF A SINGLE SIDEBAND  
RADIOTELEPHONE EMISSION

(APPENDIX 17A)

When using single sideband A3H, A3A or A3J emission the power of any emission supplied to the antenna transmission line of a station on a discrete frequency shall, when the transmitter is driven to full peak envelope power, be less than the peak envelope power in accordance with the following table :

Frequency separation $\Delta$ kc/s from the assigned frequency	Minimum attenuation below peak envelope power
$1.6 < \Delta \leq 4.8$	28 db
$4.8 < \Delta \leq 8.0$	38 db
$8.0 < \Delta$	43 db, without exceeding the power of 50 milliwatts

Transmitters when using suppressed carrier or reduced carrier emission may be tested for compliance with this regulation by means of a two-tone audio input signal with sufficient frequency separation between tones such that all intermodulation products occur at frequencies at least 1.6 kc/s removed from the assigned frequency.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING GROUP 5A

DRAFT

FOURTH REPORT OF WORKING GROUP 5A

TO COMMITTEE 5

Article 35

Nos. 1322B and 1323

The Working Group adopted the new text which appears in **the Annex.**

No. 1324

The Working Group decided that this number would remain unchanged.

Nos. 1325 and 1326

The Working Group adopted the text which appears in the Annex.

Nos. 1327 - 1333

The Working Group decided that these numbers would remain unchanged.

Nos. 1326A, 1326B, 1334 and 1335

The Working Group considered that before taking any decision with respect to these numbers, Committee 6 should be asked to give its opinion on the proposals in question.

Proposals concerning No. 1325.1, 1329A and 1330AA

The Working Group adopted the first part of the proposed text for this paragraph which reads as follows:

"Transmissions in the bands [2170 - 2173.5 kc/s and 2190.5 - 2194 kc/s] respectively on carrier frequency [...] kc/s (assigned frequency [...] kc/s) and carrier frequency [...] kc/s (assigned frequency [...] kc/s) are limited to emissions of classes A3A and A3J. [The band 2170 - 2173.5 kc/s may also be used with class A2H emissions by coast stations



for selective calling]. [The band 2190.5 - 2194 kc/s may also be used by ship stations for calling coast stations.]"

. . . . .

It was also decided to request Committee 7 to insert the words "carrier frequency" before "2182 kc/s" in the text of numbers 1324, 1327, 1331 and 1332.

P. AAKERLIND  
Chairman

Annex: 1

A N N E X

Article 35

.....

- |     |        |   |
|-----|--------|---|
| ADD | 1322B  | §3. Apparatus in radiotelephone stations of the maritime mobile service installed for operation on frequencies in the authorized bands between 1605 and 4000 kc/s and in the authorized bands between 4000 and 23 000 kc/s shall satisfy the technical and operational conditions specified in [Appendix 17A].  |
| MOD | 1323   | §3.(1) The frequency 2182 kc/s <sup>1</sup> is the international distress frequency for radiotelephony; it shall be used for this purpose by ships, aircraft, survival craft stations and by floatable emergency position-indicating radio beacons using frequencies in the authorized bands between 1605 and 4000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for signals of floatable emergency position-indicating radio beacons, for the urgency signal and urgency messages and for the safety signal, safety messages shall be transmitted where practicable, on a working frequency after a preliminary announcement on 2182 kc/s. The class of emission to be used for the frequency 2182 kc/s shall be A3 or A3H (see No. 984). |
| ADD | 1323.1 | (1) Whatever the class of emission used, the value indicated, 2182 kc/s, always designates the carrier frequency of the emission.   |
| NOC | 1324   |   |
| MOD | 1325   | (3) Except for <b>transmissions</b> authorized on carrier frequency 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190.5 kc/s are forbidden <sup>1</sup> .   |



MOD	1326	(4) Any coast station using carrier frequency 2182 kc/s shall be able to transmit the radiotelephone alarm signal described in No. 1465 (see also Nos. 1471, 1472 and 1473).
NOC	1327	
NOC	1328	
NOC	1329	
NOC	1330	
NOC	1331	
NOC	[c]	Watch
NOC	1332	
NOC\$	1333	

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/57-E  
9 October 1967  
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COMMITTEE 4

REPORT OF COMMITTEE 4 AD HOC I.O.C./W.M.O.

The ad hoc Committee, consisting of delegates of the United Kingdom, U.S.S.R., France and the United States of America, assisted by members of the I.F.R.B., held three meetings and approved unanimously the two draft Resolutions attached hereto.

The first Resolution defines the role of I.O.C./W.M.O. in coordinating the use of the frequencies allocated for oceanographic data transmissions.

The second Resolution instructs the I.F.R.B. with respect to notifications and registrations pertaining to oceanographic stations.

S.M. MYERS  
Chairman

Annexes : 2



A N N E X 1

DRAFT RESOLUTION No. ....

Relating to the establishment of a coordinated world-wide system for the collection of data relating to oceanography

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) the expressed desire for the establishment of a coordinated world-wide system for the collection of data relating to oceanography;
- b) that a frequency band has been designated in each of the six high frequency bands allocated exclusively to the maritime mobile service for use in the collection of data relating to oceanography in accordance with Appendix 15A revised;
- c) that use of these frequencies with maximum effectiveness is dependent upon cooperation and coordination among administrations;
- d) that certain administrations expressed the desire that a coordinated world-wide system for the transmission of data relating to oceanography be established on the basis of a coordinated plan in the bands allocated by this Conference;
- e) that, however, certain other administrations wish to use in the near future stations for the collection of data relating to oceanography within the framework of decisions taken on this matter by the present Conference;
- f) that, consequently, a coordinated programme for the collection of data relating to oceanography should be established using the frequency bands referred to in b) above; and
- g) that the Intergovernmental Oceanographic Commission (I.O.C.) and the World Meteorological Organization (W.M.O.) have been in consultation since 1962 with respect to cooperative efforts in the collection of data relating to oceanography (e.g. the W.M.O./I.O.C. Panel of Experts on Coordination of Requirements, Geneva, 19-21 July 1967);

resolves

1. that the I.O.C. and W.M.O. be invited to develop jointly, in consultation with the I.F.R.B., and in consultation with I.T.U. administrations as appropriate, a coordinated plan designed to meet existing and future requirements of all interested I.T.U. Member countries, for use by stations in the collection of data relating to oceanography in a world-wide system, within the framework of provisions made by the W.A.R.C. for such a system,
  - this plan to include the geographical distribution of oceanographic stations, their system of operation, the deployment of frequencies in the system and the manner in which oceanographic information is to be transmitted;
2. that administrations be encouraged to assign frequencies in conformity with the plan and the recommendations of I.O.C. and W.M.O., for the portion of the world-wide system over which they have jurisdiction;
3. that the I.O.C. and W.M.O. be invited further to assume jointly the responsibility, in consultation with the I.F.R.B., for keeping such a plan current, in the light of changing requirements for data relating to oceanography; and
4. that the plan developed under points 1 and 3 above shall be considered at the next Administrative Radio Conference competent to deal with matters relative to the maritime mobile service, to determine what, if any, changes appear necessary to improve its effectiveness.

A N N E X 2

DRAFT RESOLUTION No. ....

Relating to the manner in which the I.F.R.B.  
shall treat notifications dealing with  
frequency assignments to oceanographic stations

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that the Conference had adopted Resolution No. ...., relating to the establishment of a coordinated world-wide system for the collection of data relating to oceanography; and
- b) that the I.F.R.B. would require instructions relative to the notification and registration of assignments to oceanographic stations;

resolves

that the I.F.R.B. be instructed to accept for registration only such notifications, submitted by administrations in accordance with Nos. 486 and 487, as pertain to transmitting and receiving oceanographic stations which are land based and which are in conformity with Resolution No. ...., referred to in a) above. Such notifications shall be treated by the Board in accordance with No. 505 of the Regulations. These entries in the M.I.F.R. shall not prejudice any decisions to be taken by the next Administrative Radio Conference competent to deal with the maritime mobile service.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/58-E  
10 October 1967  
Original : French/English

WORKING GROUP 6A

DRAFT

FIFTH REPORT OF WORKING GROUP 6A TO COMMITTEE 6 (OPERATION)

General Radiotelephone Procedure  
in the Maritime Mobile Service (Article 33)

Calls by Radiotelephony (Article 34, in part)

1. Working Group 6A unanimously agreed to recommend the adoption of the provisions appearing in the Annex attached hereto.
2. International Code of Signals

In recommending ADD 1216A, the Working Group specifically did not include reference to the International Code of Signals since it was of the opinion that the appropriate place for such mention would be in Article 36. In this respect the attention of Working Group 6B is invited to a proposal to this effect appearing on page 399 of Document No. DT/2, ADD 1433A.

A. CHASSIGNOL  
Chairman

Annex: 1



A N N E X

Article 33

	NOC	1209	
	SUP	1210	
	NOC	1211 - 1214	
(ex DT/2 p. 283)	MOD	1215	(2) Radiotelephone stations of the maritime mobile service which participate in communications between ship stations and subscribers of the land telephone system, should as far as possible, avoid manual methods of switching from transmission to reception and vice versa.
	ADD	1215A	[Held in abeyance pending App. 17A, page 284]
	(MOD)	1216	§5.(1) [add sub-paragraph number]
(ex DT/2 p. 283)	ADD	1216A	(2) To facilitate radiocommunications the service abbreviations given in Appendix 13A may be used.
(ex DT/2 p. 283)	ADD	1216B	(3) When it is necessary to spell out certain expressions, difficult words, service abbreviations, figures, etc., the phonetic spelling tables in Appendix 16 shall be used.
	NOC	1217 - 1218	
(ex DT/2 p. 283)	MOD	1219	(a) The mobile station whose emission causes interference to the correspondence of a mobile station with a coast station shall cease sending at the first request of the coast station.
	NOC	1220 - 1221	
(ex DT/2 p. 289)	MOD	1222	§7.(1) The call consists of : <ul style="list-style-type: none"><li>- the call sign or other identification of the station called, not more than three times;</li><li>- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);</li></ul>

(ex DT/2  
p. 289)  
(contd)

- the call sign or other identification of the calling station, not more than three times.

NOC 1223

MOD 1224

[G/91 (52) page 292 held in abeyance]

(ex DT/2  
p. 291)

ADD

Internal radio communication on ships

ADD 1224A

§ 7 (bis) (1) Calls for internal communications on board ship shall consist of :

(ex DT/2  
p. 291)

ADD 1224B

a) From the control station :

- the name of the ship followed by a single letter (ALFA, BRAVO, CHARLIE, etc. indicating the substation (see No. 777B)) not more than three times;
- the words "THIS IS";
- the name of the ship followed by the word "CONTROL";

(ex DT/2  
p. 291)

ADD 1224C

b) From the substation :

- the name of the ship followed by the word "CONTROL" not more than three times;
- the words "THIS IS";
- the name of the ship followed by a single letter (ALFA, BRAVO, CHARLIE, etc. indicating the substation - see No. 777B)).

NOC 1225

NOC 1226

MOD 1227

- b) a working frequency, observed by the coast station, as shown in the List of Coast Stations.



ADD	1227AA	[I/31 (1) page 292, held in abeyance]
(MOD)	1228	(2) A radiotelephone ship station calling a coast station of another nationality should, as a general rule, use the carrier frequency 2 182 kc/s. However, where so agreed by administrations, the ship station may use a working frequency on which watch is kept by that coast station.
NOC	1229	
(MOD)	1230	a) the carrier frequency 2 182 kc/s;
NOC	1231	
(MOD)	1232	(4) An aircraft station calling a coast station or a ship station may use the carrier frequency 2 182 kc/s
MOD	1233	["carrier" added and held in abeyance]
ADD	1233AA	[I/31/1 page 292, held in abeyance]
(MOD)	1234	["carrier" added and held in abeyance]
(MOD)	1235	["carrier" added and held in abeyance]
ADD	1235A	[F/109 (96) page 289, held in abeyance]
MOD	1236	[Held in abeyance, page 292 plus proposals AUS/122 (42), NZL/133 (13) and B/138 (52)]
NOC	1237 - 1238	
(ex DT/2 p. 295)	MOD 1239	§10.(1) In the bands between 156 Mc/s and 174 Mc/s used for the maritime mobile services, coast and ship stations should, as a general rule, call on 156.80 Mc/s. However, calling may be conducted on a working channel or on a two-frequency calling channel, which has been implemented in accordance with No. 1361.
NOC	1240	
ADD	1240A	[F/109 (97) page 295, held in abeyance]

(ex DT/2  
p. 295) MOD 1241

§11. The reply to calls consists of :

- the call sign or other identification of the calling station, not more than 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 called, not more than three times.

(ex DT/2  
p. 299) (MOD) 1242

§12. (1) When a ship station is called on the carrier frequency 2 182 kc/s it should reply on the same frequency unless another frequency is indicated by the calling station.

ADD 1242A

[G/113 (59) page 301, held in abeyance]

NOC 1243

ADD 1243A

[F/109 (98) page 299, held in abeyance]

(ex DT/2  
p. 299) MOD 1244

(3) When calling a coast station or another ship station, a ship station shall indicate the frequency on which a reply is required if this frequency is not the normal one associated with the frequency used for the call.

ADD 1244A

[F/111 (152), page 299, held for further study]

NOC 1245 - 1246

(MOD) 1247

- a) on the carrier frequency 2 182 kc/s to calls made on the carrier frequency 2 182 kc/s unless another frequency is indicated by the calling station;

NOC 1248

ADD 1248A

[G/79 (98) page 301, held in abeyance]

MOD 1249

[F/8 (26), G/77 (41), J/84 (15), AUS/122 (43), B/138 (53), pages 299-301, held in abeyance]

MOD 1250

[G/77 (41) page 301, held in abeyance]

MOD 1251

[F/8 (27) page 300, AUS/122 (44) held in abeyance]

NOC 1252

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/59-E  
9 October 1967  
Original : English

COMMITTEE 4

REVISION OF ARTICLE 32

Nos. 1145, 1146 AND 1148 TO 1202

The conclusions of the Ad-hoc Working Group are attached as  
Annex.

F. THORNE  
Chairman Ad-hoc Working Group

Annex : 1



A N N E X

NOC

Section V.Bands between 4 000 and 27 500 kc/s

NOC

## A. General provisions

MOD 1145 § 17. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 1174, 1192 and 1196 shall employ only class A1 emission. In the bands specified in No. 1192, stations may use manual or automatic A1 Morse telegraphy 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 to operate in the frequency bands authorized to ships for wide-band telegraphy, facsimile and special transmission systems may use any class of emissions provided that such emissions can be contained within the wide-band channels indicated in Appendix 15A. However, manual Morse and telephony are excluded, except for circuit alignment purposes.

MOD 1148 (4) Coast radiotelegraph stations employing single channel class A1 or F1 emission operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall at no time use mean power in excess of the following :

<u>Band</u>	<u>Maximum mean power</u>
4 Mc/s	5 kW
6 Mc/s	5 kW
8 Mc/s	10 kW
12 Mc/s	15 kW
16 Mc/s	15 kW
22 Mc/s	15 kW

- ADD 1148A (5) Coast radiotelegraph stations employing multi-channel telegraph emissions operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall at no time use a mean power in excess of 2.5 kW per 500 c/s bandwidth.
- 1149 § 18. (1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25 070-25 110 kc/s, shall be divided into six parts, beginning at the low frequency end :
- 1150 a) a band of working frequencies for ship stations using wide-band telegraphy, facsimile and special transmission systems :
- 1150A aa) a band of working frequencies for oceanographic data transmissions;
- 1150B ab) a band of working frequencies for ship stations using narrow-band direct-printing telegraph and data systems;
- NOC 1151
- NOC 1152
- NOC 1153
- MOD 1154 (2) The bands 25 070-25 082.5 kc/s and 25 082.5-25 110 kc/s are allocated, respectively, for calling and working by ship radiotelegraph stations employing A1 or F1 emissions on ships of all categories. (See No. 224.)
- SUP 1155
- MOD 1156 § 20. (1) Stations installed on ships shall, at the discretion of the administration controlling the ship station concerned, use either the high traffic band (see No. 1151) or the low traffic band (see No. 1153), depending on their traffic requirements.
- SUP 1157

1158 (3) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in Appendix 15A.

1159 § 21. For the exchange of radiotelegraph communications with stations of the maritime mobile service, aircraft stations may utilize the frequencies of the bands allocated to that service for radiotelegraphy between 4 000 and 27 500 kc/s. When using these frequencies, aircraft stations shall comply with the provisions of this section.

NOC 1160-1172

1173 (3) Working frequencies assigned to coast stations using the bands between 4 000 and 27 500 kc/s are included within the following band limits :

4 231.5	to	4 361.5	kc/s
6 344	to	6 512	kc/s
8 460	to	8 729	kc/s
12 689.5	to	13 105.5	kc/s
16 917.5	to	17 255.5	kc/s
22 372	to	22 622	kc/s (see No. 453.1)

#### D. Assignment of Frequencies to Mobile Stations

##### 1. Calling Frequencies of Ship Stations

1174 § 29. (1) The calling frequencies assigned to ship stations are included within the following band limits :

4 178	to	4 187	kc/s
6 267	to	6 280.5	kc/s
8 356	to	8 374	kc/s
12 534	to	12 561	kc/s
16 712	to	16 748	kc/s
22 222.5	to	22 267.5	kc/s
25 070	to	25 082.5	kc/s

1175 (2) In the band 4 178 to 4 187 kc/s, the calling frequencies are spaced 0.5 kc/s apart. The extreme frequencies assignable are 4 178.5 and 4 186.5 kc/s as indicated in Appendix 15A.

MOD 1176

(3) In each of the other maritime mobile service bands between 4 000 and 18 000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4 178 to 4 187 kc/s.

In the bands 22 222.5 to 22 267.5 and 25 070 to 25 082.5 kc/s the spacing of calling frequencies is 2.5 kc/s and 1.5 kc/s respectively.

MOD 1177

§ 30. The administration to which a ship station is subject shall assign to it a series of calling frequencies including one frequency in each of the bands in which the station is equipped to transmit. Administrations may, however, assign a supplementary series of calling frequencies for use in the event of interference. In the bands between 4 000 and 18 000 kc/s, ..... the calling bands.

The same system of uniform distribution shall be applied in the assignment of calling frequencies in the bands 22 222.5 to 22 267.5 kc/s and 25 070 to 25 082.5 kc/s.

MOD 1178

§ 31. (1) One calling frequency in each of the calling bands indicated in No. 1174 shall be reserved as far as possible for the use of aircraft desiring to communicate with stations of the maritime mobile service. These frequencies are the following : 4 182; 6 273; 8 364; 12 546; 16 728 and 22 245 kc/s.

NOC 1179

## 2. Working Frequencies of Mobile Stations

### a) Channel Spacing and Assignment of Frequencies

MOD 1180

§ 32. In all bands the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kc/s apart. The frequencies assignable are shown in Appendix 15A.

ADD 1180A

§ 32(bis) In all bands, the frequencies assignable for oceanographic data transmissions are spaced 0.3 kc/s apart. The frequencies assignable are shown in Appendix 15A.

- ADD 1180B § 32(ter) The working frequencies for ship stations using narrow-band direct-printing telegraph and data systems are spaced 0.5 kc/s apart in the 4, 6 and 8 Mc/s bands and 1.0 kc/s apart in the 12, 16 and 22 Mc/s bands. The frequencies assignable are shown in Appendix 15A.
- MOD 1181 § 33. (1) The working frequencies for high traffic ships in the band 4 172.25 to 4 178 kc/s are so spaced as to provide channels 0.5 kc/s wide, the extreme frequencies assignable being 4 172.5 and 4 177.5 as shown in Appendix 15A.
- MOD 1182 (2) In the band 4 187 to 4 231.5 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4 187.5 and 4 229 kc/s as indicated in Appendix 15A.
- MOD 1183 § 34. The working frequencies assigned to each ship station in the 6, 8, 12 and 16 Mc/s band shall be harmonically related to those assigned in the 4 Mc/s band, in all cases where such a relationship is provided in Appendix 15A.
- MOD 1184 § 35. In the 22 Mc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows, as shown in Appendix 15A.
- MOD 1185 a) in the high traffic band, the working frequencies are spaced 2 kc/s apart, the extreme frequencies assignable being 22 187 and 22 221 kc/s;
- MOD 1186 b) in the low traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 270 and 22 370 kc/s.
- MOD 1187 § 36. In the 25 Mc/s band, the frequency separation shall be 1.5 kc/s. The extreme frequencies which may be assigned are, as shown in Appendix 15A: 25 084 and 25 106.5 kc/s.



b) Working Frequencies for Ship Stations using  
Wide-band Telegraphy, Facsimile and  
Special Transmission Systems

- MOD 1188 § 37. The working frequencies assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems are included within the following band limits :
- 4 142.5 to 4 162.5 kc/s  
6 216.5 to 6 244.5 kc/s  
8 288 to 8 328 kc/s  
12 431.5 to 12 479.5 kc/s  
16 576 to 16 636.5 kc/s  
22 112 to 22 160.5 kc/s
- MOD 1189 § 38. (1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems, one or more series of working frequencies designated in Appendix 15A. The total number of series assigned to each ship shall be determined by traffic requirements.
- 1190 (2) When ship stations employing wide-band telegraphy, facsimile and special transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.
- 1191 (3) However, within the limits of the bands given in No. 1188 administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in Appendix 15A. Nevertheless, administrations shall take into account, as far as possible, the provisions of Appendix 15A concerning channelling and 4 kc/s spacing.
- ADD b(bis) Frequencies for Oceanographic Data Stations
- ADD 1191A § 38(bis) Frequencies assignable to ship stations for oceanographic data transmissions are included within the following band limits :

4 162.5 to 4 166 kc/s  
6 244.5 to 6 248 kc/s  
8 328 to 8 331.5 kc/s  
12 479.5 to 12 483 kc/s  
16 636.5 to 16 640 kc/s  
22 160.5 to 22 164 kc/s

ADD 1191B The frequency bands in 1191A may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.

ADD 1191C § 38(ter)(1) Each administration may assign to each type of station in No. 1191A and 1191B under its jurisdiction one or more of the assignable frequencies designated in Appendix 15A.

b(ter) Working Frequencies for Ship Stations using narrow-band direct-printing telegraph and data systems

ADD 1191D § 38(quat) Working frequencies assigned to ships using narrow-band direct-printing telegraph and data systems are included within the following band limits :

4 166 to 4 172.25 kc/s  
6 248 to 6 258.25 kc/s  
8 331.5 to 8 341.75 kc/s  
12 483 to 12 503.25 kc/s  
16 640 to 16 660.5 kc/s  
22 164 to 22 184.5 kc/s

ADD 1191E (1) Each administration shall assign to each ship station under its jurisdiction and employing narrow-band direct-printing telegraph and data systems one or more series of working frequencies designated in Appendix 15A. The total number of series assigned to each ship shall be determined by traffic requirements.

ADD 1191F (2) When ship stations employing narrow-band direct-printing telegraph and data systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.

## c) Working Frequencies for High Traffic ships

MOD 1192 § 39. The working frequencies assigned to high traffic ships are included within the following band limits :

4 172.25 to 4 178 kc/s  
 6 258.25 to 6 267 kc/s  
 8 341.75 to 8 356 kc/s  
 12 503.25 to 12 534 kc/s  
 16 660.5 to 16 712 kc/s  
 22 184.5 to 22 222.5 kc/s

1193 § 40. (1) Each administration shall assign to each high traffic ship within its jurisdiction two or more series of working frequencies shown in Appendix 15A or vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

NOC 1194

NOC 1195

## d) Working Frequencies for Low Traffic Ships

1196 § 42. Working frequencies assigned to low traffic ships shall be included within the following band limits :

4 187 to 4 231.5 kc/s  
 6 280.5 to 6 344 kc/s  
 8 374 to 8 460 kc/s  
 12 561 to 12 689.5 kc/s  
 16 748 to 16 917.5 kc/s  
 22 267.5 to 22 372 kc/s

MOD 1197 § 43. (1) In each of the low traffic bands, the assignable frequencies are divided into two equal Groups A and B, Group A comprising the frequencies in the lower half of the band and Group B the frequencies in the upper half (see Appendix 15A).

1198 (2) Each administration shall assign to each of its low traffic ships two series of working frequencies, one in Group A and the other in Group B. In each band, the two working frequencies are separated, as far as practicable, by half the width of the assignable band

MOD 1199

(3) For example, if the frequency assigned to a ship station is the lowest frequency assignable in Group A, the other should be the lowest frequency assignable in Group B. If one of the frequencies assigned is the second frequency from the low frequency end of Group A, then the other frequency assigned should be the second frequency from the low frequency end of Group B, etc.

NOC 1200

NOC 1201

MOD 1202

The working frequencies in the bands specified in No. 1191D for narrow-band direct-printing telegraph and data systems, and in the band 25 082.5 to 25 110 kc/s may be assigned to ships of all kinds.

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/60-E

9 October 1967

Original : English/French/  
Spanish

## WORKING GROUP 5A

### TENTATIVE ADVANCE DRAFT OF TEXTS FOR WORKING GROUP 5A

#### A. APPENDIX ...

#### Technical Characteristics for Radiotelephony in the Maritime Mobile Service in the Bands between 1605 and 4000 kc/s

(Division of  
DSB channels)

B, CAN, F, G, HOL,  
J, I, USA

Committee 5

Committee 5

USA

1. Coast and ship station shall use upper sideband emissions.

2. The transmitter audio-frequency band shall be 350 to 2700 cycles per second with a permitted amplitude variation of 6 db.

3. The carrier frequencies of stations operating on SSB channels derived from each DSB channel of at least 6 kc/s bandwidth shall be as follows :

(a) Upper channel - carrier frequency shall be the same as that of the double sideband channel.

(b) Lower channel - carrier frequency shall be 3.0 kc/s lower than the carrier frequency of the double sideband channel.

4. Class A3H emissions shall not be used on SSB channels derived in the lower portion of double sideband channels.



5. The assigned frequency of an SSB channel shall be :

F	1350
CAN, I, HOL, USA	1400 cycles per second higher than
J	1500
	the carrier frequency.

USA

6. If an administration assigns frequencies other than as indicated above, its use of these frequencies shall not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies assigned to them in accordance with these Regulations.

(Technical specifications)

I, USA  
(App. 27)

7. Definitions of carrier modes :

<u>Carrier mode</u>	<u>Level N(db) of the carrier with respect to peak envelope power</u>
Full carrier (A3H)	$0 \geq N \geq -6$
Reduced carrier (A3A)	$-6 > N \geq -26$
Suppressed carrier (A3J)	$-26 > N$

8. Specification of carrier modes for maritime mobile radiotelephony :

- |   |  |
|---|--|
| CAN, F, G, HOL,<br>J, USA<br>(B, 16 + 6 db) | (a) For class A3A emission the power of the carrier shall be $16 \pm 2$ db below the peak envelope power of the emission.  |
| B, CAN, F, G, HOL,<br>J, USA                | (b) For class A3J emission the power of the carrier shall be at least 40 db below the peak envelope power of the emission. |

Frequency tolerance

[installed after/  
.....]

B, CAN, F, G, HOL,  
J, USA  
B, F, G, HOL, J, USA  
(CAN,  $\pm 50$ )

9. The carrier frequency of transmitters shall be maintained within the following tolerances :

- |                                   |
|-----------------------------------|
| (a) Coast stations : $\pm 20$ c/s |
| (b) Ship stations : $\pm 100$ c/s |

F, G, J, USA

In the case of ship stations, the short-term limits (of the order of 15 minutes) shall be  $\pm 40$  c/s.

(Note : Consequential changes to be made in App. 3)

G, HOL, J, USA

10. The unwanted frequency modulation of the carrier shall be sufficiently low to prevent harmful distortion.

W.G.5 a.h.

11. Emission limitations. (Wait for recommendations of Working Group 5 ad hoc)

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/61-E  
10 October 1967  
Original : French

WORKING GROUP 5B

## PROPOSALS CONCERNING A TIMETABLE FOR THE TRANSITION TO SINGLE SIDEBAND TECHNIQUE (Bands between 4000 and 23 000 kc/s)

Proposals (Country-Doc.No.)	Proposed timetable				Remarks
	New DSB installations on board ships no longer authorized	Coast stations must be able to make SSB emissions	Coast stations to cease DSB emissions	Total cessation of DSB and A3H (end of DSB emissions from ships)	
F/8 (54)	* 2)	* 1) 2)	1.1.71	1.1.77	Resolution
USA/16(10)	1.1.70	-	1.1.70	1.1.74	Art. 35, Sect. III
I/31 (6)	1.1.71	1.1.71	1.1.71	1.1.77	Art. 35, Sect. III
CAN/39(1)	1.1.70 3)	-	-	1.1.74 4)	Art. 7, Sect. IVA or VA
URS/48(1)	1.1.72 3)	-	-	1.1.77	
HOL/70(1)	1.1.70 5)	1.1.70	1.1.70	1.1.77	Resolution
G/76 (34)	1.1.70 5)	1.1.70	1.1.70	1.1.77	Resolution
J/84 (32)			31.12.69	1.1.74	Resolution
B/136 (5)	1.1.73	1.1.73 1)	1.1.75	1.1.80	Resolution

- 1) Provision applying to coast stations open to public correspondence on at least one working frequency.
- 2) Date of entry into force of the Final Acts of the Conference.
- 3) Provision also applying to coast stations.
- 4) Preferably from 1.1.73 onwards.
- 5) Recommended date only.





INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/62-E  
10 October 1967  
Original : English

WORKING GROUP 6B

DRAFT

THIRD REPORT OF WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

Amendments in Article 29 consequential to the establishment of  
an Appendix 13A (Miscellaneous Abbreviations and Signals to be  
Used for Radiocommunications in the Maritime Mobile Service)

Upon the recommendation of Working Group 6B ad hoc,  
Working Group 6B unanimously agreed to recommend adoption of MOD 1004 and  
MOD 1005 appearing in the Annex attached hereto.

H. A. FEIGLESON  
Chairman

Annex : 1



A N N E X

(ex-DT/21  
page 1)

Article 29

General Radiotelegraph Procedure ...

- |     |      |  |
|-----|------|--|
| MOD | 1004 | §3. (1) In order to facilitate radio-communications, stations of the mobile service, other than the maritime mobile service, shall use the service abbreviations given in Appendix 13. |
| MOD | 1005 | (2) In the maritime mobile service, only the service abbreviations given in Appendix 13A are to be used.   |

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Note : The above texts complete page 3 of Document No. 181  
(First Report of Working Group 6A to Committee 6).

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/63-E  
10 October 1967  
Original : English

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WORKING GROUP 5C

TENTATIVE ADVANCE OF A DRAFT RESOLUTION RELATING TO THE CHANNEL  
SPACING OF TRANSMITTING FREQUENCIES ALLOTTED TO THE INTERNATIONAL  
MARITIME MOBILE SERVICE FOR RADIOTELEPHONY IN THE BAND 156-174 Mc/s

In order to facilitate the discussions of Working Group 5C  
with respect to the transition from the existing 50 kc/s channel spacing  
to 25 kc/s channel spacing of the International Maritime Mobile Radio-  
telephone Service in the VHF band, the attached draft Resolution is  
presented.

E. FROMMER  
Chairman

Annex : 1



A N N E X

DRAFT RESOLUTION

Relating to the channel spacing of transmitting frequencies  
allotted to the International Maritime Mobile Service  
for radiotelephony in the band 156-174 Mc/s  
(See Appendix 18 and Article 35A)

The Maritime Radio Conference, Geneva 1967,

considering

- a) the expanding use of the maritime mobile radiotelephone frequencies in the VHF band between 156 Mc/s and 174 Mc/s;
- b) the increasing demand for additional channels for port operations (including pilotage, tug and other services);
- c) the need for additional VHF channels for short-distance communications in the maritime mobile service to relieve the congestion and saturation on the maritime mobile frequencies in the band 1605 kc/s to 3800 kc/s;
- d) that this expanding use of VHF cannot be fully met by the existing available channels given in the Table of Transmitting Frequencies in Appendix 18;
- e) that additional channels could be made available by reducing the present channel spacing of 50 kc/s to 25 kc/s;

resolves

- 1. that the channel spacing for international maritime mobile VHF radiotelephone services shall be reduced from 50 kc/s to 25 kc/s;
- 2. that the additional channels shall be obtained by interleaving the 25 kc/s channels midway between the existing 50 kc/s channels given in Appendix 18 of the Radio Regulations, Geneva, 1959;

3. that the 25 kc/s channels should be allocated on an international basis;
4.
  - a) (old para. 3 as agreed upon by the Working Group 5C)  
that during the transition period no harmful interference shall be caused to existing services, especially to ships equipped with receivers built for 50 kc/s spacing between channels;
  - b) (alternative proposal for old para. 3 after discussions with several delegations)  
that channels made available by a country to meet the needs of international shipping should, during the transition period (i.e. up to 1.1.1983), be selected among the channels given in the Appendix 18 of the Radio Regulations, Geneva, 1959. No harmful interference shall be caused to such channels during this period, especially with respect to ships equipped with receivers built for 50 kc/s spacing between channels;
5. that the technical characteristics of equipment for the international maritime mobile VHF radiotelephone service shall be in accordance with relevant C.C.I.R. Recommendations;
6. that from 1.1.1983, guard bands on either side of 156.80 Mc/s shall be 156.7625 to 156.7875 Mc/s and 156.8125 to 156.8375 Mc/s;
7. that the transition from a channel spacing of 50 kc/s to that of 25 kc/s shall be in accordance with the following :
  - a) date of commencement of implementation 1.1.1972
  - b) date by which all existing transmitters shall be modified to  $\pm 5$  kc/s deviation, and receiver audio gain increased, where necessary 1.1.1973
  - c) date on which modification of coast station receivers to meet the selectivity requirements may commence 1.1.1973
  - d)
    - 1) date on which all new equipment shall conform to 25 kc/s standards 1.1.1973
    - 2) date from which all new equipment may conform to 25 kc/s standards 1.1.1973

- e) date by which channel allocations on interleaved channels may commence where possible
- f) date by which all equipments shall conform to 25 kc/s standards and all interleaved channels may be generally introduced

1.1.1983

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/64-E

10 October 1967

Original : French, English,  
Spanish

COMMITTEE 4

DRAFT  
SECOND REPORT OF  
COMMITTEE 4

1. The attached texts, concerning the provisions of the Radio Regulations mentioned below, have been unanimously adopted by Committee 4.

- a) Article 5, Nos. : 196, 196.1, 197, 197.1, 199 and 199.1;
- b) Article 32, Nos. : 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, Section I (title), 1106A, 1111, 1113, 1113A, 1113B, 1115A, 1115B, 1116, 1117, 1121, 1122, 1122.1, 1123, 1124, 1125, 1134, Section IV (title), 1139, 1140, 1141, 1142, 1143 and 1144.

F.G. FERRIN

Chairman of Committee 4

Annex : 1



A N N E X

Article 5

- MOD 196 In Japan, the band 1605-1800 kc/s is allocated on a permitted basis to the maritime radionavigation service using continuous wave systems with a mean power of not more than 50 watts. 1)
- ADD 196.1 1) In Japan, the stations of the maritime mobile service are authorized to use this band subject to agreements to be reached with administrations, the services of which operate in this band in accordance with the Table and which may be affected.
- MOD 197 In Australia, North Borneo, Brunei, Sarawak, Singapore, China, Indonesia, Malaya, New Zealand and the Philippines, the band 1605-1800 kc/s is allocated on a permitted basis to the aeronautical radionavigation service, the stations of which shall use a mean power not exceeding 2 kW. 1)
- ADD 197.1 1) In Australia, North Borneo, Brunei, Sarawak, Singapore, China, Indonesia, Malaya, New Zealand and the Philippines the stations of the maritime mobile service are authorized to use this band subject to agreements to be reached with administrations, the services of which operate in this band in accordance with the Table and which may be affected.
- MOD 199 In India, the band 1800-2000 kc/s is allocated on a permitted basis to the aeronautical mobile service. 1)
- ADD 199.1 1) In India, the stations of the maritime mobile service are authorized to use this band subject to agreements to be reached with administrations, the services of which operate in this band in accordance with the Table and which may be affected.

Article 32

- SUP 1095
- SUP 1096
- SUP 1097
- SUP 1098



SUP 1099  
SUP 1100  
SUP 1101  
SUP 1102  
SUP 1103  
SUP 1104  
SUP 1105

MOD  
(title)

Section I - General

ADD 1106A Whenever the class of emission A2 or A2H is mentioned in the present Regulations for use in the maritime mobile service, the type of transmission shall be telegraphy by on-off keying of the modulated emission, to the exclusion of on-off keying of the modulating audio frequencies only.

MOD 1111 b) by coast stations to announce the transmission of their traffic lists under the conditions provided for in Nos. 1070 and 1071.

MOD 1113 (5) In order to facilitate the reception of distress calls, other transmissions on the frequency 500 kc/s shall be reduced to a minimum, and in any case shall not exceed one minute.

ADD 1113A Before transmitting on 500 kc/s, stations in the mobile service must listen on this frequency for a reasonable period to make sure that no distress traffic is being sent (see number 1007).

ADD 1113B The provisions of number 1113A do not apply to stations in distress.

ADD 1115A A ship station calling a coast station shall, wherever possible and particularly in regions of heavy traffic, indicate to the coast station that it is ready to receive on the working frequency of that station.

- ADD 1115B The ship station should make sure beforehand that this frequency is not already being used by the coast station.
- MOD 1116 The frequency for replies to calls sent on the general calling frequency (see number 1114) shall be as follows :
- either 500 kc/s,
  - or the frequency specified by the calling station (see numbers 1023 and 1115A).
- MOD 1117 In regions of heavy traffic, coast stations may answer calls made by ship stations of their own nationality in accordance with special arrangements made by the administration concerned (see number 1023).
- MOD 1121 In regions of heavy traffic, coast stations and ship stations should use class A1 emission on their working frequencies.
- MOD 1122 §10. As an exception to the provisions of Nos. 1107, 1109, 1110 and 1111 and on condition that signals of distress, urgency and safety, and calls and replies are not interfered with, 500 kc/s may be used outside regions of heavy traffic for direction-finding but with discretion.
- SUP 1122.1
- MOD 1123 §11. (1) Ship stations operating in the authorized bands between 405 and 535 kc/s shall use working frequencies chosen from the following : 425, 454, 468, 480 and 512 kc/s, except as permitted by No. 418.
- MOD 1124 (2) Coast stations are prohibited from transmitting on the working frequencies designated for the use of ship stations on a world-wide basis.
- MOD 1125 (3) The frequency 512 kc/s may be used by ship stations as a supplementary calling frequency when 500 kc/s is being used for distress.

MOD	1134	§13. (1) Stations of the maritime mobile service open to public correspondence and using frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on 500 kc/s. This watch is obligatory only for class A2 and A2H emissions.
MOD (title)	<u>Section IV</u>	Additional provisions applicable to Region 3 areas North of the equator only.
MOD	1139	§16. (1) The band 2089.5-2092.5 kc/s is the calling and safety band for the maritime mobile service of radiotelegraphy in those parts of the bands between 1605 and 2850 kc/s in which radiotelegraphy is authorized.
MOD	1140	(2) Frequencies in the band 2089.5-2092.5 kc/s may be used for calls, replies and safety. These frequencies may also be used for messages preceded by the urgency or safety signals.
MOD	1141	(3) Each coast station using the calling band 2089.5-2092.5 kc/s shall, as far as possible, maintain watch on this band during its working hours.
MOD	1142	(4) Coast stations which use frequencies in the band 2089.5-2092.5 kc/s for calling shall be able to use at least one other frequency in those parts of the bands between 1605 and 2850 kc/s in which the maritime mobile service of radiotelegraphy is authorized.
NOC	1143	
NOC	1144	

INTERNATIONAL TELECOMMUNICATION UNION  
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WORKING GROUP 5A

TENTATIVE ADVANCE DRAFTS OF TEXTS FOR WORKING GROUP 5A

Implementation schedule for SSB operation

1. The following schedule shall apply for the conversion of coast and ship radiotelephone stations in the 1605-4000 kc/s band from double sideband to single sideband operation:
  - a) Coast stations
    - 1) Coast stations ☐ open to public correspondence ☐ shall be equipped for single sideband operation on at least one working frequency not later than 1 January ☐ 1970-1973 ☐.
    - 2) At coast stations, the installation of double sideband equipment shall not be permitted after 1 January ☐ 1970-1972 ☐.
    - 3) Coast stations shall cease double sideband emissions ☐ except on the carrier frequency 2182 kc/s ☐ not later than 1 January ☐ 1970-1977 ☐.
    - 4) Coast stations equipped for single sideband operation, shall have the capability to use full carrier (A3H) emissions to permit communication with ship stations using either double sideband or single sideband reception. ☐ This requirement shall terminate with respect to working frequencies on 1 January 1980. ☐ ☐ Coast stations shall cease A3H emissions, except on carrier frequency 2182 kc/s, on 1 January ☐ 1974-1980 ☐.



b) Ship stations

- 1) At ship stations, the installation of double sideband equipment shall not be permitted after 1 January 1970-1973 with the exception of the cases covered by Nos.987 and 996 of the Regulations.
  - 2) Ship stations shall cease double sideband emission with the exception of the cases covered by Nos.987 and 996 of the Regulations except on the carrier frequency 2182 kc/s not later than 1 January 1970-1980.
  - 3) Ship stations equipped for single sideband operations, shall also have the capability to use full carrier (A3H) emissions to permit communications with stations using either double sideband or single sideband reception. This requirement shall terminate with respect to working frequencies on 1 January, 1980. Ship stations shall cease A3H emissions, except on the carrier frequency 2182 kc/s, on 1 January 1974-1980.
2. The transition period to which reference is made in the Regulations, pertaining to the conversion of coast and ship radiotelephone stations, operating in the 1605-4000 kc/s band, from double sideband to single sideband operation, shall be in effect from the date of entry into force of the Regulations until 1 January same as 1.b)2) above.

SUMMARY OF PROPOSED SCHEDULES FOR SSB IMPLEMENTATION AT 1605 TO 4000 kc/s

Country	B	CAN	F	G	HOL	J	I	USA	USSR
Document	136(5)	39(1)	8(54)	76(34)	80(1)	84(32)	31(4)	16(5)	48(1)
DT/2, page	-	76	725	728	732	734	340	345	-
<u>Coast stations</u>	1 January								
Capable of SSB - all channels					1970		1971		
" " " - at least one channel				1970					
" " " - public correspondence, one channel	1973		1973						
Cease DSB installations		1970							1972
Cease DSB emission	1975		1975		1970		1973	1970	1977
" " " , except 2182		1974		1973		1970			
Cease A3H, except 2182				1980	1980	1974		1975	
End of compulsory A3H on working frequencies	1980		1980						
<u>Ship stations</u>									
Cease DSB installations	1973	1970	1973		1970		1971	1970	1972
" " " , except Regs. 987, 966				1970					
Cease DSB emission							1980	1975	1977
" " " , except Regs. 987, 966	1980		1973		1980				
" " " , except 2182		1974		1980		1970			
Cease A3H emission, except 2182				1980	1980	1974		1975	
End of compulsory A3H on working frequencies	1980		1980						

# MARITIME CONFERENCE

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WORKING GROUP 6B

DRAFT

## FIFTH REPORT OF WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

Appendix 13 - Miscellaneous Abbreviations and Signals to be used in  
Radiotelegraphy Communications

(ex DT/21, Appendix 13A - Miscellaneous Abbreviations and Signals to be used for  
p. 4) Radiocommunications in the Maritime Mobile Service

1. All proposals relating to the revision of Appendix 13 to the Radio Regulations were considered.
2. As to the question of principle, the Working Group unanimously agreed to recommend that no amendment to Appendix 13 should be made by the present Conference, subject to possible editorial revision of the title in the light of MOD 1005.
3. The Working Group unanimously agreed to recommend the adoption of Appendix 13A appearing in the Annex hereto.

H.A. FEIGLESON

Chairman

Annex: 1



A N N E X

ADD

APPENDIX 13 A

MISCELLANEOUS ABBREVIATIONS AND SIGNALS TO BE USED FOR  
RADIOCOMMUNICATIONS IN THE MARITIME MOBILE SERVICE  
(See Articles 29 and 33)

SECTION I. Q CODE

Introduction

1. The series of groups listed in this Appendix range from QOA to QVZ.
2. The QOA to QQZ series are reserved for the maritime mobile service.
3. Certain Q code abbreviations may be given an affirmative or negative sense by sending, immediately following the abbreviation, the letter C (spoken as CHARLIE) or NO (spoken as NO) in the case of radiocommunications.
4. The meanings assigned to Q code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear shall be sent in the same order as shown in the text of the following tables.
5. Q code abbreviations are given the form of a question when followed by a question mark in radiotelegraphy and RQ (ROMEO QUEBEC) in radiotelephony. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark (or RQ) should follow this information.
6. Q code abbreviations with numbered alternative significations shall be followed by the appropriate figure to indicate the exact meaning intended. This figure shall be sent immediately following the abbreviation.
7. All times shall be given in Greenwich Mean Time (G.M.T.) unless otherwise indicated in the question or reply.
8. An asterisk \* appearing against a Q code abbreviation means :

This signal is one which has a similar meaning to a signal appearing in the International Code of Signals and which signal is felt to be within the area of responsibility of I.M.C.C. The signal is included herein provisionally, pending the general carriage by ships of the International Code of Signals.



ABBREVIATIONS AVAILABLE FOR THE MARITIME MOBILE SERVICE

A. List of Abbreviations in Alphabetical Order

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
Q..	Can you communicate by radiotelegraphy (500 kc/s) ?	I can communicate by radiotelegraphy (500 kc/s).
Q..	Can you communicate by radiotelephony (2182 kc/s) ?	I can communicate by radiotelephony (2182 kc/s).
Q..	Can you communicate by radiotelephony (channel 16-156.80 Mc/s) ?	I can communicate by radiotelephony (channel 16-156.80 Mc/s).
Q..	Can you communicate with me in .. 0. Dutch      5. Italian 1. English    6. Japanese 2. French     7. Norwegian 3. German     8. Russian 4. Greek      9. Spanish ?	I can communicate with you in .. 0. Dutch      5. Italian 1. English    6. Japanese 2. French     7. Norwegian 3. German     8. Russian 4. Greek      9. Spanish
Q..		The groups which follow are from the International Code of Signals.
Q..	Have you received the safety signal transmitted by ... (name and/or call sign) ?	I have received the safety signal transmitted by .. (name and/or call sign).
Q..	What is the commercial quality of my signals ?	The quality of your signals is : 1. Uncommercial 2. Commercial with difficulty 3. Commercial
Q..	How many tapes have you to transmit ?	I have .... tapes to transmit.

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
Q..	Shall I transmit a phasing signal for ... seconds ?	Transmit a phasing signal for .... seconds.
Q..	Shall I transmit my tape ?	Transmit your tape.
Q.. 1)	Will you listen on .... or 2182 kc/s or 121.5 Mc/s or 243 Mc/s or ... kc/s Mc/s for signals of emergency position-indicating radio-beacons.	I am listening on ... or 2182 kc/s or 121.5 or 243 Mc/s or ... kc/s Mc/s for signals of emergency position-indicating radiobeacons.
Q.. 1)	Have you received the signal of an emergency position-indicating radiobeacon on ... or 2182 kc/s or 121.5 Mc/s or 243 Mc/s or ... kc/s Mc/s ?	I have received the signal of an emergency position-indicating radiobeacon on .... or 2182 kc/s or 121.5 Mc/s or 243 Mc/s or ..... kc/s Mc/s.

1) Agreed subject to other frequencies possibly to be added.

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QRA	What is the name of your vessel (or station)?	The name of my vessel (or station) is .....
QRB	How far approximately are you from my station?	The approximate distance between our station is .... nautical miles ( <u>or</u> kilometres
QRC	By what private enterprise ( <u>or</u> State Administration) are the accounts for charges for your station settled?	The accounts for charges of my station are settled by the private enterprise ..... ( <u>or</u> State Administration)
QRD	Where are you bound for and where are you from?	I am bound for ... from ...
QRE	What is your estimated time of arrival at ... ( <u>or</u> over ...) ( <u>place</u> )?	My estimated time of arrival at ... ( <u>or</u> over ...) ( <u>place</u> ) is ... hours
QRF	Are you returning to ... ( <u>place</u> )?	I am returning to ... ( <u>place</u> ) Return to ... ( <u>place</u> ) <span style="float: right;">or</span>
QRG	Will you tell me my exact frequency ( <u>or</u> that of ....)?	Your exact frequency ( <u>or</u> that of ...) is ... kc/s ( <u>or</u> Mc/s)
QRH	Does my frequency vary?	Your frequency varies
QRI	How is the tone of my transmission?	The tone of your transmission is ... 1. good 2. variable 3. bad
QRJ	How many radiotelephone calls have you to book?	I have ... radiotelephone calls to book
QRK	What is the intelligibility of my transmission ( <u>or</u> that of ... (name and/or call sign))?	The intelligibility of your transmission ( <u>or</u> that of ... (name and/or call sign)) is ... 1. bad 2. poor 3. fair 4. good 5. excellent

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QRL	Are you busy?	I am busy (or I am busy with ... (name and/or call sign)) Please do not interfere.
QRM	Is my transmission being interfered with?	Your transmission is being interfered with : (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRN	Are you troubled by static?	I am troubled by static. (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRO	Shall I increase transmitter power?	Increase transmitter power.
QRP	Shall I decrease transmitter power?	Decrease transmitter power.
QRQ	Shall I transmit faster?	Transmit faster (... words per minute)
QRR	Are you ready for automatic operation?	I am ready for automatic operation. (Send at ... words per minute.)
QRS	Shall I transmit more slowly?	Transmit more slowly (... words per minute).
QRT	Shall I stop transmitting?	Stop transmitting.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRW	Shall I inform ... that you are calling him on ... kc/s (or Mc/s)?	Please inform ... that I am calling him on ... kc/s (or Mc/s).
QRX	When will you call me again?	I will call you again at ... hours (on ... kc/s (or Mc/s)).

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QRY	What is my turn? ( <u>Relates to communication</u> )	Your turn is Number ... ( <u>or according to any other indication</u> ). ( <u>Relates to communication</u> )
QRZ	Who is calling me?	You are being called by ... (on ... kc/s (or Mc/s)).
QSA	What is the strength of my signals (or those of ... (name and/or call sign))?	The strength of your signals (or those of ... (name and/or call sign) is ... 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good
QSB	Are my signals fading?	Your signals are fading.
QSC	Are you a low traffic ship station? (see Article 32, Section V)	I am a low traffic ship station.
QSD	Are my signals mutilated?	Your signals are mutilated.
QSE*)	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is ... ( <u>figures and units</u> )
QSF*)	Have you effected rescue?	I have effected rescue and am proceeding to ... base (with ... persons injured requiring ambulance).
QSG	Shall I transmit ... telegrams at a time?	Transmit ... telegrams at a time.
QSH	Are you able to home with your direction-finding equipment?	I am able to home with my direction-finding equipment (on ... (name and/or call sign)).
QSI		I have been unable to break in on your transmission. <u>or</u> Will you inform ... ( <u>name and/or call sign</u> ) that I have been unable to break in on his transmission (on ... kc/s ( <u>or Mc/s</u> )).

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QSI	What is the charge to be collected to ... including your internal charge?	The charge to be collected to ... including my internal charge is ... francs.
QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last telegram which I sent you ( <u>or</u> some previous telegram)?	Repeat the last telegram which you sent me ( <u>or</u> telegram(s) number(s) ...).
QSN*)	(Do <u>not</u> include text of QSN)	
QSO	Can you communicate with ... (name and/or call sign) direct (or by relay)?	I can communicate with ... (name and/or call sign) direct (or by relay).
QSP	Will you relay to ... (name and/or call sign) free of charge?	I will relay to ... (name and/or call sign) free of charge.
QSQ	Have you a doctor on board ( <u>or</u> is ... ( <u>name of person</u> ) on board)?	I have a doctor on board ( <u>or</u> ( <u>name of person</u> ) is on board)
QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you ( <u>or</u> have interference).
QSS	What working frequency will you use?	I will use the working frequency ... kc/s (or .. Mc/s) (in the high frequency bands; normally only the last three figures of the frequency need be given).

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QSU	Shall I transmit or reply on this frequency (or on ... kc/s (or ... Mc/s)); (with emissions of class ...)?	Transmit or reply on this frequency (or on ... kc/s (or ... Mc/s)); (with emissions of class ...).
QSV	Shall I transmit a series of V's (or signs for adjustment on this frequency (or ... kc/s (or ... Mc/s)))?	Transmit a series of V's (or signs for adjustment on this frequency (or ... kc/s (or ... Mc/s))).
QSW	Will you transmit on this frequency (or on ... kc/s (or Mc/s)) (with emissions of class ...)?	I am going to transmit on this frequency (or on ... kc/s (or Mc/s)) (with emissions of class ...).
QSX	Will you listen to ... (name and/or call sign) on ... kc/s (or ... Mc/s))?	I am listening to ... (name and/or call sign) (on ... kc/s (or ... Mc/s)).
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on ... kc/s (or Mc/s)).
QSZ	Shall I transmit each word or group more than once?	Transmit each word or group twice (or ... times).
QTA	Shall I cancel telegram (or message) number ...?	Cancel telegram (or message) number ...
QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
QTC	How many telegrams have you to transmit?	I have ... telegrams for you (or for ... (name and/or call sign)).
QTD*)	What has the rescue vessel or rescue aircraft recovered?	... ( <u>identification</u> ) has recovered ... 1. ... ( <u>number</u> ) survivors 2. wreckage 3. ... ( <u>number</u> ) bodies.

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QTE	What is my TRUE bearing from you?	Your TRUE bearing from me is ... degrees at ... hours.
	or What is my TRUE bearing from ... (name and/or call sign) from ...	or Your TRUE bearing from ... (name and/or call sign) was ... degrees at ... hours.
	or What is the TRUE bearing of ... (name and/or call sign) from ... (name and/or call sign)?	or The TRUE bearing of ... (name and/or call sign) from ... (name and/or call sign) was ... degrees at ... hours.
QTF	Will you give me my position according to the bearings taken by the direction-finding stations which you control?	Your position according to the bearings taken by the direction-finding stations which I control was ... latitude ... longitude (or other indication of position), class ... at ... hours.
QTG	Will you transmit two dashes of ten seconds each (or carrier frequency) followed by your call sign (or name) (repeated ... times) (on ... kc/s ( ... Mc/s)?	I am going to transmit two dashes of ten seconds each (or carrier frequency) followed by my call sign (or name) (repeated ... times) (on ... kc/s (or ... Mc/s)).
	or Will you request ... (name and/or call sign) to transmit two dashes of ten seconds each (or carrier) followed by his call (and/or name) (repeated ... times on ... kc/s (or ... Mc/s))?	or I have requested ... (name and/or call sign) to transmit two dashes of ten seconds each (or carrier) followed by his call sign (and/or name) (repeated ... times) on ... kc/s (or ... Mc/s)
QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude ... longitude (or according to any other indication).
QTI*)	What is your TRUE course?	My TRUE course is ..... degrees.



<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QTJ*)	What is your speed?	My speed is ... knots ( <u>or</u> kilometres per hour <u>or</u> ... statute miles per hour).
	(Requests the speed of a ship or aircraft through the water or air respectively)	(Indicates the speed of a ship or aircraft through the water or air respectively)
QTK*)	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is ... knots ( <u>or</u> ... kilometres per hour <u>or</u> ... statute miles per hour)
QTL*)	What is your TRUE heading?	My TRUE heading is ... degrees.
QTM*)	What is your MAGNETIC heading?	My MAGNETIC heading is ... degrees.
QTN*)	At what time did you depart from ... ( <u>place</u> )	I departed from ... ( <u>place</u> ) at ... hours.
QTO	Have you left dock ( <u>or</u> port)?	I have left dock ( <u>or</u> port).
	<u>or</u> Are you airborne?	<u>or</u> I am airborne.
QTP	Are you going to enter dock ( <u>or</u> port)?	I am going to enter dock ( <u>or</u> port).
	<u>or</u> Are you going to alight (or land)?	<u>or</u> I am going to alight ( <u>or</u> land).
QTQ	Can you communicate with my station by means of the International Code of Signals (INTERCO)?	I am going to communicate with your station by means of the International Code of Signals (INTERCO).
QTR	What is the correct time?	The correct time is ... hours.
QTS	Will you transmit your call sign (and/or name) for ... seconds?	I will transmit my call sign and/or name) for ... seconds

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QTT		The identification signal which follows is superimposed on another transmission.
QTU	What are the hours during which your station is open?	My station is open from ... to ... hours.
QTV	Shall I stand guard for you on the frequency of ... kc/s ( <u>or</u> .... Mc/s) (from ... to ... hours)?	Stand guard for me on the frequency of ... kc/s ( <u>or</u> Mc/s) from ... to ... hours).
QTW	What is the condition of survivors?	Survivors are in ... condition urgently need ...
QTX	Will you keep your station open for further communication with me until further notice ( <u>or</u> until ... hours)?	I will keep my station open for further communication with you until further notice ( <u>or</u> until ... hours).
QTY*)	Are you proceeding to the position of incident and if so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at ... hours (on ... <u>date</u> )
QTZ*)	Are you continuing the search?	I am continuing the search for ... (aircraft, ship, survival craft, survivors or wreckage).
QUA	Have you news of ... (name and/or call sign)?	Here is news of ... (name and/or call sign)
QUB*)	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at .... ( <u>place of observation</u> )?	Here is the information requested: ( <u>The units used for speed and distances should be indicated</u> ).

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QUC	What is the number ( <u>or other indication</u> ) of the last message you received from me ( <u>or</u> from ... (name and/or call sign))?	The number ( <u>or other indication</u> ) of the last message I received from you ( <u>or</u> from ... (name and/or call sign)) is ...
QUD	Have you received the urgency signal transmitted by ... (name and/or call sign)?	I have received the urgency signal transmitted by ... (name and/or call sign) at ... hours.
QUE	Can you use telephony in ... ( <u>language</u> ), with interpreter if necessary; if so, on what frequencies?	I can use telephony in ... ( <u>language</u> ) on ... kc/s ( <u>or</u> Mc/s).
QUF	Have you received the distress signal transmitted by ... (name and/or call sign)?	I have received the distress signal transmitted by ... (name and/or call sign) at .... hours.
QUH*)	Will you give me the present barometric pressure at sea level?	The present barometric pressure at sea level is ... (units).

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QUM	May I resume normal working?	Normal working may be resumed.
QUN	<p>1. When directed to all stations :</p> <p>Will vessels in my immediate vicinity .....</p> <p style="text-align: right;">or</p> <p>(in the vicinity of ..... latitude ..... longitude)</p> <p style="text-align: right;">or</p> <p>(in the vicinity of .....)</p> <p>Please indicate their position, TRUE course and speed?</p> <p>2. When directed to a single station :</p> <p>Please indicate your position, TRUE course and speed.</p>	<p>My position, TRUE course and speed are .....</p>
QUO*)	<p>Shall I search for ....</p> <p>1. aircraft</p> <p>2. ship</p> <p>3. survival craft</p> <p>in the vicinity of ..... latitude ..... longitude</p> <p><u>(or according to any other indication)?</u></p>	<p>Please search for ....</p> <p>1. aircraft</p> <p>2. ship</p> <p>3. survival craft</p> <p>in the vicinity of ..... latitude ..... longitude</p> <p><u>(or according to any other indication).</u></p>
QUP*)	<p>Will you indicate your position by ....</p> <p>1. searchlight</p> <p>2. black smoke trail</p> <p>3. pyrotechnic lights?</p>	<p>My position is indicated by ....</p> <p>1. searchlight</p> <p>2. black smoke trail</p> <p>3. pyrotechnic lights.</p>

<u>Abbreviation</u>	<u>Question</u>	<u>Answer or Advice</u>
QUR*)	Have survivors .... <ol style="list-style-type: none"><li>1. received survival equipment</li><li>2. been picked up by rescue vessel</li><li>3. been reached by ground rescue party?</li></ol>	Survivors .... <ol style="list-style-type: none"><li>1. are in possession of survival equipment dropped by ....</li><li>2. have been picked up by rescue vessel</li><li>3. have been reached by ground rescue party.</li></ol>
QUS*)	Have you sighted survivors or wreckage? If so, in what position?	Have sighted .... <ol style="list-style-type: none"><li>1. survivors in water</li><li>2. survivors on rafts</li><li>3. wreckage</li></ol> in position .... latitude .... longitude ( <u>or according to any other indication</u> ).
QUT*)	Is position of incident marked?	Position of incident is marked by .... <ol style="list-style-type: none"><li>1. flame or smoke float</li><li>2. sea marker</li><li>3. sea marker dye</li><li>4. .... (<u>specify other marking</u>).</li></ol>
QUU*)	Shall I home ship or aircraft to my position?	Home ship or aircraft .... ( <u>call sign</u> ) .... <ol style="list-style-type: none"><li>1. to your position by transmitting your call sign and long dashes on .... kc/s (<u>or Mc/s</u>)</li><li>2. by transmitting on .... kc/s (<u>or Mc/s</u>) TRUE track to reach you.</li></ol>
QUW*)	Are you in the search area designated as .... ( <u>designator or latitude and longitude</u> )?	I am in the .... ( <u>designation</u> ) search area.
QUY*)	Is position of survival craft marked?	Position of survival craft was marked at .... hours by .... <ol style="list-style-type: none"><li>1. flame or smoke float</li><li>2. sea marker</li><li>3. sea marker dye</li><li>4. .... (<u>specify other marking</u>).</li></ol>

B. List of Signals according to the Nature of Questions

Answer or Advice

(This table can be prepared only after Section IA has been adopted)

SECTION II. MISCELLANEOUS ABBREVIATIONS AND SIGNALS

<u>Abbreviation or Signal</u>	<u>Definition</u>
AA	All after ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
AB	All before ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
ADS	Address (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
<u>AR</u>	End of transmission.
AS	Waiting period.
BK	Signal used to interrupt a transmission in progress.
BN	All between ... and ... (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).
BQ	A reply to an RQ.
BT	Signal to mark the separation between different parts of the same transmission.
C	Affirmative - yes or "The significance of the previous group should be read in the affirmative."

Note : When used in radiotelegraphy a bar over the letters composing a signal denotes that the letters are to be sent as one symbol.

<u>Abbreviation or Signal</u>	<u>Definition</u>
CFM	Confirm ( <u>or</u> I confirm).
CL	I am closing my station.
COL	Collate ( <u>or</u> I collate).
<b>CORRECTION</b> (KOR-REK-SHUN)	Cancel my last word or group. The correct word or group follows (for radiotelephony).
CP	General call to two or more specified stations ( <u>see Article 31</u> ).
CQ	General call to all stations ( <u>see Articles 31 and 33 (No. 1302)</u> ).
CS	Call sign ( <u>used to request a call sign</u> ).
DE	"From ....." (used to precede the name or other identification of the calling station) - see No. 1216A.
DF	Your bearing at ... hours was ... degrees, in the doubtful sector of this station, with a possible error of ... degrees.
DO	Bearing doubtful. Ask for another bearing later ( <u>or</u> at ... hours).
E	East (Cardinal direction) (see No. 1400).
ETA	Estimated time of arrival.
INTERCO (IN-TER-CO)	International Code of Signals groups follow (for radiotelephony).
ITP	The punctuation counts.
K	Invitation to transmit.
KA	Starting signal.
KTS	Nautical miles per hour ( <u>knots</u> ).
MIN	Minute ( <u>or</u> Minutes).

<u>Abbreviation or Signal</u>	<u>Definition</u>
MSG	Prefix indicating a message to or from the master of a ship concerning its operation or navigation.
N	North (Cardinal).
NIL	I have nothing to send to you.
NO	No ( <u>Negative</u> ).
NW	Now.
NX	Notice to Mariners or Notice to Mariners follows.
OK	We agree ( <u>or</u> It is correct).
OL	Ocean Letter.
P	Prefix indicating a private radiotelegram.
PBL	<u>Preamble (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).</u>
PSE	Please.
R	Received.
REF	Reference to ... ( <u>or</u> Refer to ...).
RPT	Repeat ( <u>or</u> I repeat)( <u>or</u> Repeat ...).
RQ	Indication of a request.
S	South (Cardinal direction) (see No. 1400).
SIG	<u>Signature (used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition).</u>
SLT	Radiomaritime Letter.
SVC	Prefix indicating a service telegram.



<u>Abbreviation or Signal</u>	<u>Definition</u>
SYS	Refer to your service telegram.
TFC	Traffic.
TR	Used by a land station to request the position and next port of call of a mobile station ( <u>see No. 1083 and 1314</u> ); used also as a prefix to the reply.
TU	Thank you.
TEXT	Text ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
<u>VA</u>	End of work.
W	West (Cardinal direction) (see No. 1400).
WA	Word after ... ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
WB	Word before ... ( <u>used after a question mark in radiotelegraphy and after RQ in radiotelephony (in case of language difficulties) to request a repetition</u> ).
WD	Word(s) <u>or</u> Group(s).
WX	Weather report or weather report follows.
XQ	Prefix used to indicate an operational communication.
YZ	The words which follow are in plain language.

Note : When used in radiotelegraphy a bar over the letters composing a signal denotes that the letters are to be sent as one symbol.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/67-E  
11 October 1967  
Original : English

WORKING GROUP 5A

REPORT OF THE AD HOC GROUP 5A TO WORKING GROUP 5A

Participants :     Denmark  
                     France  
                     The Netherlands

(Reference Document : USSR/49(3))

The ad hoc Group, having examined the reference document and taking into account the decision of Working Group 5A to incorporate the existing Search and Rescue arrangements in the Radio Regulations, recommends the following addition :

Article 35

Section II.

Bands between 1605 and 4000 kc/s

ADD

A new part D(bis)

ADD

1339A

The frequency 3023.5 kc/s may be used for intercommunication between mobile stations engaged in coordinated Search and Rescue operations including communication between these stations and particular land stations, in accordance with the provisions of paragraph 4 of No. 27/196 of the Frequency Allotment Plan for the Aeronautical (R) Service. (Appendix 27).

V.R.Y. WINKELMAN

Chairman



**MARITIME CONFERENCE**

GENEVA, 1967

Addendum to  
 Document No. DT/68-E  
 13 October 1967  
 Original : English

WORKING GROUP 6BA N N E X

DIFFERENCES BETWEEN THE PROVISIONS OF APPENDICES 13A AND 16, REVISED,  
TO THE RADIO REGULATIONS AND THOSE OF THE INTERNATIONAL CODE OF SIGNALS

I. Figure Spelling Table

The figure spelling table of Appendix 16, revised, contains in addition to the figures 0 to 9 and the mark "Decimal Point", the mark "Full Stop" as follows :

<u>Figure or mark to be transmitted</u>	<u>Code word</u>	<u>Spoken as</u>
Full stop	STOP	STOP

II. Signals of Appendix 13A pertaining to use of emergency position-indicating radiobeacons not appearing in the International Code of Signals

/ex. DT/66  
 P.47

Q.. Will you listen on .... or  
 2182 kc/s or 121.5 Mc/s or  
 243 Mc/s or .... kc/s Mc/s  
 for signals of emergency  
 position-indicating radio-  
 beacons.

I am listening on .... or  
 2182 kc/s or 121.5 or 243 Mc/s  
 or .... kc/s Mc/s for signals  
 of emergency position-  
 indicating radiobeacons.

/ex. DT/66  
 P.47

Q.. Have you received the signal  
 of an emergency position-  
 indicating radiobeacon on  
 .... or 2182 kc/s or 121.5 Mc/s  
 or 243 Mc/s or .... kc/s Mc/s ?

I have received the signal of  
 an emergency position-  
 indicating radiobeacon on  
 2182 kc/s or .... kc/s Mc/s  
 or 121.5 Mc/s or 243 Mc/s  
 or .... kc/s Mc/s.



III. Signals with identical or almost the same Meanings but with different Abbreviations or Signals

	<u>App. 13A</u>	<u>I.C.O.S.</u>	<u>Meaning</u> *)
<u>Ex. DT/66</u> <u>pp.3-15/</u>	Q..	YI	I have received the safety signal transmitted by ... (name and/or call sign).
	Q.. ?	YJ	Have you received the safety signal transmitted by ... (name and/or call sign)?
	QRX	YL	I will call you again at ... hours (on ... kc/s (or Mc/s))
	QRZ ?	YM	Who is calling me?
	QTA	YN	Cancel telegram (or message or signal) number ...
	Q.. ?	YR 7	Can you communicate by radiotelegraphy (500 kc/s)?
	Q.. ?	YR 8	Can you communicate by radiotelephony (2182 kc/s)?
	Q.. ?	YR 9	Can you communicate by radiotelephony (channel 16 - 156.80 Mc/s)?
	QTQ	YU	I am going to communicate with your station by means of the International Code of Signals (INTERCO)
	QSW	YW	I am going to transmit on this frequency (or on ... kc/s (or Mc/s)) (with emissions of class ...)
	QSW	YX	"
	QSW	YY	"

\*) In cases of slight differences of meanings, the wording of Appendix 13A is given.

<u>App. 13A</u>	<u>I.C.O.S.</u>	<u>Meaning</u>
<u>/ex. DT/66</u> <u>(cont.)</u>	Q..	ZB
		I can communicate with you in ...
		0. Dutch            5. Italian
		1. English        6. Japanese
		2. French        7. Norwegian
		3. German        8. Russian
		4. Greek         9. Spanish
	Q.. ?	ZC
		Can you communicate with me in ... (0 - 9 as above)
	QRS	ZM
		Transmit more slowly ( ... words per minute).
	QRS ?	ZM 1
		Shall I transmit more slowly?
	QSZ	ZN
		Transmit each word or group twice (or ... times)
	QRT	ZO
		Stop transmitting
	QRT ?	ZO 1
		Shall I stop transmitting?

IV. Identical Abbreviations or Signals having quite different Meanings

BK, BQ, BT, CL, CP, DF, DO, NW, NX, OL, TU, WD, WX,  
XQ, MIN, MSG

V. Identical Abbreviations or Signals having only a slight Difference of Meaning

CQ

K (no confusion possible, if Signal K is given with numerals)

Note : The following Numbers of the Radio Regulations refer to the  
International Code of Signals :

1386A        .....        .....        .....

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/68-E  
12 October, 1967  
Original : English, French,  
Spanish

WORKING GROUP 6B

DRAFT RESOLUTION ...

RELATING TO THE EXAMINATION OF PERTINENT PORTIONS OF  
THE REVISED INTERNATIONAL CODE OF SIGNALS  
(submitted by Working Group 6B ad hoc editorial)

The Maritime Conference, Geneva, 1967,

considering

- a) that the Inter-governmental Maritime Consultative Organization (I.M.C.O.) has prepared a revised International Code of Signals which is designed to be used in all methods of signalling including radio;
- b) that the revised International Code of Signals was adopted by the 4th Assembly of the I.M.C.O. in 1965, to come into effect on first of January 1968; later amended to be first of January 1969;
- c) that the I.M.C.O. Assembly at its 4th Session invited the International Telecommunication Union (I.T.U.) to comment on the pertinent portions of the revised International Code of Signals at an Administrative Radio Conference for the maritime mobile service;
- d) that the present Conference has amended certain portions of the Radio Regulations by adopting Appendix 13A and Appendix 16, revised, and in so doing has attempted to reduce to a minimum differences between the Radio Regulations and the International Code of Signals.
- e) that it is necessary to determine the responsibility of the I.T.U. and the I.M.C.O. regarding the choice and conditions of use of international signals related to radiocommunication;



- f) that it is advisable to bring into force the revised International Code of Signals and Appendices 13A and 16, revised, to the Radio Regulations on the same date.

resolves

1. that the International Telecommunication Union is responsible for determining the choice and conditions of use of international signals relating to radiocommunication procedures;
2. that the Inter-Governmental Maritime Consultative Organization is responsible for determining the choice and conditions of use of international signals relating to other matters, such as navigation and search and rescue activities;
3. that where considered desirable, signals within the responsibility of the International Telecommunication Union may be reproduced in the publications of the I.M.C.O., suitably annotated as to indicate their source;
4. that the attention of the Inter-Governmental Maritime Consultative Organization should be invited to differences existing between the Radio Regulations and the revised International Code of Signals (see Annex);

requests the Secretary General

1. to communicate the present resolution together with the annex to the Inter-Governmental Maritime Consultative Organization.

Annex : 1

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

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COMMITTEE 4

REVISION OF ARTICLE 7

Nos. 451, 451A, 451B, 452, 452.1, 453 and 453.1

The revision of the attached Regulations contained in Article 7 are consequential of decisions taken in Committee 4 concerning revision of Appendix 15A and are presented for consideration of the Committee.

F.G. PERRIN

Chairman of Committee 4

Annex : 1





A N N E X

MOD	451	(e) Ship stations, wideband telegraphy, facsimile, and special transmission systems.
		4 142.5 - 4 162.5 kc/s
		6 216.5 - 6 244.5 kc/s
		8 288 - 8 328 kc/s
		12 431.5 - 12 479.5 kc/s
		16 576 - 16 636.5 kc/s
		22 112 - 22 160.5 kc/s
ADD	451A	(eA) Ship stations, oceanographic data transmission (see note shown with one asterisk in <u>Appendix 15A</u> )
		4 162.5 - 4 166 kc/s
		6 244.5 - 6 248 kc/s
		8 328 - 8 331.5 kc/s
		12 479.5 - 12 483 kc/s
		16 636.5 - 16 640 kc/s
		22 160.5 - 22 164 kc/s
ADD	451B	(eB) Ship stations, narrow-band direct-printing telegraphy and data systems
		4 166 - 4 172.25 kc/s
		6 248 - 6 258.25 kc/s
		8 331.5 - 8 341.75 kc/s
		12 483 - 12 503.25 kc/s
		16 640 - 16 660.5 kc/s
		22 164 - 22 184.5 kc/s

- MOD 452 (f) Ship stations, telegraphy
- 4 172.25 - 4 231.5 kc/s
  - 6 258.25 - 6 344 kc/s
  - 8 341.75 - 8 460 kc/s
  - 12 503.25 - 12 689.5 kc/s
  - 16 660.5 - 16 917.5 kc/s
  - 22 184.5 - 22 372 kc/s
  - 25 070 - 25 110 kc/s<sup>1</sup>
- MOD 452.1 <sup>1</sup> The frequencies in the band 25 082.5 - 25 110 kc/s shall be used as working frequencies in addition to frequencies in the band 22 184.5 - 22 372 kc/s
- MOD 453 (g) Coast stations, wideband and manual telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems.
- 4 231.5 - 4 361.5 kc/s
  - 6 344 - 6 512 kc/s
  - 8 460 - 8 729 kc/s
  - 12 689.5 - 13 105.5 kc/s
  - 16 917.5 - 17 255.5 kc/s
  - 22 372 - 22 622 kc/s
- MOD 453.1<sup>1</sup> Frequencies in the bands 25 010 - 25 070 kc/s, 25 110 - 25 600 kc/s and 26 100 - 27 500 kc/s may be assigned to coast stations.

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Note to the Editorial Committee

No. MOD 453 (title) appears in Document No. 209 sent to the Editorial Committee.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/70-E  
11 October 1967  
Original : English

WORKING GROUP 6B

DRAFT

FOURTH REPORT OF WG 6B TO COMMITTEE 6  
(OPERATION)

Use of Frequencies for Radiotelephony in the  
Maritime Mobile Service

Article 35, Section II, A. Distress, ADD 1326A 1326B

Article 35, Section II, C. Watch, MOD 1334 SUP 1335

1. Working Group 6B unanimously agreed to recommend the adoption of the new provisions appearing in the Annex hereto.

2. MOD 1334 and SUP 1335

Proposal POL/83(3) to modify No. 1334 of the Radio Regulations so that the maximum watch practicable on 2182 kc/s should be kept by all ships and, as a consequence, to delete No. 1335 was not supported in its present form. On the other hand the Working Group agreed to consider at its next meeting a draft Resolution by which I.M.C.O. would be invited to consider studying measures to improve watch on 2182 kc/s and to prepare the way for the adoption of a single frequency for distress traffic.

3. The attention of Committee 5 is invited to the present Report.

H.A. FEIGLESON  
Chairman

Annex : 1



A N N E X

(ex DT/2, p.331)	ADD	1326A	Before transmitting on 2182 kc/s, a station in the mobile service should listen to this frequency for a reasonable period to make sure that no distress traffic is being sent (see No. 1217).
(ex DT/2, p.331)	ADD	1326B	The provisions of number 1326A do not apply to stations in distress.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/71-E

11 October 1967

Original: French

WORKING GROUP 5A

DRAFT

OF FIFTH REPORT OF WORKING GROUP 5A

TO COMMITTEE 5

I. Article 35

No. 1337

The Group adopted the new text appearing in Annex I and a new version of No. 1337.1.

Nos. 1338, 1339 and 1340

It was decided not to change these numbers.

Nos. 1341 and 1342

The new texts appearing in Annex I were adopted.

No. 1343

It was decided that this number should remain unchanged.

Nos. 1344 and 1345

The Group adopted the new texts appearing in Annex I. The question of whether to include a frequency in the 2170 - 2173.5 kc/s band in No. 1344 was left in abeyance.

Nos. 1346, 1348 and 1349

It was decided that these numbers should remain unchanged.

No. 1350

The new text appearing in Annex I was adopted.



/Nos. 1336, 1339A, 1339AA, 1344A, 1347 and 1351

It was decided to postpone discussion of the proposals relating to these numbers as they deal with problems - such as the use of channels made available by the reduction of the guard-band for 2182 kc/s - on which it is not possible to take a final decision at the present stage.7

II. Article 5

No. 201

The new text appearing in Annex II was adopted.

III. Article 33

The discussion of this article was confined to the designation of frequencies as Committee 6 is responsible for the final drafting of the provisions of this Article. However, most of the members of the Group thought that the order of Nos. 1226 and 1227 should be reversed.

It was decided that "frequency 2182 kc/s" should be replaced by "carrier frequency 2182 kc/s" in Nos. 1227, 1228, 1230, 1232, 1234, 1235, 1242, 1247, 1254 and 1290.

IV. Technical characteristics for single-sideband transmitters in the bands between 1605 and 4000 kc/s

It was decided that a new appendix should be included in the Radio Regulations setting forth the technical specifications for single sideband transmitters in the HF bands. Committee 5 would have to decide whether the same appendix should contain the specifications relating to transmitters operating in the MF bands.

The Group adopted the texts of paragraphs 1 to 7 appearing in Annex III. In line with the decision taken by Working Group 5B, the Group considered it to be unnecessary to define the classes of emission A3A, A3H and A3J. A proposal to include in this appendix a paragraph containing proposals similar to those of paragraph 4 of Appendix 17 was withdrawn.

V. Proposal concerning the implementation of single sideband technique mode of operation on frequency 2182 kc/s (see DT/19, page 5, paragraph 2)

This proposal was withdrawn.

P. AAKERLIND  
Chairman

Annexes: 3

A N N E X I

Article 35

- .....
- MOD 1337 (2) Coast stations open to the public correspondence service on one or more frequencies between 1605 and 2850 kc/s shall also be capable of transmitting class A3 1) or A3H emissions with carrier frequency on 2182 kc/s, and receiving class A3 and A3H emissions with carrier frequency on 2182 kc/s.
- ADD 1337.1 (1) Coast stations are authorized to transmit on A3 only to the conversion date for coast stations.
- NOC 1338
- NOC 1339
- .....
- NOC 1340
- MOD 1341 (2) The peak envelope power of mobile radiotelephone stations operating in the authorized bands between 1605 and 2850 kc/s shall not exceed 400 watts.
- MOD 1342 (3) The peak envelope power of coast radiotelephone stations, operating in the authorized bands between 1605 and 3800 kc/s, shall be limited to :
- 8 kilowatts for coast stations located north of latitude 32°N.
  - 14 kilowatts for coast stations located south of latitude 32°N.
- NOC 1343

- MOD 1344 a) The following ship-shore working frequencies, if required by their service :
- carrier frequency 2046 kc/s (assigned frequency : ..... kc/s) and carrier frequency 2049 kc/s (assigned frequency : ..... kc/s) for A3A and A3J emissions;
  - carrier frequency also 2049 kc/s for A3 and A3H emissions until the end of the transition period.
- .....

- MOD 1345 c) The following intership frequencies, if required by their service :
- carrier frequency 2053 kc/s (assigned frequency : ..... kc/s) and carrier frequency 2056 kc/s (assigned frequency : ..... kc/s) for A3A and A3J emissions;
  - carrier frequency 2056 kc/s also for A3 and A3H emissions until the end of the transition period.
- These frequencies may be used as additional ship-shore frequencies.

NOC 1346

.....

NOC 1348

NOC 1349

- MOD 1350 (2) During the periods mentioned above, except for the transmissions provided for in Article 36, transmission shall cease within the band 2173.5 - 2190.5 kc/s.
- .....



A N N E X    I I

Article 5

.....

MOD	201	The frequency 2182 kc/s is the international distress and calling frequency for radiotelephony. The conditions for the use of the band 2170 - 2194 kc/s are prescribed in Article 35.
-----	-----	---

.....

A N N E X    I I I

ADD

Appendix   ...  

Technical Characteristics for S.S.B. transmitters  
in the Radiotelephone Maritime Mobile Service  
in the Bands between 1605 and 4000 kc/s

1. Coast and ship station shall use upper sideband emissions.
2. The transmitter audio-frequency band shall be 350 to 2700 cycles per second with a permitted amplitude variation of 6 dB.
3. The carrier frequencies of stations operating on SSB channels derived from each DSB channel of at least 6 kc/s bandwidth shall be as follows :
  - (a) Upper channel - carrier frequency shall be the same as that of the double sideband channel.
  - (b) Lower channel - carrier frequency shall be 3.0 kc/s lower than the carrier frequency of the double sideband channel.
4. Class A3H emissions shall not be used on SSB channels derived in the lower portion of previous double sideband channels.
5. The assigned frequency of an SSB channel shall be :  
  1400   cycles per second higher than the carrier frequency.
6. Specification of carrier modes for maritime mobile radiotelephony :
  - (a) For class A3A emission the power of the carrier shall be  $16 \pm 2$  dB below the peak envelope power of the emission.

- (b) For class A3J emission the power of the carrier shall be at least 40 dB below the peak envelope power of the emission.

7. The carrier frequency of transmitters shall be maintained within the following tolerances :

(a) Coast stations :  $\pm 20$  c/s

(b) Ship stations :  $\pm 100$  c/s

These tolerances shall apply to new SSB transmitters installed after       and to all SSB transmitters after      .

.....

\_\_\_\_\_

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/72-E  
13 October 1967  
Original : English

WORKING GROUP 6B

DRAFT

SIXTH REPORT OF WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

Article 35, Section III A. Call, Reply and Safety

ADD 1352A MOD 1353

Article 36, Distress Signal and Traffic. Alarm, Urgency and Safety Signals.

Section I, General, MOD 1386

Section III, Distress Call and Message, MOD 1393

Section VI, Distress Traffic ADD 1433 A

1. Working Group 6B unanimously agreed to recommend the adoption of the provisions appearing in the Annexes hereto. Annex 1 is for further consideration in Committee 5. Annex 2 is for normal routing to the Final Acts of the Conference.

2. No. 1352A

The attention of Committee 5 is invited to Annex 1 attached hereto. It was agreed by Working Group 6B that class A3 emission will be required for ship stations until the end of the transition period.

3. No. 1353

In reply to the question posed by Committee 5 in Document No. 199, Working Group 6B is of the opinion that a requirement for a frequency in the 6 Mc/s band continues to exist in the tropical zone of Region 3. Working Group 6B agreed that class A3H emissions will be required with authority for class A3 emissions for ship stations until the end of the transition period.

4. ADD 1386A ADD 1433A

Having considered the question of where, in Article 36, mention should be made of the International Code of Signals bearing in mind the opinion of Working Group 6A (Document No. 234, para. 2, ex-Document No. DT/58), Working Group 6B unanimously agreed to recommend a new provision in Section I, General, of Article 36 (see No. 1386A appearing in Annex 2). Following this decision, proposal G59(9) to include No. 1433A in Section VI, Distress Traffic, was not supported.

Annexes : 2

H.A. FEIGLESON  
Chairman



A N N E X 1

Article 35, Section III

ADD 1352A

S14 bis. In that part of the Tropical Zone situated in Region 2 and extending to parallel 34°S and in that part of the Tropical Zone situated in Region 3 and extending to parallel 50°S, the carrier frequency [4133 kc/s] is designated for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.

(RR 1359)

Note: The frequency of the order of 4 Mc/s should be considered by Committee 5.

A N N E X 2

Article 36, Section I

NOC 1380 - 1386

ADD 1386A

c) by any form of radiocommunication, should use the    provisions of Appendices 13A and 16.       abbreviations and signals of Appendix 13A and the Phonetic Alphabet and Figure Code in Appendix 16.    Where language difficulties exist, use of the International Code of Signals is recommended.

NOC 1387

   (MOD) 1388   

   Document No. 206, page 7 refers   

   ADD 1388A   

   Document No. 206, (para. 3 and page 7 refer) - Emergency position - indicating radiobeacons   

Section II

NOC 1389 - 1391

Section III (in part)

NOC 1392

MOD 1393

- (2) The distress call sent by radiotelephony consists of :
- the distress signal MAYDAY, 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 mobile station in distress, spoken three times.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/73-E  
12 October 1967  
Original : French

WORKING PARTY 5A

NEW WORDING OF NUMBER 1351A AND  
DRAFT RESOLUTION CONCERNING CLASS A3B EMISSIONS

1351A Unless otherwise specified in the present Regulations ☐ see Nos. ....☐, stations in the maritime mobile service operating in the bands between 4000 and 23000 kHz shall use the following classes for their radiotelephone emissions, with the necessary bandwidth of 2.8 kHz:

- ship stations = A3A and A3J
- coast stations = A3A or A3J.

Ship stations shall also be allowed to use Class A3 or A3H emissions until ☐ date ☐.

Coast stations may use Class A3 emissions until ☐ date ☐ and shall be allowed to use Class A3H until ☐ date ☐.

With respect to the use, in exceptional circumstances, of Class A3B emissions, see Resolution No. ☐ Document No.....☐.



DRAFT RESOLUTION

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that certain administrations are at present using Class A3B emissions, in accordance with the provisions of Appendix 17, for radiotelephone communications with ships;
- b) that difficulties may arise from the use of this class of emission when the Conference is preparing the new allotment plan which is the subject of Recommendation No. 7 Document DT/497;

resolves

- 1. that the use of Class A3B emissions shall continue to be authorized, in exceptional circumstances, up to the date when the new allotment plan enters into force;
- 2. that it shall be for the next Conference to consider whether Class A3B emissions should be maintained after that date.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/74-E  
12 October 1967  
Original : English/  
French/  
Spanish

WORKING GROUP 5A

TENTATIVE ADVANCE DRAFTS OF TEXTS

FOR WORKING GROUP 5A

Utilization of two new channels  
in the band 2 170 - 2 194 kc/s

1. Summary of proposals :

	$\begin{bmatrix} 2\ 170 \\ 2\ 170.5 \end{bmatrix}$ kc/s	$\begin{bmatrix} 2\ 190 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$ kc/s
F	Coast sel. calling	Ship-shore working
G, I	Coast sel. calling	Ship calling and ship-shore working
J	Intership	Ship-shore simplex
USA	Intership	Intership

2. a) Text adopted by Working Group 5A

Transmissions in the bands  $\begin{bmatrix} 2\ 170 - 2\ 173.5 \end{bmatrix}$  kc/s and  $\begin{bmatrix} 2\ 190.5 - 2\ 194 \end{bmatrix}$  kc/s respectively on carrier frequency  $\begin{bmatrix} \quad \quad \quad \end{bmatrix}$  kc/s ( ) and carrier frequency  $\begin{bmatrix} \quad \quad \quad \end{bmatrix}$  kc/s ( ) are limited to emissions of classes A3A and A3J.

b) Discussion deferred by Working Group 5A on the following addition to the above

$\begin{bmatrix} \quad \quad \quad \end{bmatrix}$  The band  $\begin{bmatrix} 2\ 170 - 2\ 173.5 \end{bmatrix}$  kc/s may also be used with class A2H emissions by coast stations for selective calling.  $\begin{bmatrix} \quad \quad \quad \end{bmatrix}$  The band  $\begin{bmatrix} 2\ 190.5 - 2\ 194 \end{bmatrix}$  kc/s may also be used by ship stations for calling coast stations.



3. Proposals :

G (I)	MOD	442 (Region 1)	2 170 - 2 173.5 kc/s : selective calling of ship stations by coast stations.
			2 190.5 - 2 194 kc/s : ship stations calling <u>and working</u> to coast stations.
I Also see 2.a, above and 1339 A (1)	ADD	1227AA	(Ship calling) c) The frequency $\left[ \begin{array}{l} 2\ 190.5 \\ 2\ 191.0 \\ 2\ 191.3 \end{array} \right]$ kc/s ( ) <u>with single</u> sideband emissions and peak envelope power not exceeding 400 watts.
F Also see 1233A, below	ADD	1235A	(8) Coast stations shall call ships equipped to receive selective call signals by sending class A2H emissions on $\left[ \begin{array}{l} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{array} \right] \left[ \begin{array}{l} 2\ 170 \\ 2\ 170.5 \end{array} \right]$ kc/s ( ) . After transmission of the ship call number, they shall transmit an identification number to inform the ship of the name of the calling coast station. (Nos. 788F and 1318 E to K)
F Consequential to No. 1235A	MOD	1233	<u>Subject to the provisions of No. 1235 A,</u> coast stations shall .....
I Also see 2.a and 1235A, above	ADD	1233AA	(5 bis) When using selective calling coast stations shall use the frequency $\left[ \begin{array}{l} 2\ 170 \\ 2\ 170.5 \end{array} \right]$ kc/s ( ) <u>with A3A or A3J emission</u> .
G	ADD	1242A	When a ship is called by selective calling on $\left[ \begin{array}{l} 2\ 170 \\ 2\ 170.5 \end{array} \right]$ kc/s ( ) it shall reply on $\left[ \begin{array}{l} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{array} \right]$ kc/s ( ) .
G	ADD	1248A	(Coast station) c) On a working frequency to calls made on the frequency $\left[ \begin{array}{l} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{array} \right]$ kc/s ( ) .

- USA            ADD            1339A(1)            (5) The power supplied to the antenna transmission line by transmitters operating on carrier frequencies  $\begin{bmatrix} 2\ 170 \\ 2\ 170.5 \end{bmatrix}$  kc/s (       ) and  $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$  kc/s (       ) shall not exceed 400 watts ( $P_p$ ).
- G            ADD            1339A(2)            (8 bis) When 2 182 kc/s is being used for distress the frequency  $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$  kc/s (       ) may be used by ships as a supplementary frequency for calling coast stations. During this period ship stations shall not use  $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$  kc/s (       ) as an international working frequency in those areas where it is in use as a supplementary calling frequency.
- I                            1339AA            (5) During the transition period from double sideband to single sideband operation, in order to facilitate single sideband communications, the frequency  $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$  kc/s (       ) may also be used by ship stations for the exchange of traffic
- J            ADD            1339A(3)            8a. For the conduct of simplex telephony, all stations on ships making international voyages should be able to use ....
- J            ADD            1339B            (1) The ship-shore working frequency  $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$  kc/s (       ), if required by their service.

J	ADD	1339C	(2) The intership frequency $\begin{bmatrix} 2\ 170 \\ 2\ 170.5 \end{bmatrix}$ kc/s ( ), if required by their service. This frequency may be used as an additional ship-shore frequency.
G (1344B) Also see 2.a, above	ADD	1344A	(Region 1) (Ships) b) The ship-shore working frequency $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$ kc/s ( ) [for A3A and A3J emissions]
F, J  USA	MOD	1351	(Regions 2 and 3) All stations on ships making international voyages should be able to use the intership frequency 2638 kc/s ( ) and [with A3A and A3J emissions only] the intership frequencies $\begin{bmatrix} 2\ 170 \\ 2\ 170.5 \end{bmatrix}$ kc/s ( ) and $\begin{bmatrix} 2\ 190.5 \\ 2\ 191 \\ 2\ 191.3 \end{bmatrix}$ kc/s ( ), if required by their service.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/75-E  
12 October 1967  
Original : English

WORKING GROUP 5C

DRAFT

FIRST REPORT OF WORKING GROUP 5C TO COMMITTEE 5  
CONCERNING MODIFICATION OF APPENDIX 18

1. There was an unanimous agreement to reduce the channel spacing from 50 kc/s to 25 kc/s, in due time.
2. The Working Group adopted the text of the draft Resolution annexed to this Report concerning the conversion procedure and recommended its approval by Committee 5.

The opinion of the Working Group was divided as to whether a date should be inserted under paragraph e) of resolves 8.

3. With respect to a new frequency allotment plan, replacing the present Appendix 18 in due time, an ad hoc Working Group with Mr. Devey, Canada, as Chairman, was created. The terms of reference of this ad hoc Working Group are the following : "Preparation of a new allotment plan with 25 kc/s channel spacing replacing Appendix 18 in due time".

4. With respect to the addition of a new column "Navigational" to the table of Appendix 18, the overwhelming majority of the Working Group was fully satisfied with the present solution.

5. Discussion concerning proposals Nos. NZL/131(25, 26, 28, 29) took place with respect to designating the frequency 156.8 Mc/s as a distress frequency on a world-wide basis.

Bearing in mind that safety problems are involved which fall under the responsibility of I.M.C.O., and taking into account :

that some delegation thought it premature to take a decision on this matter at this conference;

that even national use could cause some difficulties;

that a second receiver may become necessary;

the Working Group 5C invited Committee 6 to give its opinion on the operational side of this problem to Committee 5.

E. FROMMER  
Chairman of Working Group 5C

Annex : 1



A N N E X

DRAFT RESOLUTION

Relating to the channel spacing of transmitting frequencies  
allotted to the International Maritime Mobile Service  
for radiotelephony in the band 156-174 Mc/s

(See Appendix 18 and Article 35A)

The Maritime Radio Conference, Geneva 1967,

considering

- a) the expanding use of the maritime mobile radiotelephone frequencies in the VHF band between 156 Mc/s and 174 Mc/s;
- b) the increasing demand for additional channels for port operations (including pilotage, tug and other services);
- c) the need for additional VHF channels for short-distance communications in the maritime mobile service to relieve the congestion and saturation on the maritime mobile frequencies in the band 1605 kc/s to 3800 kc/s;
- d) that this expanding use of VHF cannot be fully met by the existing available channels given in the Table of Transmitting Frequencies in Appendix 18;
- e) that additional channels could be made available by reducing the present channel spacing of 50 kc/s to 25 kc/s;

resolves

- 1. that the channel spacing for international maritime mobile VHF radiotelephone services shall be reduced from 50 kc/s to 25 kc/s;
- 2. that the additional channels shall be obtained by inter-leaving the 25 kc/s channels midway between the existing 50 kc/s channels given in Appendix 18 of the Radio Regulations, Geneva, 1959;

3. that the 25 kc/s channels should be allocated on an international basis;
  4. that until the end of the transition period, administrations should arrange that ships stations fitted with channels 01 to 28 only can obtain an adequate use of available services;
  5. that in bringing into use channels 50 to 78 during the transition period no harmful interference shall be caused to those services on channels 01 to 28 referred to in resolves 4., especially with respect to ships equipped with receivers built for 50 kc/s spacing between channels;
  6. that the technical characteristics of equipment for the international maritime mobile VHF radiotelephone service shall be in accordance with Appendix 19A;
  7. that from 1.1.1983, guard bands on either side of 156.80 Mc/s shall be 156.7625 to 156.7875 Mc/s and 156.8125 to 156.8375 Mc/s;
  8. that the transition from a channel spacing of 50 kc/s to that of 25 kc/s shall be in accordance with the following :
    - a) date of commencement of implementation 1.1.1972
    - b) date by which all existing transmitters shall be modified to  $\pm 5$  kc/s deviation, and receiver audio gain increased, where necessary 1.1.1973
    - c) date on which modification of coast station receivers to meet the selectivity requirements may commence 1.1.1973
    - d) 1) date by which all new equipment shall conform to 25 kc/s standards 1.1.1973
    - e) date by which channel allocations on interleaved channels may commence where possible
    - f) final date of transition period by which all equipments shall conform to 25 kc/s standards and all interleaved channels may be generally introduced 1.1.1983
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/76-E  
13 October 1967  
Original : English

WORKING GROUP 6B

REPORT BY WORKING GROUP 6B ad hoc - CAPTAIN SWALLOW

DRAFT RESOLUTION No. ...

relating to the necessity of asking I.M.C.O. to consider  
introducing into the International Convention for  
the Safety of Life at Sea, London, 1960, the  
amendments necessary to ensure adequate watch being  
kept on the international distress frequency for  
radiotelephony by ship stations

The World Administrative Radio Conference, Geneva, 1967,

considering that

- a) this Conference has adopted the necessary amendments to the Radio Regulations, Geneva, 1959, concerning the operation of emergency position-indicating radiobeacons on the international distress frequency for radiotelephony,
- b) ship stations equipped for radiotelegraphy, but having as well means of communications by radiotelephony are required to keep watch only on the international distress frequency for radiotelegraphy,
- c) ships keeping watch only on the international distress frequency for radiotelegraphy will not hear distress calls of small craft calling on the distress frequency for radiotelephony,
- d) if ships in a position to do so should keep watch on both international distress frequencies - for radiotelephony as well as radiotelegraphy - it would increase the safety of ships fitted with radiotelephone only and improve the efficacy of assistance to the survivors from any maritime distress incident,





is of the opinion

that an increased watch is necessary by ship stations on the radiotelephone distress frequency,

resolves

that the Inter-Governmental Maritime Consultative Organization be invited to give urgent attention to this matter, particularly in the present study being undertaken on Maritime Safety Systems,

requests the Secretary-General

to communicate this ~~Resolution~~ to the Inter-Governmental Maritime Consultative Organization.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/77-E  
13 October 1967  
Original : English

WORKING GROUP 6C

SUPPLEMENTARY REPORT  
BY THE CHAIRMAN OF WORKING GROUP 6C  
LISTING THE REMAINING RR, AR, RESOLUTIONS AND RECOMMENDATIONS  
TO WHICH NO PROPOSALS HAVE BEEN SUBMITTED TO THIS CONFERENCE AND  
UNDER THE TERMS OF REFERENCE OF WORKING GROUP 6C

RR

Article 22	:	Nos. 845 - 847
Article 23, Section I	:	Nos. 848 - 858
Section II	:	Nos. 859 - 860, 864, 866
Section III	:	Nos. 867 - 893, 895, 897 - 902
		Nos. 904 - 906
Section IV	:	-
Article 24	:	Nos. 912 - 913, 919 - 920
Article 25, Section I	:	Nos. 921 - 922
Section II	:	Nos. 923 - 927
Section III	:	No. 928
Section IV	:	Nos. 930, 935, 938 - 946
Section V	:	No. 947
Article 26	:	No. 948

AR

Article 8	:	Nos. 2124 - 2125, 2128 - 2129
		Nos. 2132 - 2136



Article 9 : Nos. 2137 - 2138, 2140 - 2142,  
Nos. 2146 - 2150

Resolution No. 12

Recommendation No. 17

Recommendation No. 18

Recommendation No. 26

F. WIEFELSPUTZ  
Chairman

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See Agenda for the Eighth and last meeting of WG 6C scheduled for  
Tuesday, 17 October 1967, 0930 hours, Room A.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/78-E

13 October 1967

Original : English

WORKING GROUP 6C

SUPPLEMENTARY REPORT BY THE  
CHAIRMAN OF WORKING GROUP 6C  
(AS A BASIS FOR DISCUSSION)

Article 23

Section IV. Qualifying Service

- |     |     |  |
|-----|-----|--|
| MOD | 907 | §17.(1) An operator holding a first or second class radiotelegraph operator's certificate is authorized to embark as chief operator of a ship station of the fourth category (see No. 932).  |
| MOD | 908 | (2) Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A), an operator holding a first or second class radiotelegraph operator's certificate shall have had at least six month's experience as operator on board ship or in a coast station of which at least three months shall have been on board ship. |
| MOD | 909 | (3) Before becoming chief operator of a ship station of the first category (see No. 930), an operator holding a first class radiotelegraph operator's certificate shall have had at least one year's experience as operator on board ship or in a coast station of which at least six months shall have been on board ship.                                  |
| SUP | 910 | (see 907 as modified)  |
| SUP | 911 | (see 908 as modified)  |

Article 24

Class and Minimum Number of operators  
for Ship and Aircraft Stations

NOC 912



- |     |     |   |
|-----|-----|---|
| NOC | 913 |   |
| MOD | 914 | a) ship stations of the first category, except in the case provided for in No. 918 : a chief operator holding a 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 first or second class radiotelegraph operator's certificate; |
| MOD | 916 | c) ship stations of the fourth category, except in the case provided for in Nos. 917 and 918 : one operator holding a first or a second class radiotelegraph operator's certificate;      |
| NOC | 917 |   |
| MOD | 918 | e) ship stations equipped with radiotelephone installation only : one operator holding either a radiotelephone operator's certificate or a radiotelegraph operator's certificate;         |
| NOC | 919 |   |
| NOC | 920 |   |
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

Document No. DT/79-E  
17 October 1967  
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English

WORKING GROUP 6A

DRAFT

SIXTH REPORT OF WORKING GROUP 6A TO COMMITTEE 6

(OPERATION)

- General Radiotelephone Procedure in the Maritime Mobile Service, Article 33, Section III (continued), Sections IV - VI.
- Calls by Radiotelephony, Article 34.
- Service Documents, Article 20.

1. Working Group 6A unanimously agreed to recommend the adoption of the provision appearing in the Annex attached hereto.

2. Article 33, Section IV : ADD 1280A

Since there was not a majority in favour of the new procedure providing ways and means of communication in radiotelephony where language difficulties arise (Proposal No. DNK/38(6)), the proposal was withdrawn.

3. Article 20

3.1 MOD 805

The delegate of Canada withdrew Proposal No. CAN/108(26) since he had learned that the object of the amendment could be attained by the adoption of Proposal No. CAN/108(27) concerning MOD 815.

3.2 ADD 806A

The Working Group agreed to inform Working Group 6C that it was of the opinion that Proposals to amend Appendix 11 to include carriage by ships of the Manual as an alternative to the Radio Regulations etc. were well-founded and should be adopted (Proposals Nos. G/62(70), USA/28(64, 65), appearing on page 457 of Document No. DT/2 refers). On this basis, the delegate of the U.S.A. withdrew Proposal No. USA/28(63).

A. CHASSIGNOL

Chairman

Annex : 1



Ref.

A N N E X

Article 33, Section III (continued)

ADD	1252A	<u>/held in abeyance/</u>
MOD	1253	<u>/held in abeyance/</u>
(MOD)	1254	§15. If contact is established on the carrier frequency 2 182 kc/s, coast and ship stations shall transfer to one of their normal working frequencies for the exchange of traffic.
MOD	1255	<u>/held in abeyance/</u>
MOD	1256	<u>/NZL/131(27) held in abeyance/</u>
NOC	1257	<u>/held in abeyance/</u>
ADD	1257A	<u>/held in abeyance/</u>
	1258	<u>/held in abeyance/</u>
	1258A	<u>/Delegation of U.S.A. to draft the text for discussion in the light of related decisions Committees 4 and 5/</u>
	1259-1265	<u>/held in abeyance/</u>
<u>/G/78(93)/</u> <u>/DNK/38(4)/</u> <u>/DT/2,</u> page 306	MOD 1266	§20.(1) If the station called is unable to accept traffic immediately, it should reply to the call as indicated in No. 1241 followed by "Wait .... minutes" (or AS spoken as ALFA SIERRA ..... (minutes) in case of language difficulties); indicating the probable duration of waiting time in minutes. If the probable duration exceeds ten minutes the reason for the delay shall be given. Alternatively the station called may indicate by any appropriate means, that it is not ready to receive traffic immediately.

Ref.

NOC 1267-  
1268

Article 33, Section IV

NOC 1269-  
1272

DT/2,  
page 309

MOD 1273

- the call sign or other identification of the station called;
- 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.

NOC 1274-  
1279

(MOD) 1280 French version : replace "commutez" by "à vous".

NOC 1281-  
1283

SUP 1284

DT/2,  
page 312

MOD 1285

(6) In transmitting groups of figures each Figure shall be spoken separately and the transmission of each group or series of groups shall be preceded by the words "in figures".

NOC 1286

DT/2,  
page 312

MOD 1287

§24.(1) The acknowledgement of receipt of a radio-telegram or a series of radiotelegrams shall be given by the receiving station in the following manner :



Ref.

DT/2,  
page 312/  
(Cont.)

- the call sign or other identification of the sending station;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- the call sign or other identification of the receiving station;
- "Your No. ... received, over" (or R spoken as ROMEO ... (number), K spoken as KILO in case of language difficulties); or
- "Your No. ... to No. ... received, over" (or R spoken as ROMEO ... (numbers), K spoken as KILO in case of language difficulties).

French version : replace "commutez" by "à vous"

	NOC	1288	
(ex DT/2, page 312)	MOD	1289	(3) The end of work between two stations shall be indicated by each of them by means of the word "out" (or VA spoken as VICTOR ALFA in case of language difficulties).
			<u>Article 33, Section V</u>
(ex DT/2, page 313)	MOD	1290	§25.(1) Calling and signals preparatory to traffic shall not exceed two minutes when made on the carrier frequency 2182 kc/s or on 156.80 Mc/s, except in cases of distress, urgency or safety to which the provisions of Article 36 apply.
	NOC	1291- 1292	

Ref.

Article 33, Section VI

	NOC	1293- 1294	
(ex DT/2, page 317)	MOD	1295	(2) Any signals sent for testing shall be kept to a minimum, particularly on the carrier frequency 2182 kc/s, the frequency 156.80 Mc/s and in the Tropical Zone of Region 3 on the carrier frequency <u>6204 kc/s</u> .

Article 34

	NOC	1296- 1300	
(ex DT/2, page 321)	MOD	1301	(2) Coast stations shall transmit their traffic lists on their normal working frequencies in the appropriate bands. This transmission shall be preceded by a call to all stations.
(ex DT/2, page 324)	MOD	1302	(3) They may, however, announce this transmission by the following brief preamble sent on a calling frequency : <ul style="list-style-type: none"><li>- "Hello all ships" or "CQ" not more than three times;</li><li>- the words "THIS IS" (or DE spoken as DELTA ECHO in case of language difficulties);</li><li>- "... radio" not more than three times;</li><li>- "Listen for my traffic list on ... kc/s".</li></ul> In no case may this preamble be repeated. <u>MOD 1302 and SUP 1303, Proposal No. NZL/133(14) held</u> .
	SUP	1303	<u>Proposal No. NZL/133(14) held in abeyance</u>
	NOC	1304- 1308	

Ref.

(ex DT/2, page 324)	ADD	1308A	However, in the maritime mobile service when a station called does not reply, the call may be repeated at three-minute intervals.
	(MOD)	1309	[ Attention of the Editorial Committee is invited to the possible need to adjust the beginning of this paragraph as a result of the introduction of 1308A. A similar adjustment may be considered desirable in No. 1078 for the same reason. ]
	NOC	1310- 1311	
(ex DT/2, page 324)	ADD	1311A	(5) However, in the maritime mobile service, before renewing the call, the calling station shall ascertain that further calling is unlikely to cause interference to other communications in progress and that the station called is not in communication with another station.
	NOC	1312- 1313	
(RR 1083)	MOD	1314	88.(1) The land station may, by means of the abbreviation TR, ask the mobile station to furnish it with the following information :
	NOC	1315- 1316	
(ex DT/2, page 324)	MOD	1317	(2) The information referred to in Nos. 1314 to 1316, preceded by the abbreviation TR, should be furnished by mobile stations without prior request from the coast station, whenever such a measure seems appropriate. This information is furnished on the authority of the master or the person responsible for the mobile station.

Ref.

	SUP	1318	
	ADD	1318A	<u>/F/109(102, 103), DT/2, pages 322/3 held/</u>
			<u>Article 20</u>
	NOC	789- 804	
(ex 6C)	MOD	805	(IV) <u>List IV. List of Coast Stations</u>
			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.
(ex 6C)	MOD	806	(V) <u>List V. List of Ship Stations</u>
			This list shall contain particulars of :
			a) ship stations fitted with radiotelegraph installations;
			b) ship stations fitted with radiotelegraph and radiotelephone installations;
			c) ship stations fitted with radiotelephone installations only of ships communicating with stations of the maritime mobile service other than those of their own nationality or making international voyages.
			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).
	NOC	807- 810	

Ref.

	ADD	810A	<u>/F/109(93) held in abeyance/</u>
	NOC	811- 814	
(ex DT/2, page 133)	MOD	815	82.(1) The Secretary-General shall publish the amendments to be made in the documents listed in Nos. 790 and 814 inclusive. Once a month administrations shall inform him, in the form shown for the lists themselves in Appendix 9, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 10. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II, III and VIIIA, he shall use the data provided by the International Frequency Registration Board, obtained from the information received in application of the provisions of Articles 9, 9A and 10. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI and VIIIA. Lists IV and VI shall be coordinated with the information appearing in List I. The Secretary-General shall refer any discrepancies to the administration concerned.
	NOC	816-823	
(RR 824, MOD from 3 to 2 years)	MOD	824	86. The List of Coast Stations (List IV) shall be republished every two years and kept up to date by recapitulative supplements issued every six months.
	MOD	825	<u>/held in abeyance/</u>
	NOC	826- 837	

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/80-E  
13 October 1967  
Original : French

WORKING GROUP 5B

DRAFT

FOURTH REPORT OF WORKING GROUP 5B  
TO COMMITTEE 5

1. Appendix 17A

The Working Group adopted the text of paragraphs 5 to 8 of this appendix, as shown in Annex I.

2. Frequency in the HF bands to be used for search and rescue operations

The Working Group decided to mention in Article 35 that, in accordance with Appendix 27 (paragraph 4 of No. 27/201), the frequency 5680 kc/s can be used by stations of the maritime mobile service for search and rescue operations.

It adopted for this purpose the text of No. 1353A given in Annex II.

J. BES  
Chairman

Annexes : 2



A N N E X I

ADD

AP. 17A

.....

5. The audio-frequency band transmitted shall extend from 350 to 2 700 c/s, and the variation of the amplitude with the frequency shall not exceed 6 db.

The assigned frequency shall be 1 400 c/s higher than the carrier frequency /\*.

6. Only the SSB channel from the upper part of a DSB channel may be used for the class of emission A3H \*\*.

7. In the case of an emission in class A3H, A3A or A3J, the power supplied to the feeder of the antenna on any discrete interfering frequency shall, when the transmitter is working at its maximum peak envelope power, remain below this peak power by the amount shown in the table below.

8. In the case of an SSB emission in class A3H, A3A or A3J, the power supplied to the feeder of the antenna on any discrete interfering frequency shall, when the transmitter is working at its maximum peak envelope power, remain lower than this peak power by the amount shown in the following table.

Difference $\Delta$ between the frequency of the interfering emission and the assigned frequency (kc/s)	Minimum attenuation with respect to the peak envelope power (db)
$1.6 < \Delta \leq 4.8$	28 db
$4.8 < \Delta \leq 8.0$	38 db
$8.0 < \Delta$	43 db, without the power of the interfering emission exceeding 50 milliwatts

\* This provision should also be included in the Preamble to Appendix 17

\*\* This provision could be transferred to the Preamble to Appendix 17

When it is desired to check whether emission using a reduced or suppressed carrier meets the above conditions, a signal consisting of two audio frequencies sufficiently distant from each other to ensure that all the intermodulation products will fall on frequencies that are at least 1.6 kc/s distant from the assigned frequency can be applied to the transmitter input.



A N N E X II

Article 35

.....

ADD

A(bis) Search and rescue.

ADD

1353A

The frequency 5680 kc/s may be used throughout the world for intercommunication between mobile stations engaged in coordinated search and rescue operations, including communication between these stations and participating land stations, in accordance with No. 27/201, paragraph 4 of the Frequency Allotment Plan for the Aeronautical Mobile (R) Service (Appendix 27).

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/81-E  
14 October 1967  
Original : English

## WORKING GROUP 5B

### REPORT OF WORKING GROUP 5B AD HOC ON APPENDIX 17

The ad hoc Working Group, consisting of delegates of Canada, United Kingdom, U.S.S.R., Norway, and the United States of America, assisted by the representative of C.I.R.M., held two meetings and approved unanimously the draft new Appendix 17 attached hereto. This material was developed pursuant to the terms of reference of the ad hoc Working Group adopted by Working Group 5B on 11 October, as amended by the decisions of the joint meeting of Committees 4 and 5 of 12 October 1967.

In developing the attached documents, it was necessary for the ad hoc group to make certain determinations as follows :

a) Adjust the limit between assignable working frequencies for low traffic ships and coast telegraph allocations as follows (see Document No. DT/51) :

4231	instead of	4231.5 kc/s
6345.5	instead of	6344
8459.5	instead of	8460
12 689	instead of	12 689.5
16 917	instead of	16 917.5
22 374	instead of	22 372

b) Adjust the limits for coast stations as presently contained in No. 453 as follows :

4231 - 4361	instead of	4238 - 4368 kc/s
6345.5-6513.5	instead of	6357 - 6525
8459.5-8728.5	instead of	8476 - 8745
12 589 - 13 105	instead of	12 714 - 13 130
16 917 - 17 255	instead of	16 952 - 17 290
22 374 - 22 624	instead of	22 400 - 22 650



c) Develop recommended minimum separation between the highest assignable working frequency for low traffic ships and the first assignable coastal telegraph frequency :

4 Mc/s	3.4 kc/s .
6	3.6
8	3.8
12	4.3
16	4.7
22	5.2

d) As far as practicable, coast telegraph stations should operate no closer than 3 kc/s below the lowest coast telephone carrier frequency.

It is recommended that the information contained in the foregoing paragraph be forwarded to Committee 4 for use as appropriate. It is further recommended that the coast telegraph stations vacate the designated calling channels, Series No. 2 of Section B, as a matter of priority.

W.. DEAN Jr.

Chairman

Annex : 1

APPENDIX 17

1. APPENDIX 17 - Preamble  
(Page 1)
2. SECTION A - Table of Double Sideband Transmitting Frequencies  
in kc/s  
(Page 2)
3. SECTION B - Table of Duplex Single Sideband Carrier Frequencies  
in kc/s  
(Page 3)
4. SECTION C - Table of Simplex Single Sideband Carrier Frequencies  
in kc/s  
(Page 4)
5. APPENDIX 17A - [Technical characteristics]

DRAFT

APPENDIX 17

Channelling of the Maritime Mobile Radiotelephone Bands between  
4000 and 23 000 kc/s  
(see Article 35)

1. Channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radio-telephone service are set out in three sections as follows :  
  
Section A - Table of Duplex Double Sideband Transmitting frequencies (in kc/s).  
  
Section B - Table of Duplex Single Sideband Transmitting Frequencies (carrier) (in kc/s).  
  
Section C - Table of Simplex Single Sideband Transmitting Frequencies (carrier) (in kc/s).
2. The technical characteristics for SSB transmitters operating in the bands allocated for radiotelephone use by the maritime mobile service between 4000 and 23 000 kc/s, are given in Appendix 17A.
3. One or more series of frequencies from Sections A or B are assigned to each coast station which uses these frequencies associated, as far as possible, in pairs, each pair comprises 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. Administrations may assign the frequencies shown in Section C to ships of any category, according to traffic requirements, for ship to shore and inter-ship working. Coast stations may also use these frequencies for simplex working provided that one kilowatt peak envelope power is not exceeded.
5. The frequencies of series number 2 in Section B are allocated for calling purposes. The remaining frequencies in Sections A, B and C are working frequencies. Use of the double sideband calling frequencies 8269, 12 403.5, 16 533.5 and 22 074 kc/s may continue until              .

6. a) Stations utilizing double sideband emissions shall operate only on the frequencies in Section A / in accordance with paras .... and /..../.  
b) Stations utilising single sideband emissions shall operate on the carrier frequencies shown in Sections B and C in conformity with the technical characteristics contained in Appendix 17A. The upper sideband mode shall always be employed.  
c) Stations employing the single sideband mode shall only use A3A and A3J emissions / in accordance with paras .../. During the transition period, A3H emission / in accordance with paras .../ is permitted only on those carrier frequencies shown in Section B which are coincident with, or within 100 cycles of, the frequencies shown in Section A.  
d) During the transition period, assignments to stations utilizing 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.
7. If an administration authorizes the use of frequencies other than those contained 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 appended Tables.

SECTION A

Table of Duplex Double Sideband Transmitting Frequencies (in kc/s)

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast station frequency	Ship station 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	4 371.1	4 066.1	8 748.1	8 198.1	13 133.5	12 333.5	17 293.5	16 463.5	22 653.5	22 003.5
2	4 377.4	4 072.4	8 754.4	8 204.4	13 140.5	12 340.5	17 300.5	16 470.5	22 660.5	22 010.5
3	4 383.8	4 078.8	8 760.8	8 210.8	13 147.5	12 347.5	17 307.5	16 477.5	22 667.5	22 017.5
4	4 390.2	4 085.2	8 767.2	8 217.2	13 154.5	12 354.5	17 314.5	16 484.5	22 674.5	22 024.5
5	4 396.6	4 091.6	8 773.6	8 223.6	13 161.5	12 361.5	17 321.5	16 491.5	22 681.5	22 031.5
6	4 403.0	4 098.0	8 780.0	8 230.0	13 168.5	12 368.5	17 328.5	16 498.5	22 688.5	22 038.5
7	4 409.4	4 104.4	8 786.4	8 236.4	13 175.5	12 375.5	17 335.5	16 505.5	22 695.5	22 045.5
8	4 415.8	4 110.8	8 792.8	8 242.8	13 182.5	12 382.5	17 342.5	16 512.5	22 702.5	22 052.5
9	4 422.2	4 117.2	8 799.2	8 249.2	13 189.5	12 389.5	17 349.5	16 519.5	22 709.5	22 059.5
10	4 428.6	4 123.6	8 805.6	8 255.6	13 196.5	12 396.5	17 356.5	16 526.5	22 716.5	22 066.5
11	4 434.9	4 129.9	8 811.9	8 261.9						

Table of Duplex Single Sideband Transmitting Frequencies (carrier) (in kc/s)

Series	4 Mc/s Band		6 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
Series No.	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship	Coast	Ship
1	4361.6	4063.0	6515.4	6200.8	8729.0	8195.0	13109.0	12330.0	17255.0	16460.0	22625.5	22000.0
2*)	4364.7	4066.1	6518.6	6204.0	8732.1	8198.1	13112.5	12333.5	17258.5	16463.5	22629.0	22003.5
3	4367.8	4069.2	6521.8	6207.2	8735.2	8201.2	13116.0	12337.0	17262.0	16467.0	22632.5	22007.0
4	4371.0	4072.4			8738.4	8304.4	13119.5	12340.5	17265.5	16470.5	22636.0	22010.5
5	4374.2	4075.6			8741.6	8207.6	13123.0	12344.0	17269.0	16474.0	22639.5	22014.0
6	4377.4	4078.8			8744.8	8210.8	13126.5	12347.5	17272.5	16477.5	22643.0	22017.5
7	4380.6	4082.0			8748.0	8214.0	13130.0	12351.0	17276.0	16481.0	22646.5	22021.0
8	4383.8	4085.2			8751.2	8217.2	13133.5	12354.5	17279.5	16484.5	22650.0	22024.5
9	4387.0	4088.4			8754.4	8220.4	13137.0	12358.0	17283.0	16488.0	22653.5	22028.0
10	4390.2	4091.6			8757.6	8223.6	13140.5	12361.5	17286.5	16491.5	22657.0	22031.5
11	4393.4	4094.8			8760.8	8226.8	13144.0	12365.0	17290.0	16495.0	22660.5	22035.0
12	4396.6	4098.0			8764.0	8230.0	13147.5	12368.5	17293.5	16498.5	22664.0	22038.5
13	4399.8	4101.2			8767.2	8233.2	13151.0	12372.0	17297.0	16502.0	22667.5	22042.0
14	4403.0	4104.4			8770.4	8236.4	13154.5	12375.5	17300.5	16505.5	22671.0	22045.5
15	4406.2	4107.6			8773.6	8239.6	13158.0	12379.0	17304.0	16509.0	22674.5	22049.0
16	4409.4	4110.8			8776.8	8242.8	13161.5	12382.5	17307.5	16512.5	22678.0	22052.5
17	4412.6	4114.0			8780.0	8246.0	13165.0	12386.0	17311.0	16516.0	22681.5	22056.0
18	4415.8	4117.2			8783.2	8249.2	13168.5	12389.5	17314.5	16519.5	22685.0	22059.5
19	4419.0	4120.4			8786.4	8252.4	13172.0	12393.0	17318.0	16523.0	22688.5	22063.0
20	4422.2	4123.6			8789.6	8255.6	13175.5	12396.5	17321.5	16526.5	22692.0	22066.5
21	4425.4	4126.8			8792.8	8258.8	13179.0	12400.0	17325.0	16530.0	22695.5	22070.0
22	4428.6	4130.0			8796.0	8262.0	13182.5	12403.5	17328.5	16533.5	22699.0	22073.5
23	4431.8	4133.2			8799.2	8265.2	13186.0	12407.0	17332.0	16537.0	22702.5	22077.0
24	4434.9	4136.3			8802.4	8268.4	13189.5	12410.5	17335.5	16540.5	22706.0	22080.5
25					8805.6	8271.6	13193.0	12414.0	17339.0	16544.0	22709.5	22084.9
26					8808.8	8274.8	13196.5	12417.5	17342.5	16547.5	22713.0	22087.5
27					8812.0	8278.0			17346.0	16551.0	22716.5	22091.0
28									17349.5	16554.5		
29									17353.0	16558.0		
30									17356.5	16561.5		

\*) The frequencies in Series No. 2 are designated as calling frequencies.  
(See No. 1224 and 1353).



SECTION C

Table of Simplex Single Sideband  
Transmitting Frequencies (carrier) - (in kc/s)

Band Mc/s	Limits	Radiotelephone (single sideband) upper sideband carrier frequencies *	Limits
4	4139.5	4139.5	4142.5
6	6210.4	6210.4 and 6213.5 2 frequencies spaced 3.1	6216.5
8	8281.2	8281.2 and 8284.4 2 frequencies spaced 3.2	8288
12	12421	12421 ----- 12428 3 frequencies spaced 3.5	12431.5
16	16565	16565 ----- 16572 3 frequencies spaced 3.5	16576
22	22094.5	22094.5 ----- 22108.5 5 frequencies spaced 3.5	22112

\* Frequencies in this category may be assigned also to coast stations in accordance with the provisions of No. 1357 (proposal No. USA/16 (9)).

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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Original : French, English,  
Spanish

WORKING GROUP 6C

DRAFT

FOURTH REPORT OF WG 6C TO COMMITTEE 6 (OPERATION)

DRAFT RESOLUTION

Relating to the Introduction of a General  
Radiocommunication Operator's Certificate  
for the Maritime Mobile Service

Working Group 6C agreed to recommend the adoption of the attached  
Draft Resolution.

F. WIEFELSPÜTZ  
Chairman

Annex : 1



[ex DT/53]

A N N E X

DRAFT RESOLUTION

Relating to the Introduction of a General  
Radiocommunication Operator's Certificate  
for the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1967,  
considering

- a) that Article 23 of the Radio Regulations, Geneva, 1959, provides for two classes of certificate as well as a special certificate for radiotelegraph operators;
- b) that many radiotelegraph operators are the holders of the second class certificates;
- c) that it is doubtful if the higher morse speed qualification of the first class certificate would be necessary in the future;
- d) that there is a future need for a greater emphasis on the practical maintenance of radiocommunication equipment in service;

is of the opinion

- 1. that administrations should consider the desirability of replacing the present two classes of radiotelegraphic certificate with a general class of certificate for radiocommunication operators more closely related to future needs;
- 2. that in considering the introduction of such a certificate, administrations take into account the certificate qualification as appended hereto in Annexes 1, 2 and 3; and in connection therewith,

[ex DT/53]  
cont.

resolves

1. that such administrations as may wish to issue a general certificate are authorized to do so,
2. that the general radiocommunication operator's certificate shall maintain at least the practical technical standards of present first class certificates,
3. that the Morse code speed shall not be less than in No. 884 of the Radio Regulations,
4. that, for the purposes of the Radio Regulations, such general certificate shall be recognized as an alternative to present first and second class certificates,
5. that countries which do not issue the general certificate and which employ operators of a foreign nationality may decide upon the status of the general radiocommunication operator's certificate in so far as employment in their own ships is concerned.

Annexes : 3

Annex 1

Conditions for the issue of the radiocommunication operator's general  
certificate - Maritime

1. The radiocommunication general certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below.
2. Knowledge of the principles of electricity and the theory of radio sufficient to meet the requirements of paragraphs 3, 4 and 5 below.
3. Theoretical knowledge of marine radiotelegraph and radiotelephone transmitters and receivers; marine aerial 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) with particular reference to maintaining the equipment in service.
4. Practical knowledge of the operation, adjustment and maintenance of the apparatus mentioned in paragraph 3) above, including the taking of direction-finding bearings and knowledge of the principles of the calibration of radio direction-finding apparatus.
5. Practical knowledge necessary for the location and remedying (with the means available on board) of faults which may occur during a voyage, in the apparatus mentioned in paragraph 3) above.
6. Ability to send correctly by hand and to receive correctly by ear, in the Morse Code, code groups (mixed letters, figures and punctuation marks), at a speed of sixteen groups a minute, and a plain language text at the speed of twenty words a minute. Each code group shall comprise five characters, each figure or punctuation mark counting as two characters. The average word of the text in plain language shall contain five characters. The duration of each test of sending and receiving shall be, as a rule, five minutes.
7. Ability to send correctly and to receive correctly by telephone.

8. Knowledge of the Regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio.
  9. A sufficient knowledge of world geography, especially the principal shipping and the most important telecommunication routes.
  10. Knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language or languages required.
-

Annex 2

Qualifying service

1. An operator holding a radiocommunication operator's general certificate may be authorized to embark as chief operator of a ship station of the fourth category (see No. 932 of the Radio Regulations).
2. Before becoming chief operator of a ship station of the second or third category (see Nos. 931 and 931A of the Radio Regulations) an operator holding radiocommunication operators general certificate shall have had at least six months experience as operator of which at least three months shall have been on board ship.
3. Before becoming chief operator of a ship station of the first category (see No. 930 of the Radio Regulations) an operator holding a radiocommunication operator's general certificate shall have had at least two years experience as operator on board ship or in a coast station.

---

Note : This annex was agreed by WG 6C subject to revision, if necessary, after proposals concerning Nos. 914-918 of the Radio Regulations have been considered.

Annex 3

Conditions of Employment of Holders of Radiocommunication Operator's  
General Certificates on Ship Stations

The holder of a radiocommunication operator's general certificate may carry out the radiotelegraph or radiotelephone service of any ship station and, having regard to the requirements of paragraphs 1, 2 and 3 of Annex 2, may act as chief or sole operator on any ship station in the circumstances detailed in Nos. 914 - 918 of the Radio Regulations.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/83-E

14 October 1967

Original : English

WORKING GROUP 5A

DRAFT

SIXTH REPORT OF WORKING GROUP 5A TO COMMITTEE 5

I. Article 35

No. 1336A

The working group adopted the new text which appear in Annex I. However, the delegation of Canada reserved its right to raise this question again when this text is submitted for approval. Furthermore, the decision concerning the prohibition of using class of emission A3H after the transition period was left pending at the request of the delegate of France.

No. 1347

The working group considered a proposal submitted by Denmark in Document No. 235, for the deletion of this number. While considering that from the point of view of the utilization of the frequencies this number should be deleted, it decided to refer this proposal to Committee 6 for final decision.

II. Use of a frequency in the MF bands for search and rescue operations

The working group decided to mention in Article 35 that frequency 3023.5 kc/s may be used by stations in the maritime mobile service for search and rescue operations in accordance with the provisions of paragraph 4 of No. 27/196 of Appendix 27.

Consequently, it adopted the new text of No. 1326A which appears in Annex I.

III. Appendix 3

The working group decided to modify Appendix 3 as indicated in Annex II.

P. AAKERLIND  
Chairman

Annexes : 2



[illegible]

ADD A (bis) Search and rescue

ADD 1326A /[\*] The frequency 3023.5 kc/s may be used for inter-communication between mobile stations engaged in coordinated Search and Rescue operations including communication between these stations and particular land stations, in accordance with the provisions of paragraph 4 of No. 27/196 of the Frequency Allotment Plan for the Aeronautical (R) Service (Appendix 27).

ADD 1336A (1 bis) Coast stations authorized for radio-  
telephony on one or more frequencies other than  
2182 kc/s in the authorized bands between 1605 and  
2850 kc/s shall be able to transmit class A3  
emissions or classes of emissions A3H, A3A and A3J.  
Transmissions with classes A3 / and A3H / are not  
authorized after / the end of the transition  
period /.

A N N E X II

Appendix 3

	Band : 1605 to 4000 kc/s		
MOD	2. Land stations		
	- power 200 W or less	100	100 j)
	- power above 200 W	50	50 j)
MOD	3. Mobile stations		
	a) Ship stations	200	200 k)

Notes Referring to Table of Frequency Tolerances

- ADD j) For coast radiotelephone SSB transmitters the tolerance is 20 c/s.
- ADD k) For ship radiotelephone SSB transmitters the tolerance is 100 c/s.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/84-E  
14 October 1967  
Original: English

WORKING GROUP 5A

REPORT OF THE WORKING GROUP AD HOC 5A TO WORKING GROUP 5A

(Reference Document No. 183)

Participants : Denmark  
France  
Federal Republic of Germany  
Norway  
United Kingdom  
United States of America

1. The ad hoc group, taking into account :
  - the reasons given for the proposal, to add to the Radio Regulations an additional paragraph No. 1336A, as contained in the reference document;
  - the unanimous support for this proposal in Working Group 5A, the operational requirements and principles, set forth in this document;
  - the doubts expressed by some of the delegations as to the feasibility of finding the necessary frequencies;

examined the possibilities of designating frequencies to meet the requirements in question.

2. The ad hoc group considered :
  - a) that frequencies in the available MF range are not exclusively allocated to the Maritime Mobile Service;
  - b) that, as a matter of fact, certain frequencies in this band are assigned to stations of the maritime mobile service in one Region, but that the same frequencies are not necessarily assigned to stations of this Service in other Regions;



- c) that, therefore, under these circumstances, a regional approach to the problem is desirable;
- d) that no other frequencies, other than those already assigned to stations of the maritime mobile service, may be obtained;
- e) that, as a result of the reduction of the guard band for the international calling and emergency frequency 2182 kc/s, two additional frequencies have been obtained - viz. carrier frequency 2170 and 2190.5 kc/s which may be used on a world wide basis;
- f) that, however, the use of these frequencies by coast stations as working frequencies for public correspondence and the exchange of telegrams should be avoided;
- g) that after the conversion period the lower derived sidebands of a number of selected frequencies could be considered, on a regional basis, for these purposes, such as :
  - i) the lower derived sidebands of the international ship to shore working frequencies (see RR Nos. 1344, 1345 and 1351);
  - ii) the lower derived sidebands of certain working frequencies assigned to coast stations, selected regionally on a common denominator basis.

3. The ad hoc group further considered :

- a) that primarily, world-wide or regionally assigned international shore to ship working frequencies should be designated to coast stations to operate with ship stations of another nationality, but that the use of such frequencies should only be authorized for communication with ship stations which are unable to receive the normal working frequencies of the coast station concerned;
- b) that it is important that messages concerning the safety of shipping are passed to these ship stations on these frequencies after being announced on 2182 kc/s;
- c) that an early assignment of these frequencies during the conversion period is not of vital importance, as these ship stations may still be equipped with DSB receivers until the end of the conversion period;
- d) that due to the geographical location of coast stations in a congested area, such as in parts of Region 1, an adequate number of frequencies should be available so that harmful interference should be reduced to the minimum;

- e) that one frequency should be available on a world-wide basis, in particular for the purposes mentioned in paragraph 3b;
- f) that for operational and economical reasons, no more than three additional frequencies should be available on a regional basis for congested areas;
- g) that an examination by the group of a tabulation, provided by the I.F.R.B., revealed that:

neither for the purpose referred to in paragraph 3e, nor for the purpose referred to in paragraph 3f were any frequencies found to be available.

- 4. With regard to proposal 183(37) from the Netherlands, the ad hoc Group concludes:
  - a) that the use of the frequencies, indicated in paragraph 2e for public correspondence and the exchange of telegrams should be avoided;
  - b) that no frequencies are available for the purposes referred to in paragraph 3e and 3f.
- 5. The ad hoc Group submits the attached Recommendation for the consideration of the Working Group.

DRAFT RECOMMENDATION

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

noting

- a) that on small ships, equipped with a single sideband installation, a crystal controlled spot frequency receiver is essential in order to facilitate correct tuning;
- b) that such ships, which make international voyages and communicate with coast stations of another nationality, need to be provided with a considerable number of additional crystals;
- c) that to reduce the number of single sideband receiver crystals required, ensures that the cost of single sideband receivers is kept to an economical level;

considering

- a) that international working frequencies should be assigned to all coast stations for working with ships of another nationality;
- b) that an examination of the Master International Frequency Register has revealed that neither on a world-wide nor on a regional basis any frequencies appear to be available for common use by all coast stations for working with ships of another nationality;

recommends

1. that administrations study this matter at the earliest opportunity with a view to formulating proposals for consideration by the next Administrative Radio Conference competent to deal with the matter;
  2. that, in the meantime, countries should explore the possibility of concluding regional, bilateral or multilateral arrangements to provide common working frequencies for coast stations for working with ship stations of another nationality.
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/85-E  
14 October 1967  
Original : English

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WORKING GROUP 5B

REPORT OF 6204 kc/s AD HOC GROUP TO WG 5B

The 6204 kc/s ad hoc Working Group is unanimously of the opinion that the use of the frequency 6204 kc/s should continue to be as presently indicated in Radio Regulation No. 1353.

B. MADELEY

Chairman





INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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16 October 1967

Original : English/French/  
Spanish

COMMITTEE 4

DRAFT

THIRD REPORT OF COMMITTEE 4

1. The texts in Annex 1, concerning the provisions of Article 32, Section V, of the Radio Regulations mentioned below, have been adopted unanimously by Committee 4.  
  
Nos.: 1145, 1146, 1148, 1148A, 1149, 1150, 1150A, 1150B, 1151 to 1154, 1158 to 1180, 1180A, 1180B, 1181 to 1191, 1191A, 1191B, 1191D and 1192 to 1202.
2. The text in Annex 2, concerning Article 32, Section V, No. 1191C, of the Radio Regulations, has been adopted by a majority. The delegations of the Hungarian People's Republic and of the Union of Soviet Socialist Republics have reserved their right to take the matter to the Plenary Meeting.
3. Draft Resolutions in Annexes 2 and 3 have been unanimously adopted by Committee 4.

F.G. PERRIN

Chairman of Committee 4

Annexes : 3



A N N E X 1

Article 32

NOC

Section V.

Bands between 4 000 and 27 500 kc/s

NOC

A. General provisions

MOD

1145

§ 17. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 1174, 1192 and 1196 shall employ only class A1 emission. In the bands specified in No. 1192, stations may use manual or automatic A1 Morse telegraphy at speeds not exceeding 40 bauds. Survival craft stations may use class A2 or A2H emissions in these bands (see Nos. 994 and 997).

MOD

1146

(2) Mobile stations equipped to operate in the frequency bands authorized to ships for wide-band telegraphy, facsimile and special transmission systems may use any class of emissions provided that such emissions can be contained within the wide-band channels indicated in Appendix 15A. However, manual Morse and telephony are excluded, except for circuit alignment purposes.

MOD

1148

(4) Coast radiotelegraph stations employing single channel class A1 or F1 emission operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall at no time use mean power in excess of the following :

<u>Band</u>	<u>Maximum mean power</u>
4 Mc/s	5 kW
6 Mc/s	5 kW
8 Mc/s	10 kW
12 Mc/s	15 kW
16 Mc/s	15 kW
22 Mc/s	15 kW

- ADD 1148A (5) Coast radiotelegraph stations employing multi-channel telegraph emissions operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall at no time use a mean power in excess of 2.5 kW per 500 c/s bandwidth.
- MOD 1149 § 18. (1) Each of the bands reserved for ship radiotelegraph stations, except for the band 25 070-25 110 kc/s, shall be divided into six parts, beginning at the low frequency end :
- NOC 1150
- ADD 1150A aA) a band of working frequencies for oceanographic data transmissions;
- ADD 1150B aB) a band of working frequencies for ship stations using narrow-band direct-printing telegraph and data systems.
- NOC 1151-1153
- MOD 1154 (2) The bands 25 070-25 082.5 kc/s and 25 082.5-25 110 kc/s are allocated, respectively, for calling and working by ship radiotelegraph stations employing A1 or F1 emissions on ships of all categories. (See No. 224.)
- MOD 1158 (3) The arrangement of the frequencies in the ship radiotelegraph bands is illustrated graphically in Appendix 15A.
- NOC 1159-1172
- MOD 1173 (3) Working frequencies assigned to coast stations using the bands between 4 000 and 27 500 kc/s are included within the following band limits :
- 4 231.5 to 4 361.5 kc/s  
6 344 to 6 512 kc/s  
8 460 to 8 729 kc/s  
12 689.5 to 13 105.5 kc/s  
16 917.5 to 17 255.5 kc/s  
22 372 to 22 622 kc/s (See No. 453.1)

D. Assignment of Frequencies to Mobile Stations

1. Calling Frequencies of Ship Stations

MOD 1174 § 29. (1) The calling frequencies assigned to ship stations are included within the following band limits :

4 178 to 4 187 kc/s  
6 267 to 6 280.5 kc/s  
8 356 to 8 374 kc/s  
12 534 to 12 561 kc/s  
16 712 to 16 748 kc/s  
22 222.5 to 22 267.5 kc/s  
25 070 to 25 082.5 kc/s

MOD 1175 (2) In the band 4 178 to 4 187 kc/s, the calling frequencies are spaced 0.5 kc/s apart. The extreme frequencies assignable are 4 178.5 and 4 186.5 kc/s as indicated in Appendix 15A.

MOD 1176 (3) In each of the other maritime mobile service bands between 4 000 and 18 000 kc/s, the calling frequencies shall be in harmonic relationship with those in the band 4 178 to 4 187 kc/s.

In the bands 22 222.5 to 22 267.5 and 25 070 to 25 082.5 kc/s the spacing of calling frequencies is 2.5 kc/s and 1.5 kc/s respectively. The extreme frequencies assignable are 22 225 and 22 265 kc/s and 25 073.5 and 25 081 kc/s, respectively.

MOD 1177 § 30. The administration to which a ship station is subject shall assign to it a series of calling frequencies including one frequency in each of the bands in which the station is equipped to transmit. Administrations may, however, assign a supplementary series of calling frequencies for use in the event of interference. In the bands between 4 000 and 18 000 kc/s, the frequencies assigned to each ship station shall be in harmonic relationship. Each administration shall take the necessary steps to assign such harmonic series of calling frequencies to ships in accordance with an orderly system of rotation so as to distribute these frequencies uniformly throughout the calling bands. The same system of uniform distribution shall be applied in the assignment of calling frequencies in the bands 22 222.5 to 22 267.5 kc/s and 25 070 to 25 082.5 kc/s.

- MOD 1178 § 31. (1) One calling frequency in each of the calling bands indicated in No. 1174 (except in the 25 Mc/s band) shall be reserved as far as possible for the use of aircraft desiring to communicate with stations of the maritime mobile service. These frequencies are the following : 4 182; 6 273; 8 364; 12 546; 16 728 and 22 245 kc/s.
- NOC 1179
- NOC 2. Working Frequencies of Mobile Stations
- NOC a) Channel Spacing and Assignment of Frequencies
- MOD 1180 § 32. In all bands the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kc/s apart. The frequencies assignable are shown in Appendix 15A.
- ADD 1180A § 32A. In all bands, the frequencies assignable for oceanographic data transmissions are spaced 0.3 kc/s apart. The frequencies assignable are shown in Appendix 15A.
- ADD 1180B § 32B. The working frequencies for ship stations using narrow-band direct-printing telegraph and data systems are spaced 0.5 kc/s apart in the 4, 6 and 8 Mc/s bands and 1.0 kc/s apart in the 12, 16 and 22 Mc/s bands. The frequencies assignable are shown in Appendix 15A.
- MOD 1181 § 33. (1) The working frequencies for high traffic ships in the band 4 172.25 to 4 178 kc/s are so spaced as to provide channels 0.5 kc/s wide, the extreme frequencies assignable being 4 172.5 and 4 177.5 as shown in Appendix 15A.
- MOD 1182 (2) In the band 4 187 to 4 231.5 kc/s, the working frequencies of low traffic ships are spaced 0.5 kc/s apart, the extreme frequencies assignable being 4 187.5 and 4 229 kc/s as indicated in Appendix 15A.
- MOD 1183 § 34. The working frequencies assigned to each ship station in the 6, 8, 12 and 16 Mc/s band shall be harmonically related to those assigned in the 4 Mc/s band, in all cases where such a relationship is provided in Appendix 15A.

- MOD 1184 § 35. In the 22 Mc/s band, which is not in harmonic relationship with the other bands, the frequencies are spaced as follows, as shown in Appendix 15A.
- MOD 1185 a) in the high traffic band, the working frequencies are spaced 2 kc/s apart, the extreme frequencies assignable being 22 187 and 22 221 kc/s;
- MOD 1186 b) in the low traffic band, the working frequencies are spaced 2.5 kc/s apart, the extreme frequencies assignable being 22 270 and 22 370 kc/s.
- MOD 1187 § 36. In the 25 Mc/s band, the frequency separation shall be 1.5 kc/s. The extreme frequencies which may be assigned are, as shown in Appendix 15A : 25 084 and 25 106.5 kc/s.
- NOC b) Working Frequencies for Ship Stations using Wide-band Telegraphy, Facsimile and Special Transmission Systems
- MOD 1188 § 37. The working frequencies assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems are included within the following band limits :
- 4 142.5 to 4 162.5 kc/s  
6 216.5 to 6 244.5 kc/s  
8 288 to 8 328 kc/s  
12 431.5 to 12 479.5 kc/s  
16 576 to 16 636.5 kc/s  
22 112 to 22 160.5 kc/s
- MOD 1189 § 38. (1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems, one or more series of working frequencies designated in Appendix 15A. The total number of series assigned to each ship shall be determined by traffic requirements.
- NOC 1190

- MOD 1191 (3) However, within the limits of the bands given in No. 1188 administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in Appendix 15A. Nevertheless, administrations shall take into account, as far as possible, the provisions of Appendix 15A concerning channelling and 4 kc/s spacing.
- ADD bA) Working Frequencies for Oceanographic Data Stations
- ADD 1191A § 38A. Frequencies assignable to ship stations for oceanographic data transmissions are included within the following band limits :
- |    |       |    |    |       |      |
|----|-------|----|----|-------|------|
| 4  | 162.5 | to | 4  | 166   | kc/s |
| 6  | 244.5 | to | 6  | 248   | kc/s |
| 8  | 328   | to | 8  | 331.5 | kc/s |
| 12 | 479.5 | to | 12 | 483   | kc/s |
| 16 | 636.5 | to | 16 | 640   | kc/s |
| 22 | 160.5 | to | 22 | 164   | kc/s |
- ADD 1191B § 38B. The frequency bands in 1191A may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.
- ADD 1191C § 38C.(1) Each administration may assign to each type of station in No. 1191A and 1191B under its jurisdiction one or more of the assignable frequencies designated in Appendix 15A.
- bB) Working Frequencies for Ship Stations using Narrow-band Direct-printing Telegraph and Data Systems
- ADD 1191D § 38D. Working frequencies assigned to ships using narrow-band direct-printing telegraph and data systems are included within the following band limits :
- |    |       |    |    |        |      |
|----|-------|----|----|--------|------|
| 4  | 166   | to | 4  | 172.25 | kc/s |
| 6  | 248   | to | 6  | 258.25 | kc/s |
| 8  | 331.5 | to | 8  | 341.75 | kc/s |
| 12 | 483   | to | 12 | 503.25 | kc/s |
| 16 | 640   | to | 16 | 660.5  | kc/s |
| 22 | 164   | to | 22 | 184.5  | kc/s |

c) Working Frequencies for High Traffic Ships

MOD 1192 § 39. The working frequencies assigned to high traffic ships are included within the following band limits :

4 172.25 to 4 178 kc/s  
6 258.25 to 6 267 kc/s  
8 341.75 to 8 356 kc/s  
12 503.25 to 12 534 kc/s  
16 660.5 to 16 712 kc/s  
22 184.5 to 22 222.5 kc/s

MOD 1193 § 40. (1) Each administration shall assign to each high traffic ship within its jurisdiction two or more series of working frequencies shown in Appendix 15A vessels of this class. The total number of series assigned to each ship should be determined by the anticipated traffic volume.

NOC 1194-1195

d) Working Frequencies for Low Traffic Ships

MOD 1196 § 42. Working frequencies assigned to low traffic ships shall be included within the following band limits :

4 187 to 4 231.5 kc/s  
6 280.5 to 6 344 kc/s  
8 374 to 8 460 kc/s  
12 561 to 12 689.5 kc/s  
16 748 to 16 917.5 kc/s  
22 267.5 to 22 372 kc/s

MOD 1197 § 43. (1) In each of the low traffic bands, the assignable frequencies are divided into two equal Groups A and B, Group A comprising the frequencies in the lower half of the band and Group B the frequencies in the upper half (see Appendix 15A).

MOD 1198 (2) Each administration shall assign to each of its low traffic ships two series of working frequencies, one in Group A and the other in Group B. In each band, the two working frequencies are separated, as far as practicable, by half the width of the assignable band



MOD 1199

(3) For example, if the frequency assigned to a ship station is the lowest frequency assignable in Group A, the other should be the lowest frequency assignable in Group B. If one of the frequencies assigned is the second frequency from the low frequency end of Group A, then the other frequency assigned should be the second frequency from the low frequency end of Group B, etc.

NOC 1200

NOC 1201

MOD 1202

The working frequencies in the bands specified in No. 1191D for narrow-band direct-printing telegraph and data systems, and in the band 25 082.5 to 25 110 kc/s may be assigned to ships of all categories.

A N N E X

DRAFT RESOLUTION No. ....

Relating to the establishment of a coordinated world-wide system for the collection of data relating to oceanography

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) the expressed desire for the establishment of a coordinated world-wide system for the collection of data relating to oceanography;
- b) that a frequency band has been designated in each of the six high frequency bands allocated exclusively to the maritime mobile service for use in the collection of data relating to oceanography in accordance with Appendix 15A revised;
- c) that use of these frequencies with maximum effectiveness is dependent upon cooperation and coordination among administrations;
- d) that certain administrations expressed the desire that a coordinated world-wide system for the transmission of data relating to oceanography be established on the basis of a coordinated plan in the bands allocated by this Conference;
- e) that, however, certain other administrations wish to use in the near future stations for the collection of data relating to oceanography within the framework of decisions taken on this matter by the present Conference;
- f) that, consequently, a coordinated programme for the collection of data relating to oceanography should be established using the frequency bands referred to in b) above; and
- g) that the Intergovernmental Oceanographic Commission (I.O.C.) and the World Meteorological Organization (W.M.O.) have been in consultation since 1962 with respect to cooperative efforts in the collection of data relating to oceanography (e.g. the W.M.O./I.O.C. Panel of Experts on Coordination of Requirements, Geneva, 19-21 July 1967);

resolves

1. that the I.O.C. and W.M.O. be invited to develop jointly, in consultation with the I.F.R.B., and in consultation with I.T.U. administrations as appropriate, a coordinated plan designed to meet existing and future requirements of all interested I.T.U. Member countries, for use by stations in the collection of data relating to oceanography in a world-wide system, within the framework of provisions made by the W.A.R.C. for such a system,
  - this plan to include the geographical distribution of oceanographic stations, their system of operation, the deployment of frequencies in the system and the manner in which oceanographic information is to be transmitted;
2. that administrations be encouraged to assign frequencies in conformity with the plan and the recommendations of I.O.C. and W.M.O., for the portion of the world-wide system over which they have jurisdiction;
3. that the I.O.C. and W.M.O. be invited further to assume jointly the responsibility, in consultation with the I.F.R.B., for keeping such a plan current, in the light of changing requirements for data relating to oceanography; and
4. that the plan developed under points 1 and 3 above shall be considered at the next Administrative Radio Conference competent to deal with matters relative to the maritime mobile service, to determine what, if any, changes appear necessary to improve its effectiveness.

A N N E X 3

DRAFT RESOLUTION No. ....

Relating to the manner in which the I.F.R.B.  
shall treat notifications dealing with  
frequency assignments to oceanographic stations

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that the Conference had adopted Resolution No. ....,  
relating to the establishment of a coordinated world-wide system  
for the collection of data relating to oceanography; and
- b) that the I.F.R.B. would require instructions relative to the  
notification and registration of assignments to oceanographic  
stations;

resolves

that the I.F.R.B. be instructed to accept for registration  
only such notifications, submitted by administrations in  
accordance with Nos. 486 and 487, as pertain to transmitting and  
receiving oceanographic stations which are land based and which  
are in conformity with Resolution No. ...., referred to in  
a) above. Such notifications shall be treated by the Board in  
accordance with No. 505 of the Regulations. These entries in  
the M.I.F.R. shall not prejudice any decisions to be taken by  
the next Administrative Radio Conference competent to deal with  
the maritime mobile service.

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Note to the Editorial Committee

Considering a) and resoluteive text refer to Resolution in Annex 2  
to this Document.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/87-E  
16 October 1967  
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WORKING GROUP 5C

TENTATIVE ADVANCE OF A DRAFT SECOND  
REPORT OF WORKING GROUP 5C TO COMMITTEE 5

1. Modification of Appendix 19

1.1 The Working Group decided to make a reference to draft resolution (in Annex to Document No. 242)

ADD under the title : "(See Resolution 7. .... 7)" and to ADD at the end of the Appendix 19, a new paragraph 5.

ADD "5. For short-distance radiotelephone traffic it must be possible to reduce the power to 1 Watt or less."

1.2 The Working Group decided that the technical characteristics for equipment with 25 kc/s channel spacing should conform with the standards laid down in a new Appendix 19A (see Annex I to this report).

1.3 The Working Group was in favour to have two appendices, leaving it to the Editorial Committee to combine them if deemed necessary.

2. Modification of Appendix 3

As a consequence of the modification of Appendix 19, the relevant tolerances in Appendix 3 must be changed (see Annex II to this report).

3. Further amendment to Appendix 18

With respect to the use of frequencies for shipping on inland waterways, the following note shall be added :

- h) the frequencies in this table may also be used for shipping on inland waterways in the conditions specified in No. 287 of Radio Regulations.



4. Modification of Article 5

As a consequence, at the end of the present text of No. 287 of Radio Regulations, the following text must be added :

"However, the frequency bands in which priority is given to the maritime mobile service, may be used for mobile radiotelephone communications on inland waterways, taking into account current usage and existing agreements between administrations, and subject to further concurrence between administrations concerned and those having services operating in accordance with the table, which may be affected."

5. Article 1

The following amendment and addition of definition have been adopted by the Working Group.

No. 37

The definition of Port Operations Service shall be amended as follows :

"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 person. However such messages which can be catered for by public correspondence nature shall be excluded."

No. 38A

. Insert a new definition for Port Station :

"Port Station: A coast station in the Port Operations Services".

E. FROMMER

Chairman of Working Group 5C

Annexes: 2

A N N E X I

APPENDIX 19A

Technical characteristics for transmitters and  
receivers using 25 kc/s channeling in the  
maritime mobile service in the band 156 - 174 Mc/s.

(See Articles 28 and 35 and Appendix 18A and  
Resolution [...])

1. Only frequency modulation with a preemphasis of 6 db/octave (phase modulation) shall be used.
2. The frequency deviation corresponding to 100% modulation shall approach 5 kc/s as nearly as practicable. In no event shall the frequency deviation exceed + 5 kc/s. However, it is recognized that under certain conditions, the percentage modulation may be decreased to avoid adjacent channel interference.
3. The frequency tolerance of the transmitter for coast and ship stations shall not exceed :  $10 \cdot 10^{-6}$
4. When transmitting on any of the frequencies designated in Table in Appendix 18, the emission of each station shall be polarized vertically at the source.
5. The audio frequency bandwidth shall be limited to 3000 c/s.
6. For short-distance radiotelephone traffic it must be possible to reduce the power to 1 Watt or less.

A N N E X II

APPENDIX 3

Band : 100 to 470 Mc/s		
.....		
2. Land stations :		
a) Coast stations	100	20 h)
b) .....		
c) .....		
.....		
3. Mobile stations :		
a) Ship stations	100	20 h)
b) Survival Craft stations	100 d)	50 d)
c) Aircraft stations	100	50
d) Land mobile stations :		
- power 5 W or less	100	50
- power above 5 W	100	20

Footnotes to the table of frequency tolerances

ADD h) the tolerance of 10 shall be applicable to all new transmitters installed after 1.1.73; however this tolerance of 10 must also be reached by all old transmitters before the 1.1.83.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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WORKING GROUP 5A

REPORT BY AD HOC WORKING GROUP 5A TO WORKING GROUP 5A

Participants : Delegations of the United States of America, France and Italy.

(Reference document : DT/71 - Annex III, paragraphs 3, 4 and 5)

Having examined Annex III to Document No. DT/71, and on the basis of the discussions among the members of Working Group 5A, the ad hoc Working Group suggests the following amendments :

- a) Delete Points 3, 4 and 5 of Annex III to Document No. DT/71;
- b) In Article 7 of the Radio Regulations, insert the new paragraph 445A shown in Annex 1;
- c) Include in a resolution, the provisions concerning the transition to SSB technique for radiotelephone stations in the maritime mobile service.

A draft of this resolution appears in Annex 2.

A. PETTI  
Chairman

Annexes : 2



A N N E X . 1

DRAFT AMENDMENT TO ARTICLE 7

ADD

445A

§ 11 bis (1). The frequencies assigned in single sideband channels / to stations in the maritime mobile service which provide a service between coast stations and ship stations / shall be 1400 c/s higher than the carrier frequency.

---

A N N E X 2

## DRAFT RESOLUTION No. ...

Relating to the Conversion to Single Sideband Technique of  
Stations in the Maritime Mobile Service operating in  
Radiotelephony in the Bands between 1 605 and 4 000 kc/s

The Maritime Conference, Geneva 1967,

considering

1. that radiotelephone stations in the Maritime Mobile Service operating in radiotelephony with double sideband in the bands between 1 605 and 4 000 kc/s use a bandwidth [of the order] of 6 kc/s;
2. that these stations will have in future to use single sideband technique;
3. that during the period of conversion to single sideband technique, every precaution must be taken to avoid harmful interference between stations operating with double sideband and those operating with single sideband;

resolves

- a) that the transition to single sideband technique in the stations referred to in considerandum 1 above [which provide a service between coast stations and ship stations] shall be made in accordance with the following provisions :
  - a) 1 - the carrier frequency of the single sideband channel in the upper part of the previous double sideband channel shall be the same as the carrier frequency of that channel;
  - a) 2 - the carrier frequency of the single sideband channel in the lower part of the previous double sideband channel shall be 3 kc/s lower than the carrier frequency of that channel.
- b) emissions in class A3H shall not be used on single sideband channels derived from the lower portion of previous double sideband channels.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING GROUP 5A

FOR WORKING GROUP 5A

Utilization of the two new channels in the  
band 2170 - 2194 kc/s

Some discussion on this subject took place at the sixth meeting of Committee 5 on 14 October 1967.

It was decided :

1. The carrier frequency of the lower channel shall be on 2170.5 kc/s. Thus, the assigned frequency will be 2171.9 kc/s.
2. The carrier frequency of the higher channel shall be on 2191.0 kc/s. Thus, the assigned frequency will be 2192.4 kc/s.

With regard to utilization of carrier frequency 2170.5 kc/s it appeared from the discussion that it would not be possible to obtain common ~~worldwide~~ use of this channel. The utilization was then considered on a regional basis.

Region 1

There was general agreement for using this channel for calling purposes by coast stations with class A3A and A3J emissions. When necessary, coast stations would use this channel also for selective calling with class A2H emission. Exceptionally, coast stations might use the same channel with class A3H emission for safety messages.

It was not made clear whether Region 1 countries could accept a power limitation of 400 W peak envelope power for coast stations using this channel.

Regions 2 and 3

There was general agreement for using this channel for shore-ship and intership communications with class A3A and A3J emissions and a power limitation of 400 W PEP.

However, some Region 3 countries favoured the use of this channel as a supplementary calling channel without specifying any additional class of emission.



The Delegation of Australia was in favour of indicating the channel for use by the maritime mobile service, without any further specification.

There was not time to discuss the utilization of the channel with carrier frequency 2191.0 kc/s.

P. MORTENSEN  
Chairman Committee 5

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

Document No. DT/90-E  
16 October 1967  
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COMMITTEE 4

The attached is a summary of decisions taken by Committee 4 and by the ad hoc Groups dealing with proposals concerning selective calling devices and position-indicating radiobeacons.

They are presented for approval of Committee 4.

F.G. PERRIN  
Chairman of Committee 4

Annex : 1



A N N E X

Committee 4 considered Document No. 206 and the following amendments were agreed:

1. Emergency position-indicating radiobeacons:

- 1.1 that the technical characteristics appearing on page 11 be adopted as Appendix 20A to the Radio Regulations;
- 1.2 that, on page 8 between 1476C and 1476D, the word "or" be deleted;
- 1.3 that No. 1476D be deleted;

An ad hoc Group established to give the matter further consideration has agreed upon the following:

- |     |       |  |
|-----|-------|--|
| ADD | 1476D | b) For very high frequencies, i.e. 121.5 Mc/s and/or 243 Mc/s, the signal characteristics shall be consistent with those referred to in Resolution No..... of the World Administrative Radio Conference, Geneva, 1967. (See Annex 1.)      |
| ADD | 1476L | (9) Equipment designed to transmit emergency position-indicating radiobeacon signals on very high frequencies shall be consistent with those referred to in Resolution No..... of the World Administrative Radio Conference, Geneva, 1967. |

2. Selective calling devices:

- 2.1 that the technical characteristics as proposed by the United Kingdom appearing on pages 658-662 of Document No. DT/2 be adopted as Appendix 20C to the Radio Regulations;

The Administrations of Australia, Canada, Japan, Republic of Korea and the United States of America stated that they could not adopt these technical characteristics and requested that the following statement be recorded :

Statement

The Administrations of Canada and the United States of America stated that frequencies in the 4 and 6 Mc/s bands would be used in Region 2 with a power limitation of 1 kW Pp for simplex voice calling and working purposes (coast and ship stations), if other countries in Region 2 agree. The delegate of Japan stated that all of the calling frequencies would be used in Japan for simplex voice calling and working purposes (coast and ship stations).

2.2 that the medium and very high frequencies to be used for such devices be 500 kc/s, 2170.5 kc/s,\* 2182 kc/s and 156.8 Mc/s;

2.3 by a majority of a joint meeting of Committees 4 and 5:

2.3.1 that two frequencies in each high frequency radiotelephone band be designated as calling frequencies, one for ship stations and one for coast stations, to be used for voice calling and selective calling. The precise frequencies would be selected by an ad hoc Group of Committee 5.

2.4 Proposed additions and modification to the Radio Regulations:

MOD 1147 (3) Except as provided for in No. 1352B, coast radio-telegraph stations operating in the maritime mobile exclusive bands between 4000 and 27 500 kc/s shall not use Type 2 emissions.

ADD 1352A In the bands authorized for radiotelephony, coast stations may use, for calling, one of the following frequencies:

4 --- kc/s  
6 --- kc/s  
8 --- kc/s  
13 --- kc/s  
17 --- kc/s and  
22 --- kc/s

ADD 1352B Coast telegraph stations employing selective calling systems also may use the frequencies in No. 1352A for calling purposes.

---

\* At the latest, eight years after the date of implementation of the revised Radio Regulations, this frequency will replace 2182 kc/s for selective calling.



Annex

RESOLUTION No. ...

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that emergency position-indicating radiobeacons operating on 121.5 and 243 Mc/s are intended to facilitate search and rescue operations;
- b) that frequencies 121.5 and 243 Mc/s are in common use by aircraft engaged in search and rescue operations;
- c) that the International Civil Aviation Organization (I.C.A.O.) has established recommended signal characteristics and technical specifications for aircraft equipment operating on 121.5 and 243 Mc/s;

resolves

that administrations authorizing the use of emergency position indicating radiobeacons on 121.5 and 243 Mc/s should ensure that such radiobeacons comply with the relevant Recommendations and standards of the I.C.A.O. and the C.C.I.R.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

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COMMITTEE 5

REFERENCE DOCUMENT No. 242, PARAGRAPH 8 OF THE ANNEX

During the Sixth Meeting of Committee 5 where Document No. 242 was discussed and approved, sub-paragraph 8 c) of the Annex was deferred in order to study possible improvement of the text of this sub-paragraph. The original text and an alternative text are given below :

Original text

- c) date on which modification of coast station receivers to meet selectivity requirements for a channel spacing of 25 kc/s may commence ..... 1.1.1973.

Alternative text

- c) date up to which coast stations should maintain capability to receive transmissions with  $\pm 15$  kc/s peak deviation, and after which modification of such receivers to meet selectivity requirements for a channel spacing of 25 kc/s should take place as quickly as practicable ..... 1.1.1973.

Chairman of Committee 5 :

P. MORTENSEN



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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16 October 1967

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WORKING GROUP 5C

REPORT OF THE AD HOC WORKING GROUP 5C  
ON REVISION TO APPENDIX 18

REFERENCE - PROPOSAL NUMBER G/112 (55)

Participants :

Canada

Denmark

United States of America

France

Norway

Federal Republic of Germany

United Kingdom

Sweden

Switzerland

Union of Soviet Socialist Republics

International Chamber of Shipping (I.C.S.)

Comité International Radio Maritime (C.I.R.M.)

Terms of Reference

To prepare a new plan of frequency allocations in order to replace Appendix 18, in due time, on the basis of 25 kc/s channel spacing.

The Ad Hoc Group, utilizing as on initial basis for discussion, Proposal number G/112 (55) drew up a new plan to replace Appendix 18. The new plan to replace Appendix 18 becomes Appendix 18A (Annex I).



Notes f) and g) to the Table of Appendix 18 are deleted in the new Appendix. It was agreed that notes a) to e), inclusive, to Appendix 18 should be retained in Appendix 18A, and that the substance of notes a) to d) inclusive should be included in Article 35 (Annex III). A new note to Appendix 18A, note f), relating to the use of channels 60 and 88 is added to the notes to that Table. The notes now applicable to Appendix 18A form Annex II.

A new proposal relating to the use of channels 15 and 17 with  $\pm 5$  kc/s deviation and limited power may be introduced at the meeting of Working Group 5C. The Ad Hoc Group took note of the necessity to limit transmitter power on channels 15 and 17 in order to avoid reduction of the sensitivity of receivers tuned to channel 16.

T.E. DEVEY  
Chairman

Annexes : 3

A N N E X IWORKING GROUP 5C AD HOCAPPENDIX 18A

Table of transmitting frequencies for the band 156-174 Mc/s  
for radiotelephony in the international maritime mobile service\*

(See Article 35)

Channel designators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence
	Ship Stations	Coast Stations		Single frequency	Two frequency	
*** 60	156.025	160.625			17	25
01	156.050**	160.650			10	8
61	156.075	160.675			23	19
02	156.100	160.700			8	10
62	156.125	160.725			20	22
03	156.150**	160.750			9	9
63	156.175**	160.775			18	24
04	156.200	160.800			11	7
64	156.225	160.825			22	20
05	156.250	160.850			6	12
65	156.275	160.875			21	21
06	156.300		(1)			
66	156.325	160.925			19	23
07	156.350	160.950			7	11
67	156.375	156.375	10	10		
08	156.400		(2)			
68	156.425	156.425		6		
09	156.450	156.450	5	5		
69	156.475	156.475	9	11		
10	156.500	156.500	3	9		
70	156.525		6			
11	156.550	156.550		3		

\* For assistance in understanding the Table, see Notes a) to f) below.

\*\* See Note e)

\*\*\* See Note f)

Channel designators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence
	Ship Stations	Coast Stations		Single frequency	Two frequency	
71	156.575	156.575		7		
12	156.600	156.600		①		
72	156.625		7			
13	156.650	156.650	4	4		
73	156.675	156.675	8	12		
14	156.700	156.700		②		
74	156.725	156.725		8		
15	156.750	156.750	12	14		
75	Guard band 156.7625-156.7825 Mc/s					
16	156.800	156.800	CALLING AND SAFETY			
76	Guard band 156.8125-156.8375 Mc/s					
17	156.850	156.850	13	13		
77	156.875		11			
18	156.900	161.500			3	
78	156.925	161.525			12	
19	156.950	161.550			4	
79	156.975	161.575			14	
20	157.000	161.600			①	
80	157.025	161.625			16	
21	157.050	156.050** or 161.650			5	
81	157.075	161.675			15	
22	157.100	161.700			②	
82	157.125	161.725			13	26
23	157.150	156.150** or 161.750				5
83	157.175	156.175** or 161.775				16
24	157.200	161.800				4
84	157.225	161.825			24	13

\*\* See Note e)

Channel designators	Transmitting Frequencies (Mc/s)		Inter- ship	Port operations		Public corres- pondence
	Ship Stations	Coast Stations		Single frequency	Two frequency	
25	157.250	161.850				③
85	157.275	161.875				17
26	157.300	161.900				①
86	157.325	161.925				15
27	157.350	161.950				②
87	157.375	161.975				14
28	157.400	162.000				6
*** 88	157.425	162.025				18

---

\*\*\* See Note f)

A N N E X II

NOTES REFERRING TO THE TABLE

(of App. 18A)

a)

b)

c)

d)

e)

unchanged (identical to notes to Table in Appendix 18)

f)

The channels 60 and 88 can be used subject to special agreements between interested and affected administrations.



A N N E X III

- ADD 1376A (1) bis In assigning frequencies to stations in the maritime mobile service, administrations shall ensure that :
- 1376B (1) ter a) the normal sequence in which channels should be taken into use by mobile stations is in accordance with the figures in the column in Appendix 18A headed "Intership";
- 1376C (1) quater b) the normal sequence in which channels should be taken into use by each coast station is in accordance with the figures in the column in Appendix 18A headed "Port Operations" and "Public Correspondence";
- 1376D (1) quinques c) during ice seasons, ship stations shall avoid harmful interference to communications on 156.300 Mc/s (Channel 16, Appendix 18A) between icebreakers and assisted ships;
- 1376E (1) sexies d) administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures in a circle in Appendix 18A can obtain a reasonably adequate use of available services.
-

INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

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COMMITTEE 4

REPORT OF COMMITTEE 4 AD HOC GROUP SET UP TO CONSIDER  
THE SHIFT OF COAST RADIOTELEGRAPH STATION FREQUENCY  
ASSIGNMENTS

---

The attached Resolution contains the conclusions reached by the  
Group.

F. THORNE

Chairman

Annex : 1



A N N E X

DRAFT RESOLUTION-No. ...

Relating to the Transfer of certain Frequency Assignments  
for Coast Radiotelegraph Stations in the Bands Exclusively  
Allocated to the Maritime Mobile Service in the Bands between  
4000 and 23 000 kc/s

The Maritime World Administrative Radio Conference, Geneva, 1967,  
considering

- a) that the frequency band limits for radiotelegraph coast  
stations have been modified as a result of the revision of  
appendices 15 and 17;
- b) that the new limits of the frequency bands for coast radio-  
telegraph stations are :
- |        |   |        |      |
|--------|---|--------|------|
| 4231   | - | 4361   | kc/s |
| 6345.5 | - | 6513.5 | kc/s |
| 8459.5 | - | 8728.5 | kc/s |
| 12689  | - | 13105  | kc/s |
| 16917  | - | 17255  | kc/s |
| 22374  | - | 22624  | kc/s |

recognizing

that re-arrangement of the frequency bands allocated to the  
maritime mobile service should be carried out in several stages  
and that the transfer of certain coast radiotelegraph station  
frequency assignments conditions any subsequent arrangements and  
should therefore be one of the first phases of the re-arrangement;

resolves

1. that the assignments made to coast radiotelegraph stations entered in the Master International Frequency Register on the date of entry into force of the provisions contained in the Final Acts of this Conference shall be transferred as follows :
  - any frequency assignment f in the 4360 - 4368 kc/s band shall be transferred to the frequency f - 129 kc/s;
  - any frequency assignment f in the 6512.5 - 6525 kc/s band shall be transferred to the frequency f - 168 kc/s;
  - any frequency assignment f in the 8730 - 8745 kc/s band shall be transferred to the frequency f - 268 kc/s;
  - any frequency assignment f in the 13 110 - 13 130 kc/s band shall be transferred to the frequency f - 418 kc/s;
  - any frequency assignment f in the 17 255 - 17 290 kc/s band shall be transferred to the frequency f - 336 kc/s;
  - any frequency assignment f in the 22 625.5 - 22 650 kc/s band shall be transferred to the frequency f - 252 kc/s
2. that by ..... the use of low traffic ships of frequencies above 4229 kc/s, 6343.5 kc/s, 8458 kc/s, 12 687 kc/s, 16 916 kc/s and 22 370 kc/s shall cease
3. At x hours GMT on \* administrations shall change the transmitting frequencies of their radiotelegraph stations in accordance with the rules mentioned above and shall notify the I.F.R.B. of the changes made.

---

\* Date to be fixed by the Conference; it should be as soon as possible after the date on which the Final Acts of the Conference come into force.

4.            Provided no characteristic other than the designation of the transmitting frequency has been changed, the I.F.R.B. shall enter the change requested in the Master International Frequency Register. The other details of the entry - in particular the dates given in column 2 - shall not be altered.
5.            Three months after \*            the I.F.R.B. shall send to any administrations which have not reported the transfer of frequencies assigned to their coast radiotelegraph stations an extract from the Master International Frequency Register showing the entries contained therein opposite their name, relating to stations of this category, accompanied by a reminder of the provisions of this resolution.
6.            Two months after the despatch of these extracts, the I.F.R.B. shall re-examine any assignments contained in the Master Record in respect of which a change making the assignments in question conform with the present resolution has not been notified by the countries concerned; this re-examination shall be made as though the notification appearing in the Master Register had been sent to the I.F.R.B. on the date of the examination.

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\* Date to be fixed by the Conference; it should be as soon as possible after the date on which the Final Acts of the Conference come into force.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/94-E  
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WORKING GROUP 6A

SUPPLEMENTARY REPORT TO WORKING GROUP 6A

(submitted by the U.S.A. at the request of W.G. 6A)

ADD 1258A However, a brief exchange of traffic 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.

Reasons :

To recognize present practice and include such practice in Article 33, which deals with procedure.

ADD 1258B Stations hearing a transmission concerning the safety of navigation shall listen to the message until they are satisfied that the message is of no concern to them. They shall not make any transmission likely to interfere with the message.

Reasons :

This new provision is based upon present RR 1495. When the procedure of No. 1258 is followed, transmissions concerning the safety of navigation will take place on an intership frequency according to the sequence specified in footnote a) of Appendix 18. Intership frequencies are available to all ships and will be used for many purposes other than safety of navigation. Consequently, it is necessary to furnish the same caveat and protection for safety of navigation transmissions as is now contained in No. 1495 for "safety" messages.

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Document No. DT/79, page 2 refers.



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/95-E  
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WORKING GROUP 5B

DRAFT

## FIFTH REPORT BY WORKING GROUP 5B TO COMMITTEE 5

### I. Timetable for the transition to SSB in the bands between 4 000 and 23 000 kc/s

The Working Group decided that the conversion to SSB technique should be scheduled as follows:

1. It decided (unanimously) that, as from 1 January 1972, new installations on board ships should consist solely of SSB equipment, but that administrations should try to avoid installing new DSB equipment on board ships from the time that the new Regulations come into force.

2. Coast stations should cease DSB emissions entirely as from 1 January 1972. Views on this point were divided in the Working Group; two successive soundings of opinion produced the following results:

a) 32 administrations could accept the date 1 January 1972;  
18 administrations were opposed to that date;  
1 administration abstained.

b) 20 administrations could accept the date 1 January 1975;  
28 administrations were opposed to that date.  
5 administrations abstained.

3. It was decided that from 1 January 1978, emissions in Class A3 and A3H should completely cease. This decision was the outcome of a consultation which showed that:

44 administrations were in favour of that date;  
7 administrations were opposed to it;  
5 administrations abstained.



4. It was moreover agreed that the dates of 1 January 1972 and 1 January 1978 should be mentioned in all the numbers of the Regulations where it was necessary and, further, that these provisions would be the subject of a resolution, the text of which appears in Annex I.

II. Use of class of emission A3B

When considering the second report of Working Group 5B, Committee 5 asked for a resolution to be drafted on the question of the use of Class A3B.

The text of that resolution, as adopted by the Working Group, is contained in Annex II.

J. BES

Chairman

Annexes : 2



A N N E X I

DRAFT RESOLUTION No. ...

Relating to the Use of Single Sideband Technique in the  
Maritime Mobile Service Bands between 4 000 and 23 000 kc/s

The Administrative Radio Conference to deal with matters  
relating to the Maritime Mobile Service, Geneva 1967,

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 relieving the pressure on the bands between 4 and 27.5 Mc/s, Geneva 1963;
- c) the desirability of replacing double sideband emissions by single sideband emissions as rapidly as possible in the maritime mobile service bands between 4 000 and 23 000 kc/s;

resolves that

unless otherwise specified in the Radio Regulations, Geneva 1967, or in any decision concerning the use of class of emission A3B which the Conference may take in Recommendation No. 230, radiotelephone stations in the maritime mobile service operating in the bands between 4 000 and 23 000 kc/s shall comply with the conditions set out in the following provisions :

1. As from 1 January 1972, any installation made in ship stations shall consist solely of single sideband equipment. However, Administrations shall endeavour to avoid installing new double sideband equipment in those stations from the time that the Radio Regulations, Geneva 1967, come into force.
2. As from 1 January 1972, coast stations shall cease all double sideband emissions.
3. Until 1 January 1978, stations equipped with single sideband equipment shall be permitted to use Class A3H emissions in addition to Class A3A and A3J emissions.
4. As from 1 January 1978 Class A3A and A3J emissions only shall be authorized.

further resolves

that Recommendation No. 28 of the Administrative Radio Conference, Geneva 1959, is abrogated.

---

A N N E X E II

DRAFT RESOLUTION

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

The World Administrative Radio Conference to deal with matters  
relating to the Maritime Mobile Service (Geneva, 1967),

considering

- a) that certain administrations are at present using Class A3B emissions, in accordance with the provisions of Appendix 17, to the Radio Regulations, Geneva (1959) for radiotelephone communications with ships;
- b) that difficulties may arise from the use of this class of emission when the new allotment plan is prepared by the conference which is the subject of Recommendation No. Document No. 230;

resolves

- 1. that, as an exception, the use of Class A3B emissions, in addition to normal SSB emissions, may continue to be authorized, subject to special arrangement between administrations concerned up to the date when the new allotment plan enters into force;
- 2. that the next Conference shall consider whether Class A3B emissions should be maintained after that date.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING PARTY 5B

NEW WORDING OF NUMBER 1351A

ADD 1351A § 2ter.(1) Unless otherwise specified in the present Regulations (see Nos. ....), the classes of emission to be used in the bands between 4000 and 23 000 kc/s shall be

1) A3 or

2) A3H, A3A and A3J<sup>1</sup>

For the single sideband mode of operation, upper sideband shall be used /with a necessary bandwidth not exceeding 2.8 kc/s/.

However, after 1 January 1972 class A3 emission shall no longer be authorized for coast stations, and after 1 January 1978 class A3H emission for coast stations and class A3 and A3H emissions for ship stations shall no longer be authorized.

ADD 1351A

<sup>1</sup> For use of class of emission A3B, see Resolution No. /Document No. DT/.../



# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

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WORKING GROUP 5A

## DRAFT SEVENTH REPORT OF WORKING GROUP 5A TO COMMITTEE 5

1. Designation of common frequencies in the MF bands for use by the radiotelephone coast stations for their communications with ships of other nationality

The Working Group considered the report of the ad hoc group it had set up to study the proposal HOL/183 (37) concerning a new paragraph No. 1336A to be inserted in the Radio Regulations to the effect that some specific frequencies should be designated for common use by radiotelephone coast stations for their communications with ships of other nationality. However, the ad hoc group, after having examined the Master International Frequency Register, concluded that it was not possible, for the time being, to designate such frequencies. Consequently, the Working Group 5A adopted a draft recommendation to the effect that proposals should be made by the administrations to the next administrative radio conference and that, in the meantime, such frequencies should be used according to special or regional arrangements. This draft recommendation appears in Annex.

2. Proposal concerning the continuation of DSB mode of operation after the transition period on small fishing ship using one single frequency for intership communications with low power  
(Document No. 248)

This proposal was not seconded. The Working Group was of the opinion that such operations should be made under the provisions of No. 115 of the Radio Regulations.

P. AAKERLIND  
Chairman

Annex : 1



A N N E X

DRAFT RECOMMENDATION

Relating to the Designation of Common Frequencies in the MF Bands for Use by the Coast Radiotelephone Stations for their Communications with Ships of Other Nationality

The World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967),

noting

- a) that on small ships, equipped with a single sideband installation, a crystal controlled spot frequency receiver is essential in order to facilitate correct tuning;
- b) that such ships, which make international voyages and communicate with coast stations of another nationality, need to be provided with a considerable number of additional crystals;
- c) that to reduce the number of single sideband receiver crystals required, ensures that the cost of single sideband receivers is kept to an economical level;

considering

- a) that international working frequencies should be assigned to all coast stations for working with ships of another nationality such as use of these frequencies not precluding the possibility of using them also for national purposes;
- b) that an examination of the Master International Frequency Register has revealed that neither on a world-wide nor on a regional basis any frequencies appear to be available for common use by all coast stations for working with ships of another nationality;

recommends

1.           that administrations study this matter at the earliest opportunity with a view to formulating proposals for consideration by the next administrative radio conference competent to deal with the matter;
  
  2.           that, in the meantime, countries should explore the possibility of concluding regional, bilateral or multilateral arrangements to provide common working frequencies for coast stations for working with ship stations of another nationality.
-

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/98-E

17 October 1967

Original : English

## COMMITTEE 5

### DRAFT

#### SECOND REPORT OF COMMITTEE 5

1. The attached texts, which concern Nos. 985, 986, 987 and 996 of the Radio Regulations have been generally agreed upon by Committee 5.

2. Concerning No. 992 of the Radio Regulations, the part of the text considered by Committee 5 was modified and agreed to read :

Doc. 207

"or, on the carrier frequency 2182 kc/s, transmitting class A3 or A3H emissions and receiving class A3 and A3H emissions."

(The drafting of the first part of this number has been dealt with by Committee 4.)

(Reference is made to Documents Nos. 209 and 231.)

3. The attached texts also include Nos. 1319, 1321, 1321A, 1322, 1322A, 1322B, 1323, 1324, 1325 and 1326.

Doc. 199

4. Concerning No. 1320 of the Radio Regulations a proposal was considered to delete this paragraph since the same provision was given in more general terms in No. 951 of the Radio Regulations. However, the Committee felt that this decision should be left to Committee 7 in connection with its study of the advisability of rearranging those parts of the Radio Regulations relating to the maritime mobile service. Committee 5 was of the opinion that this provision should be included for information in any manual or other extract of the Radio Regulations that might be published for use by radio operators in the maritime mobile service.

P. MORTENSEN

Chairman of Committee 5

Annexes : 2





A N N E X I

Article 28

.....

MOD 985 b) send in addition class :

i) A3 or

ii) A3H, A3A and A3J<sup>1</sup>

emissions on at least two working frequencies.<sup>2</sup>

However, after [.....(date).....],

class A3 and A3H emissions are no longer authorized on working frequencies;

MOD 986 c) receive in addition class :

i) A3 and A3H or

ii) A3, A3H, A3A and A3J

emissions on all other frequencies necessary for their service.

However, after [.....(date).....],

the ability to receive class A3 and A3H emissions is no longer required.

NOC 987

---

ADD 985.1

<sup>2</sup> Up to [.....(date).....] administrations may, in certain areas, reduce this requirement to classes A3H and A3J emissions on working frequencies.

Ref: Document No. 207-E

(MOD) 985.2 Same as present text of 985.17.

.....

MOD 996 - in the bands between 1605 and 2850 kc/s, be able to transmit on carrier frequency 2182 kc/s using class A3 or A3H emissions. If a receiver is provided for any of these bands, it shall be able to receive class A3 and A3H emissions on carrier frequency 2182 kc/s.

## ANNEX II

## Article 35

NOC Use of Frequencies for Radiotelephony in the  
Maritime Mobile Service

NOC Section I. General Provisions

NOC 1319

• • • • •

NOC 1321

ADD 1321A <sup>S</sup> SSB Frequencies on which SSB emissions are sent shall be designated by the carrier frequency, followed, in brackets, by the assigned frequency.

NOC 1322

ADD 1322A S2bis SSB apparatus in radiotelephone stations of the maritime mobile service operating in the bands between 1605 and 4000 kc/s allocated to this service and in the bands allocated exclusively to this service between 4000 and 23 000 kc/s shall satisfy the technical and operational conditions specified in /Appendix 17A and ...../.

Ex 1322B  
Doc. 236

Ref: Documents Nos. 217-E and 236-E

NOC Section II. Bands between 1605 and 4000 kc/s

ADD A(o) Mode of operation of Stations

ADD 1322B §2-ter (1) Unless otherwise specified in the present Regulations (see Nos. 987, 996, 1323, 1336 and 1337), the classes of emission to be used in the bands between 1605 and 4000 kc/s shall be :

Ex 1322A  
Doc. 217

- 1) A3 or
- 2) A3H, A3A and A3J.

For the single sideband mode of operation, upper sideband shall be used with a necessary bandwidth not exceeding 2.8 kc/s.

However, after ..... date, e.g. 1.1.75 .....  class A3 emission shall no longer be authorized for coast stations, and after ..... date, e.g. 1.1.82 .....  class A3H emission for coast stations and class A3 and A3H emissions for ship stations shall no longer be authorized.

ADD 1322C (2) The normal mode of operation for each coast station shall be indicated in the List of Coast Stations.

Ref: Document No. 236-E

NOC

A. Distress

MOD

1323

§3. (1) The frequency 2182 kc/s<sup>1</sup> is the international distress frequency for radiotelephony; it shall be used for this purpose by ships, aircraft, survival craft stations and by emergency position-indicating radio beacons using frequencies in the authorized bands between 1605 and 4000 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for signals of emergency position-indicating radio beacons, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted where practicable, on a working frequency after a preliminary announcement on 2182 kc/s. The class of emission to be used for radiotelephony on the frequency 2182 kc/s shall be A3 or A3H (see No. 984). The class of emission to be used by emergency position-indicating radio beacons is specified in Appendix 20A /Document No. 206, page 11/.

ADD

1323.1

(1) Whatever the class of emission used, the value indicated, 2182 kc/s, always designates the carrier frequency of the emission.

NOC

1324

MOD

1325

(3) Except for transmissions authorized on carrier frequency 2182 kc/s, all transmissions on the frequencies between 2173.5 and 2190.5 kc/s are forbidden.

MOD

1326

(4) Any coast station using carrier frequency 2182 kc/s for distress purposes shall be able to transmit the radiotelephone alarm signal described in No. 1465 (see also Nos. 1471, 1472 and 1473).

WORKING GROUP 5A

REPORT OF THE WORKING GROUP 5A AD HOC  
TO WORKING GROUP 5A

(Reference Document F/8(34))

Participants :

Denmark  
France  
Federal Republic of Germany  
Norway  
Netherlands  
United Kingdom  
United States of America

1. The Group examined the addition to No. 1336 of Radio Regulations as proposed in the reference document.
2. The Group considered :
  - a) that class A3H emission may be used until the end of the conversion period;
  - b) that, after the end of the conversion period, class A3H emission will no longer be authorized, other than on carrier frequency 2182 kc/s;
  - c) that the use of a working frequency for the transmission of messages concerning the safety of shipping, using A3H emission will, therefore, be authorized until the end of the conversion period;
  - d) that some administrations require the continued use of A3H emission for the transmission of messages concerning the safety of shipping, on a working frequency, after the end of the conversion period;



e) that, after the end of the conversion period, there will be no working frequencies, either on a worldwide or a regional basis, on which the continued use of class A3H emission is authorized, with the possible exception of the carrier frequency 2170.5 kc/s;

f) that the discussions in Committee 5 on the use of the carrier frequency 2170.5 kc/s have revealed that it is possible that agreement might be reached, at least on a Region 1 basis, on the use of this frequency with class A3H emission, after the end of the conversion period, for the transmission of messages concerning the safety of shipping;

3. The Group, therefore, recommends :

that, in view of the above considerations, in particular those in paragraph 2 f), the use of the carrier frequency 2170.5 kc/s be authorized in Region 1, after the conversion period, for the transmission by coast stations of messages concerning the safety of shipping, using A3H type of emissions, subject to no harmful interference being caused to the reception of distress messages on carrier frequency 2182 kc/s.

4. If the solution given in paragraph 3 above would not appear to be acceptable, the Group recommends :

that, by means of a suitable Recommendation, the matter be referred to a future World Administrative Conference, competent to deal with it.

5. The Group submits the attached addition to No. 1336 for the consideration of the Working Group.

V.R.Y. WINKELMAN

Chairman

Annex : 1

A N N E X

- MOD 1336 § 8 (1) Coast stations which use 2182 kc/s for calling shall be able to use at least one other frequency in the authorized bands between 1605 and 2850 kc/s. Exceptionally class A3H may be used in Region 1, for the transmission of messages concerning safety of shipping, announced on 2182 kc/s, on carrier frequency 2170.5 kc/s, subject to no harmful interference being caused to the reception of distress messages on carrier frequency 2182 kc/s.
- ADD 1336.1 (1) Before the transition date for coast stations either A3 or A3H may be used.



INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/100-E

17 October 1967.

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COMMITTEE 4

## APPENDIX 3

According to the decision taken at the twenty first meeting, the attached table and footnote j) is submitted to Committee 4 for final approval.

F.G. PERRIN

Chairman

Annex : 1



## A N N E X

## APPENDIX 3

Change Table of Frequency Tolerances\*) applicable to high traffic ship stations using Class A1 emission from 200 parts per million to 50 parts per million, as indicated hereinafter :

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1 January 1966 <sup>1)</sup> 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 <sup>1)</sup>
	1) 1 January 1970 in the case of all tolerances marked with an asterisk	
b) Aeronautical Stations: -power 500 W or less -power above 500 W	100 50	100 50
c) Base Stations: -power 500 W or less -power above 500 W	100 50	100 50
3. Mobile Stations:		
a) Ship Stations:		
1) Class A1 emission	200	200
<u>Low traffic ships</u>	<u>200</u>	<u>200 j)</u>
<u>High traffic ships</u>		<u>50**)</u>
2) Emission other than Class A1:		
-power 50 W or less	50 c)	50 c)
-power above 50 W	50	50
b) Survival Craft Stations	200	200
c) Aircraft Stations	200*)	100*)
d) Land Mobile Stations	200	200
4. Broadcasting Stations	30	15

\*) As amended by the E.A.R.C. Space (1963)

\*\*) Effective upon the entry into force of the revised Regulations

j) The frequency tolerance shall be 50 parts per million for ship stations using the lowest or highest series of calling frequencies or the lowest series of working frequencies for low traffic ships [ See Appendix 15 A ]

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/101-E  
18 October 1967  
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English

WORKING GROUP 5C

PROPOSALS FROM TWO ADMINISTRATIONS  
CONCERNING "ON BOARD COMMUNICATIONS"  
IN THE FREQUENCY BAND 156 - 174 Mc/s

1. Proposal from United Kingdom

ADD        1373D        The Intership Channels 70 and 72 given in the Table of transmitting frequencies of Appendix 18A, may also be used for internal communications on board ship provided the effective radiated power does not exceed 1 Watt.

APPENDIX 18A

ADD        Note ...        Channels 70 and 72 may also be used for internal communication on board ship provided the effective radiated power does not exceed 1 Watt [see No. 1373D].

2. Proposal from France

The channels assigned in Appendix 18 for intership communication may also be used for internal communications on board ship, provided the effective radiated power does not exceed 1 Watt and subject to the agreement of the Administrations concerned when these channels are used in territorial waters.

E. FROMMER

Chairman of Working Group 5C



INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

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17 October, 1967

Original : English

COMMITTEE 4

REPORT OF AD HOC GROUP SET UP TO CONSIDER THE NOTIFICATION  
OF SHIP STATION FREQUENCIES FOR DIRECT-PRINTING  
TELEGRAPH AND DATA SYSTEMS

The draft Resolution/Recommendation attached as Annex was basically agreed upon. The main differences of opinion were on whether the document should be a Resolution or a Recommendation and whether the notification of the use of frequencies should be on a voluntary or compulsory basis.

F. THORNE

Chairman

Annex : 1



A N N E X

DRAFT RESOLUTION / OR RECOMMENDATION /

The World Administrative Radio Conference, Geneva, 1967,

considering

- a) that in Appendix 15A certain sections of the HF bands allocated to the maritime mobile service are reserved for narrow-band direct-printing telegraph and data systems;
- b) that the development by Administrations of radiotelegraph services between ship and shore using narrow-band direct-printing telegraph and data systems is at an early stage;
- c) that in consequence it is not practicable for this conference to decide whether it is necessary to have a basis for regulating the orderly use of frequencies for the transmission by ship stations direct-printing telegraph signals and what basis it should be and that this matter should be considered by the World Administrative Radio Conference referred to in Recommendation No. ....;
- d) 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 the Final Acts of the World Administrative Radio Conference referred to in Recommendation No. ....;

resolves

- a) that, during the period referred to in d) above, any Administration operating or bringing into operation a narrow-band direct-printing telegraph and data service for ships shall notify to the International Frequency Registration Board, for inclusion in the Master International Frequency Register, and to the Secretary-General for inclusion in the List of Coast Stations, the frequencies on which ships wishing to participate in the service will be required to transmit;
- b) 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 concerned shall be recorded in the Master Register for information only, bearing no date in Column 2a, 2b or Column 2c but with a suitable remark in the Remarks Column;
- c) that these entries in the Master Register shall not prejudice any decisions to be taken by the World Administrative Radio Conference referred to in Recommendation No. ....
-

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/103-E

18 October 1967

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WORKING GROUP 6B

DRAFT

## EIGHTH REPORT OF WG 6B TO COMMITTEE 6 (OPERATIONS)

Article 36, Distress Signal and Traffic. Alarm, Urgency and Safety Signals.  
Section III, Distress Call and Message  
(continued from Document No. 250)  
Sections IV-VI and VII (in part).

Working Group 6B unanimously agreed to recommend the adoption  
of the provisions appearing in the Annex hereto.

H.A. FEIGLESON

Chairman

Annex : 1



A N N E XArticle 36, Section III (Continued from Document No. 250)

NOC 1394 - 1400

Article 36, Section IV

NOC 1401 - 1407

(DT/2  
p.391)

MOD 1408

(2) However, when time is vital, the second step of this procedure (No. 1403) or even the first and second steps (Nos. 1402 and 1403), may be omitted or shortened. These two steps of the distress procedure may also be omitted in circumstances where transmission of the alarm signal is considered unnecessary.

NOC 1409 - 1424

Article 36, Section V

NOC 1425

MOD 1426

(2) However, in areas where reliable communications with one or more coast stations are practicable, ship stations should defer this acknowledgement for a short interval so that a coast station may acknowledge receipt.

NOC 1427

(DT/2  
p.397)

ADD 1427A

However, stations in the maritime mobile service which receive a distress message from a mobile station which, beyond any possible doubt, is a long distance away, need not acknowledge receipt of messages except as specified in No. 1455.

NOC 1428 - 1429



Article 36, Section V (Cont.)

(DT/2  
p.398)

MOD 1430

b) Radiotelephony :

- 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 R spoken as ROMEO);
- the distress signal.

NOC 1431

ADD 1431A [ Held in abeyance, D to supply text ]

NOC 1432

Article 36, Section VI

NOC 1433 - 1450

MOD 1451 (3) In radiotelephony, this message consists of:

- the distress signal MAYDAY;
- the call "to all stations" (or CQ spoken as CHARLIE QUEEN), spoken three times;

Article 36, Section VI (Cont.)

- 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".

ADD 1451A     / Held in abeyance, F to supply text /

Article 36, Section VII

NOC 1452 - 1459

MOD 1460     b) Radiotelephony:

- the signal MAYDAY RELAY pronounced as the French expression "m'aider relais", 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 transmitting station, spoken three times.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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COMMITTEE 4

APPENDIX 3

Decisions taken at the twenty first meeting on the frequency tolerance applicable

- 1) to emergency position-indicating radiobeacons
- 2) to ship and coast station transmitters used in direct-printing telegraph and data systems

are attached as Annex 1 and are submitted to Committee 4 for final approval.

J.G. PERRIN  
Chairman

Annex : 1



A N N E X

AMENDMENTS TO APPENDIX 3

ADD

Band : 1605 to 4000 kc/s		
3. Mobile Stations :		
a) Ship Stations	200	200
b) Survival Craft Stations	-	300
bA) <u>Emergency position-</u> <u>indicating radiobeacons</u>	-	300
c) Aircraft Stations	200*	100*
d) Land Mobile Stations	200	200

MOD	Band : 4 to 29.7 Mc/s		
	2. Land Stations :		
	a) Coast Stations :		
	- power 500 W or less	50	50 <u>1</u> )
	- power above 500 W or less than or equal to 5 kW	50*	30* <u>1</u> )
	- power above 5 kW	50	15 <u>1</u> )
MOD	3. Mobile Stations :		
	a) Ship stations		
	1) Class A1 emission	200	200
	2) Emissions other than Class A1 :		
	- power 50 W or less	50 c)	50 c) <u>k</u> )
	- power above 50 W	50	50 <u>k</u> )

---

Footnotes to the table of frequency tolerances

ADD k) For ship station transmitters used for direct-printing telegraph and data systems the tolerance is 100 c/s (40 c/s for short periods of the order of 15 minutes).

ADD 1) For coast station transmitters used for direct-printing telegraph and data systems the tolerance is 40 c/s.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING GROUP 6A

DRAFT

SEVENTH REPORT OF WORKING GROUP 6A TO COMMITTEE 6

(OPERATION)

Article 32, Section V, D, 2, f)

Abbreviations for the indication of working frequencies :

SUP 1205, SUP 1206 (Proposal No. AUS/122(41)).

1. By arrangement between the Chairmen of Committees 4 and 6, Proposal No. AUS/122(41) would be considered by Committee 6. Furthermore, since this was the only proposal relating to paragraph 45 of Article 32 (RR 1203-1206) Committee 6 would assume the responsibility for disposing of this portion of Article 32.
2. Working Group 6A, after some debate finally agreed to recommend the status quo for Nos. 1205 and 1206 as shown in the Annex hereto which covers Nos. 1203 to 1206.

A. CHASSIGNOL

Chairman

Annex : 1



A N N E X

Article 32, Section V, D, 2,f)

NOC        1203-1206

Note to the Editorial Committee

Proposals to ADD 1206A etc., on the subject of oceanography,  
remained the responsibility of Committee 4.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/106-E  
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WORKING GROUP 6A

SPECIAL CALLING FREQUENCIES

Article 30, ADD 1077D

(submitted by ISR and USA)

ADD            1077D        The calling method contained in Nos. 1077A, 1077B and 1077C does not apply to ship stations when using the special calling frequencies 4186.5 kc/s, 6279.75 kc/s, 8373 kc/s, 12 559.5 kc/s, 16 746 kc/s and 22 262.5 kc/s to call coast stations which have indicated a special watch on these frequencies.

In these circumstances this consists of :

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

This call may be transmitted at intervals of one minute; thereafter it shall not be repeated until an interval of three minutes has elapsed.

---

Documents Nos. 130 + Add. and 206 refer.





INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

**GENEVA, 1967**

Document No. DT/107-E(Rev.)  
19 October 1967  
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Spanish

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COMMITTEE 4 AND  
WORKING GROUP 5D

REPORT BY WORKING GROUP 5D



Article 9

MOD 573 § 26. (1) Frequency Bands :

10	-	2 850 kc/s
3 155	-	3 400 kc/s
3 500	-	3 900 kc/s in Region 1
3 500	-	4 000 kc/s in Region 2
3 500	-	3 950 kc/s in Region 3
4 231	-	4 361 kc/s
6 345.5	-	6 514 kc/s
8 459.5	-	8 728.5 kc/s
12 689	-	13 107.5 kc/s
16 917	-	17 255 kc/s
22 374	-	22 624.5 kc/s

## DRAFT RESOLUTION No. ...

Relating to the Transfer of certain Frequency Assignments  
for Coast Radiotelegraph Stations in the Frequency

Bands allocated exclusively to the  
Maritime Mobile Service between 4000 and 23 000 kc/s

The World Administrative Radio Conference to deal with matters  
relating to the maritime mobile service (Geneva, 1967),

considering

- a) that the frequency band limits for radiotelegraph coast  
stations have been modified as a result of the revision of  
appendices 15 and 17;
- b) that the new limits of the frequency bands for coast radio-  
telegraph stations are :

4 231	-	4 361	kc/s
6 345.5	-	6 514	kc/s
8 459.5	-	8 728.5	kc/s
12 689	-	13 107.5	kc/s
16 917	-	17 255	kc/s
22 374	-	22 624.5	kc/s

recognizing

that the re-arrangement of the frequency usage within the  
frequency bands allocated to the maritime mobile service should

be carried out in several stages and that the transfer of certain coast radiotelegraph station frequency assignments conditions any subsequent arrangements and should therefore be one of the phases of the re-arrangement;

resolves

1. that the frequency assignments to coast radiotelegraph stations which, on the date of entry into force of the Final Acts of this Conference, are recorded in the Master International Frequency Register, shall be transferred as follows :

- any frequency assignment  $f$  in the 4 361 - 4 368 kc/s band shall be transferred to the frequency  $f - 129$  kc/s;
- any frequency assignment  $f$  in the 6 514 - 6 525 kc/s band shall be transferred to the frequency  $f - 168$  kc/s;
- any frequency assignment  $f$  in the 8 730 - 8 745 kc/s band shall be transferred to the frequency  $f - 269$  kc/s;
- any frequency assignment  $f$  in the 13 110 - 13 130 kc/s band shall be transferred to the frequency  $f - 419$  kc/s;
- any frequency assignment  $f$  in the 17 255.8 - 17 290 kc/s band shall be transferred to the frequency  $f - 338$  kc/s;
- any frequency assignment  $f$  in the 22 626 - 22 650 kc/s band shall be transferred to the frequency  $f - 251$  kc/s;

2. that, as from the date of entry into force of the Final Acts of this Conference, the use by low traffic ships of frequencies above 4 229 kc/s, 6 343.5 kc/s, 8 458 kc/s, 12 687 kc/s, 16 916 kc/s and 22 370 kc/s may be discontinued; such use shall cease not later than .....
3. at x hours GMT on \*) ....., administrations shall transfer the transmitting frequencies of their coast radio telegraph stations in accordance with the procedure referred to in 1. above. Administrations shall notify the I.F.R.B. of these transfers, in accordance with the provisions of No. 489 of the Radio Regulations
4. provided that the notices received by the I.F.R.B. in accordance with paragraph 3 above do not contain any change 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 International Frequency Register. The dates to be entered in the appropriate parts of column 2 shall be those of the original assignment. Any other changes in the basic characteristics of the original assignment will be dealt with in accordance with the provisions of Article 9 of the Radio Regulations ;

---

\*) This date shall be decided in a joint meeting of Committees 4 and 5 and should be as near as possible to the date as from which the new radiotelephone channels can be used (Document No. 230).

5. on ..... 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 I.F.R.B., a provisional entry determined in accordance with paragraph 1 above. The dates in column 2 recorded for the original assignment shall be retained. The original entries shall be retained but with a special remark in the "Remarks" column and any dates in column 2 a) shall be transferred to column 2 b);
6. thirty days after ....., the I.F.R.B. shall send to those administrations which have not yet notified the transfer of frequency assignment to their coast radiotelegraph stations in accordance with paragraphs 1 and 3 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;
7. if, thirty 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 paragraph 1 above, the corresponding provisional new entry shall be deleted from the Master Register and the original entry shall be retained with its date in column 2 b) and a special remark in the "Remarks" column;

8. 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 such assistance as will be necessary to the administrations concerned in order to solve the problem. In doing so, 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.

INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/107-E

18 October 1967

Original : French, English,  
Spanish

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COMMITTEES 4 and 5

## DRAFT FIFTH REPORT OF COMMITTEE 4

The attached Resolution has been unanimously adopted by  
Committee 4.

F.G. PERRIN

Chairman of Committee 4

Annex : 1





A N N E X

RESOLUTION No. ...

Relating to the Transfer of certain Frequency Assignments  
for Coast Radiotelegraph Stations in the Bands Exclusively  
Allocated to the Maritime Mobile Service in the Bands between  
4000 and 23 000 kc/s

The Maritime World Administrative Radio Conference, Geneva, 1967,  
considering

- a) that the frequency band limits for radiotelegraph coast stations have been modified as a result of the revision of appendices 15 and 17;
- b) that the new limits of the frequency bands for coast radiotelegraph stations are :

4231	-	4361	kc/s
6345.5	-	6514	kc/s
8459.5	-	8728.5	kc/s
12689	-	13107.5	kc/s
16917	-	17255	kc/s
22374	-	22624.5	kc/s

recognizing

that re-arrangement of the frequency bands allocated to the maritime mobile service should be carried out in several stages and that the transfer of certain coast radiotelegraph station frequency assignments conditions any subsequent arrangements and should therefore be one of the first phases of the re-arrangement;

resolves

1. that the assignments made to coast radiotelegraph stations entered in the Master International Frequency Register on the date of entry into force of the provisions contained in the Final Acts of this Conference shall be transferred as follows :
  - any frequency assignment  $f$  in the 4361 - 4368 kc/s band shall be transferred to the frequency  $f - 129$  kc/s;
  - any frequency assignment  $f$  in the 6514 - 6525 kc/s band shall be transferred to the frequency  $f - 168$  kc/s;
  - any frequency assignment  $f$  in the 8730 - 8745 kc/s band shall be transferred to the frequency  $f - 269$  kc/s;
  - any frequency assignment  $f$  in the 13 110 - 13 130 kc/s band shall be transferred to the frequency  $f - 419$  kc/s;
  - any frequency assignment  $f$  in the 17 255.8 - 17 290 kc/s band shall be transferred to the frequency  $f - 338$  kc/s;
  - any frequency assignment  $f$  in the 22 626 - 22 650 kc/s band shall be transferred to the frequency  $f - 251$  kc/s
2. that by ..... the use of low traffic ships of frequencies above 4229 kc/s, 6343.5 kc/s, 8458 kc/s, 12 687 kc/s, 16 916 kc/s and 22 370 kc/s shall cease
3. At  $x$  hours GMT on \* administrations shall change the transmitting frequencies of their radiotelegraph stations in accordance with the rules mentioned above and shall notify the I.F.R.B. of the changes made.

---

\* Date to be fixed by the Conference; it should be as soon as possible after the date on which the revised Radio Regulations come into force.

4.        Provided no characteristic other than the designation of the transmitting frequency has been changed, the I.F.R.B. shall enter the change requested in the Master International Frequency Register. The other details of the entry - in particular the dates given in column 2 - shall not be altered.
5.        Three months after \*        the I.F.R.B. shall send to any administrations which have not reported the transfer of frequencies assigned to their coast radiotelegraph stations an extract from the Master International Frequency Register showing the entries contained therein opposite their name, relating to stations of this category, accompanied by a reminder of the provisions of this resolution.
6.        Two months after the despatch of these extracts, the I.F.R.B. shall re-examine any assignments contained in the Master Record in respect of which a change making the assignments in question conform with the present resolution has not been notified by the countries concerned; this re-examination shall be made as though the notification appearing in the Master Register had been sent to the I.F.R.B. on the date of the examination.

---

\* Date to be fixed by the Conference; it should be as soon as possible after the date on which the revised Radio Regulations come into force.

# MARITIME CONFERENCE

GENEVA, 1967

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WORKING GROUP 6B

DRAFT

NINTH REPORT OF WG 6B TO COMMITTEE 6 (OPERATION)

Distress, Alarm, Urgency and Safety  
(Article 36 (continued) Nos. 1461-1476)

1. Working Group 6B unanimously agreed to recommend the adoption of the provisions appearing in the annex attached hereto.

2. No. 1473

Following the consideration of No. 1472, the delegation of the Netherlands proposed expanding the first sentence of No. 1473 to read :

"c) the loss of a person or persons overboard or very urgent medical case ..."

After discussion on the substance and procedural aspects of the proposal, the delegation of the Netherlands agreed to consider publishing a formal proposal for the consideration of Working Group 6B and for Committee 6.

H.A. FEIGLESON  
Chairman

Annex : 1



A N N E X

Article 36, Section VII (continued)

NOC	1461-1462	
(DT/2, p.400) ADD	1462A	g 38 (bis) A ship station should not acknowledge receipt of a distress message transmitted by a coast station under the conditions mentioned in Nos. 1452 to 1455 until the master or person responsible has confirmed that the ship station concerned is in a position to render assistance.

Section VIII

NOC	1463-1471	
(DT/2, p.401) MOD	1472	(b) the transmission of an urgent cyclone warning. The warning should be preceded by the safety signal (see numbers 1488 and 1489). In this case they may only be used by coast stations duly authorized by their government; or
	1473	[Held in abeyance pending HOL proposal]
MOD	1474	(2) In the cases referred to in numbers 1472 and 1473, an interval of two minutes shall, if possible, separate the end of the radiotelegraph alarm signal and the beginning of the warning or the message.
NOC	1475-1476	

Note to the Editorial Committee :

ADD 1466A and ADD 1473A (DT/2, p. 400) amended and ADD new Section VIIIA have been adopted provisionally and appear in Document No. 206 addressed to Committees 4 and 5. The finalized texts will follow in a later report together with Sections IX and X.

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
**CONFERENCE MARITIME**  
GENÈVE, 1967

Document N° DT/109-F/E/S  
19 October 1967  
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espagnol

COMMISSION 5  
COMMITTEE 5  
COMISIÓN 5

PROPOSITION DE NOUVELLE REDACTION DU POINT 4, PAGE 2 DU DOCUMENT N° 271  
PROPOSED NEW WORKING OF SECTION 4, PAGE 2 OF DOCUMENT No. 271  
PROPOSICIÓN DE NUEVO TEXTO PARA EL PUNTO 4, PÁGINA 2, DEL DOCUMENTO N.º 271

4. Modification de l'article 5

En conséquence, il convient d'ajouter à la fin du texte actuel du numéro 287 du Règlement des radiocommunications le texte ci-après :

"Toutefois, les fréquences des bandes dans lesquelles la priorité est accordée au service mobile maritime peuvent être utilisées pour les communications radiotéléphoniques sur les voies d'eau intérieures, sous réserve d'accords entre les administrations intéressées et celles dont les services auxquels la bande est attribuée sont susceptibles d'être affectés et en tenant compte des usages courants et des accords existants."

4. Modification of Article 5

As a consequence, at the end of the present text of No. 287 of the Radio Regulations, the following text must be added:

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

4. Modificación del artículo 5

Como consecuencia de la nota anterior, al final del actual número 287 del Reglamento de Radiocomunicaciones habría que añadir lo siguiente:

"Sin embargo las frecuencias de las bandas en las cuales se concede prioridad al servicio móvil marítimo pueden utilizarse para las comunicaciones radiotelefónicas en vías interiores de navegación a reserva de acuerdos entre las administraciones interesadas y aquellas cuyos servicios, a los que la banda está atribuida, son susceptibles de ser afectados, y teniendo en cuenta la práctica corriente y acuerdos existentes."



E. FROMMER  
Président du Groupe de travail 5C  
Chairman of Working Group 5C  
Presidente del Grupo de trabajo 5C

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/110-E  
19 October 1967  
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WORKING GROUP 5A

TENTATIVE ADVANCE DRAFT FOR WORKING GROUP 5A

DRAFT RESOLUTION No ...

relating to the introduction of single sideband techniques  
in the radiotelephone maritime mobile service bands between  
1605 and 4000 kc/s

The Administrative Radio Conference to deal with matters relating  
to the maritime mobile service, Geneva, (1967),

considering

- a) Recommendation No. 28 of the Administrative Radio Conference,  
Geneva (1959);
- b) the decision reached by the present Conference to require  
the use of single sideband techniques, except under certain  
circumstances;
- c) the desirability of replacing double sideband emissions by  
single sideband emissions as early as possible in the maritime  
mobile service bands between 1605 and 4000 kc/s;

resolves that

unless otherwise specified in the Final Acts of this  
Conference, radiotelephone stations in the maritime mobile  
service operating in the bands between 1605 and 4000 kc/s shall  
comply with the conditions set out in the following provisions:



1. after [ ], the installation of double sideband equipment shall not be permitted at ship stations, with the exception of the cases covered by Regulations Nos. 984, 987 [and 1323];  
however, administrations shall endeavour to discontinue the installation of double sideband equipment at the earliest possible date after the Final Acts of this Conference come into force;
2. coast stations shall provide some single sideband capability at the earliest possible date, and shall discontinue double sideband emissions as early as possible, but, in any case, not later than 1 January 1975;
3. until 1 January 1980, coast and ship stations equipped for single sideband operation shall also be equipped to transmit with A3H emission for compatibility with double sideband receivers. (For stations operating on carrier frequency 2182 kc/s [and .....] the requirement for A3H emission will continue beyond 1 January 1980).
4. after [1 January 1980] only the use of class A3A and A3J emission is authorized, except that class A3 and A3H emissions are authorized for ship stations transmitting on carrier frequency 2182 kc/s, and class A3H emissions is authorized for coast stations transmitting on carrier frequency 2182 kc/s [and on .....]

further resolves

that Recommendation No. 28 of the Administrative Radio Conference, Geneva (1959), be abrogated.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/111-E

19 October 1967

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WORKING GROUP 6A

DRAFT

OF EIGHTH REPORT OF WORKING GROUP 6A

TO COMMITTEE 6 (OPERATION)

- LIST V - LIST OF SHIP STATIONS -

Working Group 6A has examined the suggestions submitted by the Secretary-General in Document No. 119 and recommends that Committee 6 take the following decisions :

1. The List of Ship Stations (List V) will be published with the aid of the I.T.U. computer, starting with the 1969 edition.
2. Studies will be continued to investigate the possibilities of improving, by an intermediate process, the layout of List V as compared with that obtained by direct printing of the computer lists. In deciding on what the final solution shall be, (direct printing or intermediate processes), the Secretary-General shall take account of the need for perfect legibility and minimum sales costs.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/112-E  
20 October 1967  
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WORKING GROUP 6A AD HOC

SELECTIVE CALLING SYSTEMS

TERMS OF REFERENCE OF WORKING GROUP 6A AD HOC

Working Group 6A constituted an ad hoc Group under the Chairmanship of the delegate of the Netherlands and in which the delegations of the following countries requested to participate: the United States of America, France, Japan, Norway, Federal Republic of Germany, the United Kingdom and the U.S.S.R.

The terms of reference are:

On the bases of the decisions taken by Committees 4 and 5 on the technical aspects and choice of frequencies (Document No. 275 refers), to consider the proposals for the elaboration of provisions introducing the use of selective calling systems for the maritime mobile service.

It was agreed that the proposals in question are G/91(48 - 53), F/109(92) and G/113(57, 58) and that this list is not necessarily exhaustive.

A. CHASSIGNOL  
Chairman



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/113-E

20 October 1967

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Spanish

COMMITTEE 4

DRAFT

FIFTH REPORT OF COMMITTEE 4

Subjects : Resolution relating to the implementation of the new arrangement of radiotelegraphy and radiotelephony bands allocated to the maritime mobile service between 4 000 and 23 000 kc/s.

Article 9, No. 573

Resolution 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.

Recommendation relating to transmission by television of port radar images.

Draft Recommendation concerning harmonic relationship and channel spacing in the ships' radiotelegraph high frequency bands.

1. The Resolution relating to the implementation of the new arrangement of radiotelegraphy and radiotelephony bands allocated to the maritime mobile service between 4 000 and 23 000 kc/s (Annex I) has been provisionally adopted by Committee 4 and is submitted for final approval.
2. The modification of Article 9, No. 573 and the Resolution 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 (Annex II) has been agreed to in principle and is submitted for further consideration by the Committee.



3. The Recommendation relating to transmission by television of port radar images (Annex III) has been unanimously adopted by Committee 4.
4. The Draft Recommendation concerning harmonic relationship and channel spacing in the ships' radiotelegraph high frequency bands (Annex IV) has been unanimously agreed to by the ad hoc Group established to study the matter and is subritted for approval of the Committee.

F.G. PERRIN

Chairman

Annexes : 4

A N N E X I

RESOLUTION No. ...

Relating to the Implementation of the new arrangement of  
Radiotelegraphy and Radiotelephony Bands allocated to the Maritime  
Mobile Service between 4 000 and 23 000 kc/s

The World Administrative Radio Conference, Geneva, 1967,

considering that

- a) each of the HF radiotelegraphy and radiotelephony bands allocated to the maritime mobile service by the Ordinary Administrative Radio Conference, Geneva, 1959, has been re-adjusted to make additional channels available for radiotelephony;
- b) a considerable number of both ship and coast stations will be transferred from existing frequencies to the new frequencies and channels designated by this Conference;
- c) changes in frequency assignments should be made in the minimum time necessary so that the advantages of the re-adjustment of bands may be realized at the earliest opportunity;
- d) the transfer of assignments should be made with the least possible disruption of the service rendered by each station;
- e) the transfer of assignments should be made in such a manner that harmful interference is avoided among stations affected during the implementation period;

resolves

- 1. that the implementation of the actions taken by this Conference relating to the re-adjustment of the HF bands allocated to the maritime mobile service should follow an orderly procedure for the removal of existing and the introduction of new operations;
- 2. that Administrations shall make every effort to undertake implementation in accordance with the schedule in Annex A.

Annex A

Step of implementation	Beginning date	Completion date
<u>Step 1</u> Vacate low traffic ship working channels 85 to 98	As soon as possible	1 February 1970
<u>Step 2</u> Shift coast telegraph stations to new assignments made available by Step 1	(In accordance with Resolution No. ... [Annex III] 2 February 1970)	28 February 1970
<u>Step 3</u> Coast telephone stations may use channels vacated by coast telegraph stations (Step 2)	1 March 1970	

Step of implementation	Beginning date	Completion date
<u>Step 1</u> Shift high traffic tele- graphy (A1) ship stations to newly assignable frequencies	1 January 1969	30 June 1969
<u>Step 2</u> Shift printer systems to the new printer bands	1 July 1969	31 October 1969
<u>Step 3</u> Upward shift, as appropriate of wideband systems	1 November 1969	31 December 1969
<u>Step 4</u> Shift simplex use of Appendix 15B frequencies	1 January 1970	28 February 1970
<u>Step 5</u> Stations may commence use of new simplex and duplex ship channels	1 March 1970	

A N N E X IIArticle 9

MOD 573

§ 26.(1) Frequency Bands :

10	-	2 850 kc/s
3 155	-	3 400 kc/s
3 500	-	3 900 kc/s in Region 1
3 500	-	4 000 kc/s in Region 2
3 500	-	3 950 kc/s in Region 3
4 231	-	4 361 kc/s
6 345.5	-	6 514 kc/s
8 459.5	-	8 728.5 kc/s
12 689	-	13 107.5 kc/s
16 917.5	-	17 255 kc/s
22 374	-	22 624.5 kc/s

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RESOLUTION No. ...

Relating to the Transfer of certain Frequency Assignments  
for Coast Radiotelegraph Stations in the Frequency

Bands allocated exclusively to the  
Maritime Mobile Service between 4000 and 23 000 kc/s

The World Administrative Radio Conference to deal with matters  
relating to the maritime mobile service (Geneva, 1967),

considering

- a) that the frequency band limits for radiotelegraph coast  
stations have been modified as a result of the revision of  
appendices 15 and 17;
- b) that the new limits of the frequency bands for coast radio-  
telegraph stations are :

4 231	-	4 361	kc/s
6 345.5	-	6 514	kc/s
8 459.5	-	8 728.5	kc/s
12 689	-	13 107.5	kc/s
16 917.5	-	17 255	kc/s
22 374	-	22 624.5	kc/s

recognizing

that the re-arrangement of the frequency usage within the  
frequency bands allocated to the maritime mobile service should

be carried out in several stages and that the transfer of certain coast radiotelegraph station frequency assignments governs any subsequent arrangements and should therefore be one of the phases of the re-arrangement;

resolves

1. that the frequency assignments to coast radiotelegraph stations which, on the date of entry into force of the Final Acts of this Conference, are recorded in the Master International Frequency Register, shall be transferred as follows :
  - any frequency assignment  $f$  in the 4 361 - 4 368 kc/s band shall be transferred to the frequency  $f - 129$  kc/s;
  - any frequency assignment  $f$  in the 6 514 - 6 525 kc/s band shall be transferred to the frequency  $f - 168$  kc/s;
  - any frequency assignment  $f$  in the 8 728.5 - 8 745 kc/s band shall be transferred to the frequency  $f - 269$  kc/s;
  - any frequency assignment  $f$  in the 13 107.5 - 13 130 kc/s band shall be transferred to the frequency  $f - 419$  kc/s;
  - any frequency assignment  $f$  in the 17 255 - 17 290 kc/s band shall be transferred to the frequency  $f - 338$  kc/s;
  - any frequency assignment  $f$  in the 22 624.5 - 22 650 kc/s band shall be transferred to the frequency  $f - 251$  kc/s;

2. that, as soon as practicable, the use by low traffic ships of frequencies above 4 229 kc/s, 6 343.5 kc/s, 8 458 kc/s, 12 687 kc/s, 16 916 kc/s and 22 370 kc/s be discontinued, and in any event not later than 1 February 1970;
3. that between 2 February 1970 and 28 February 1970 administrations shall transfer the transmitting frequencies of their coast radio telegraph stations in accordance with the procedure referred to in 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;
4. provided that the notices received by the I.F.R.B. in accordance with paragraph 3 above do not contain any change 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 be notified in the basic characteristics of the original assignment, it shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;
5. on ..... 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 I.F.R.B., 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;

6.       thirty days after ....., the I.F.R.B. shall send to those administrations which have not yet notified the transfer of frequency assignment to their coast radiotelegraph stations in accordance with paragraphs 1 and 3 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;
7.       if, sixty 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 3 above, the corresponding provisional new entry shall be deleted from the Master Register and the original entry shall be retained with its date in column 2b and a special remark in the "Remarks" column; if, however, the administration concerned notifies the transfer during the sixty days period, the provisions of paragraph 4 above shall apply;

8. 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 such assistance as will be necessary to the administrations concerned in order to solve the problem. In doing so, 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.

A N N E X III

RECOMMENDATION

Relating to transmission by television  
of port radar images to ships

The World Administrative Radio Conference, Geneva, 1967,

considering

a) that there may be a future requirement for the transmission by television of port radar images from shore to ships, in congested waters;

b) that the table of frequency allocations does not provide spectrum for this purpose;

recommends

1. that as a matter of urgency, administrations and the Inter-Governmental Maritime Consultative Organization study the operational need and parameters for such systems and inform the Secretary-General of the results of these studies;
  2. that if such an operational need does exist the C.C.I.R. be invited to determine the most suitable order of frequencies required for this purpose, and the technical parameters to be met by such systems;
  3. that administrations be prepared to take a decision in this matter at the next competent World Administrative Radio Conference.
-

A N N E X IV

DRAFT RECOMMENDATION

Concerning harmonic relationship and channel spacing in the ships' radiotelegraph high frequency bands

The World Administrative Radio Conference to deal with matters relating to the maritime mobile service (Geneva, 1967),

considering

- a) that there is an urgent need for all services to utilize the High Frequency spectrum with maximum efficiency;
- b) that the continued use of the harmonic relationship and the existing channel spacings may not in the future promote the fullest use of the frequency spectrum in particular in the upper bands allocated to the exclusive maritime mobile service for ships' radiotelegraph stations;
- c) that new developments and advances in techniques, in frequency synthesizers for example, are leading to more stable and reliable radiocommunication equipment;
- d) that any organized change of equipment for ships may require a period of some 20 years taking into account the time required for development and amortization;

recommends

- 1. that administrations should study, in the light of advancing techniques, the problems relating to the future use of

harmonic relationship in the ships' radio equipment and to the determination of the optimum spacing and number of channels in the bands allocated for calling, high and low traffic, as indicated in Appendix 15A, and should submit their proposals for the consideration of the next World Administrative Radio Conference competent to deal with the matter;

2. that Administrations should study whether the fact that ships stations use synthesized transmitters will make it advantageous to modify the present method as far as low traffic ships are concerned to allow more flexibility in the choice of actual working frequencies.
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INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

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Document No. DT/114-E

20 October 1967

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WORKING GROUP 5A

PROPOSED AMENDMENTS IN SECTION A OF APPENDIX 17

IN ACCORDANCE WITH DOCUMENT No. DT/81

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SECTION ATable of Duplex Double Sideband Transmitting Frequencies (in kc/s)

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast station frequency	Ship station 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	22 629.0	22 003.5
2	4 371.0	4 072.4	8 738.4	8 204.4	13 119.5	12 340.5	17 265.5	16 470.5	22 636.0	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	22 643.0	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	22 650.0	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	22 657.0	22 031.5
6	4 396.6	4 098.0	8 764.0	8 230.0	13 147.5	12 368.5	17 293.5	16 498.5	22 664.0	22 038.5
7	4 403.0	4 104.4	8 770.4	8 236.4	13 154.5	12 375.5	17 300.5	16 505.5	22 671.0	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	22 678.0	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	22 685.0	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	22 692.0	22 066.5
11	4 428.6	4 129.9	8 796.0	8 261.9						

# MARITIME CONFERENCE

GENEVA, 1967

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21 October 1967

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WORKING GROUP 6A

Article 35, Section II

SUP 1347

ADD 1348A

Submitted by the Delegation of Denmark  
as a basis for discussion

ADD 1348A

Under exceptional circumstances, if frequency usage according to Nos. 1343 - 1345 or No. 1348 is not possible, a ship station may use one of its own assigned national ship-to-shore frequencies for communication with a coast station of a foreign nationality, under the express condition that the coast station as well as the ship station by virtue of No. 1217 take precautions to ensure that the use of such a frequency will not give rise to harmful interference to the service for which the frequency in question is authorized.



INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

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23 October 1967  
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Spanish

COMMITTEE 4

DRAFT

SEVENTH REPORT OF COMMITTEE 4

Subject : Appendix 15

1. Annex 1 is consequential to changes agreed upon in Committee 5 to delete Section B of Appendix 15.
2. Annex 2 is the new table of ship radiotelegraph frequencies. This table has been approved by a majority in Committee 4.

F. G. PERRIN

Chairman of Committee 4

Annexes : 2



A N N E X 1

MOD

APPENDIX 15

Table of Frequencies to be used by Ship stations in the bands between 4 and 27.5 Mc/s allocated exclusively to the maritime mobile service (see Article 32).

In the table :

- a) 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 kc/s being indicated in italics;
- b) the vertical arrows indicate the harmonic relationship between the frequencies assigned in the different bands.

A N N E X 2  
FREQUENCIES ASSIGNABLE TO SHIP RADIOTELEGRAPH  
STATIONS USING THE MARITIME MOBILE SERVICE  
BANDS BETWEEN 4 AND 27.5 Mc/s

Annex to Document No. DT/116-E  
Page 3

MOD APP 15

kc/s

Bands Mc/s	Limits	Assignable frequencies wide-band telegraph, facsimile and special transmission system	Limits	Oceanographic data transmission *	Limits	Assignable working frequencies for direct printing telegraph and data systems	Limits	Assignable working frequencies for high traffic ships **	Limits	Calling frequencies ****	Limits	Assignable working frequencies for low traffic ships		Limits
												Group A	Group B	
4	4142.5	4144.5...4160.5 5 frequencies spaced 4	4162.5	4162.9...4165.6 10 frequencies spaced 0.3	4166	4166.5...4172 12 frequencies spaced 0.5	4172.25	4172.5...4177.5 11 frequencies spaced 0.5	4178	4178.5...4186.5 17 frequencies spaced 0.5	4187	4187.5...4208 84 frequencies spaced 0.5	4208.5...4229	4231
6	6216.5	6218.5...6242.5 7 frequencies spaced 4	6244.5	6244.9...6247.6 10 frequencies spaced 0.3	6248	6248.5...6258 20 frequencies spaced 0.5	6258.25	6258.75...6266.25 11 frequencies spaced 0.75	6267	6267.75...6279.75 17 frequencies spaced 0.75	6280.5	6281.25...6312 84 frequencies spaced 0.75	6312.75...6343.5	6345.5
8	8288	8290...8326 10 frequencies spaced 4	8328	8328.4...8331.1 10 frequencies spaced 0.3	8331.5	8332...8341.5 20 frequencies spaced 0.5	8341.75	8342...8345...8355 14 frequencies, spaced 1	8356	8357...8373 17 frequencies spaced 1	8374	8375...8416 84 frequencies spaced 1	8417...8458	8459.5
12	12431.5	12433.5...12477.5 12 frequencies spaced 4	12479.5	12479.9...12482.6 10 frequencies spaced 0.3	12483	12484...12503 20 frequencies spaced 1	12503.25	12504...12513...12516.75...12532.5 20 frequencies, spaced 1.5	12534	12535.5...12559.5 17 frequencies spaced 1.5	12561	12562.5...12624 84 frequencies spaced 1.5	12625.5...12687	12689
16	16576	16578...16634 15 frequencies spaced 4	16636.5	16636.9...16639.6 10 frequencies spaced 0.3	16640	16641...16660 20 frequencies spaced 1	16660.5	16662...16672...16684...16690...16710 25 frequencies, spaced 2	16712	16714...16746 17 frequencies spaced 2	16748	16750...16832 84 frequencies spaced 2	16834...16916	16917.5
22	22112	22114...22158 12 frequencies spaced 4	22160.5	22160.9...22163.6 10 frequencies spaced 0.3	22164	22165...22184 20 frequencies spaced 1	22184.5	22187...22221 18 frequencies, spaced 2	22222.5	22225...22265 17 frequencies spaced 2.5	22267.5	22270...22320 41 frequencies spaced 2.5	22322.5...22370	22374

Assignable frequencies to ships of all categories

	Limits	Calling frequencies	Limit	Working frequencies	Limit
25	25070	25073.5 ..... 25081 6 frequencies, spaced 1.5	25082.5	25084 ..... 25106.5 16 frequencies, spaced 1.5	25110

\* The frequency bands may also be used by buoy stations for ocean data transmission and by stations interrogating these buoys, in accordance with the conditions set forth in Resolution No. ... Annex 3 to Document No. 270/.

\*\* Manual or automatic A1 morse telegraphy at speeds not exceeding 40 bauds.

\*\*\* For particulars concerning the use of 8364 kc/s, see No. 1179.

\*\*\*\* The frequencies 4186.5, 6279.75, 8373, 12559.5, 16746 and 22262.5 kc/s may also be assigned as special calling frequencies. Administrations shall, if possible, abstain from assigning these frequencies as normal calling frequencies.

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**MARITIME CONFERENCE**

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WORKING GROUP 5A

DRAFT EIGHTH REPORT OF WORKING GROUP 5A

TO COMMITTEE 5

I. Time-table for the transition to SSB in the bands between 1.650 and 4 000 kc/s

The Working Group decided that the conversion to SSB techniques should be scheduled as follows :

1. It was unanimously agreed that, as from 1 January 1973, installation on board ships of DSB equipments should be forbidden but that the administrations should try to avoid installing SSB equipments on board ships from the time the new regulations come into force.

2. It was also unanimously agreed that coast stations should cease DSB emissions entirely as from 1 January 1975.

3. It was decided that from 1 January 1980, only classes of emissions A3A and A3J should be authorized except on frequency 2 182 kc/s on which A3 or A3H emissions should continue to be authorized for ship, aircraft and survival craft stations. It was also decided that class A3H should continue to be required for coast stations transmitting on 2 182 kc/s - and on [.....] kc/s] for safety messages only - . Furthermore it was agreed that class A2H emissions should be permitted on [.....] for selective calling from coast stations.

The decision resulted from the fact that most of the delegations had declared that they could go along with the dates of 1 January 1980, even if quite a few wanted an earlier date and some of them would prefer a later date. Only Denmark, Greece and the Federal Republic of Germany then said that they could not accept such an early date. The decisions were taken in the order of paragraphs 3, 2 and 1. When the date of paragraph 1 of 1 January 1973 for cessations of installations of DSB equipments on board ship was decided some delegations felt that the date of the total transition, 1 January 1980, should be discussed once more. The Working Group decided, however, not to start new discussion on the subject within the Working Group. Then the delegations of Italy, Denmark, Cuba and Portugal which were in favour of the date 1 January 1983, reserved their right to re-open the discussion when the report was submitted to Committee 5.



It was further decided that the provisions concerning the transition to SSB in the MF bands would be the subject of a draft Resolution, the text of which appears in Annex 1.

II. Separation between the carrier frequency and the assigned frequency in the MF bands

It had been previously agreed that the provisions relating to the separation between the carrier frequency and the assigned frequency which were temporarily included in the new Appendix relating to the technical characteristics of SSB equipments (see Document No. 247) should appear in another part of the Radio Regulations.

Consequently the Working Group decided that these provisions should be contained in a new number 445A, the text of which appears in Annex 2.

III. Conversions to SSB technique in the bands between 1 605 and 4 000 kc/s

It had also been agreed that the provisions concerning the conversion to SSB, of the present DSB channels, which were temporarily included in the same new appendix should appear in a more appropriate part of the Radio Regulations.

It was decided that they should be the subject of a draft Resolution, the text of which appears in Annex 3.

P. AAKERLIND

Chairman



A N N E X 1

DRAFT RESOLUTION No. ...

Relating to the Introduction of Single Sideband Techniques  
in the Radiotelephone Maritime Mobile Service Bands between  
1605 and 4000 kc/s

The Administrative Radio Conference to deal with matters  
relating to the maritime mobile service, Geneva (1967),

considering

- a) Recommendation No. 28 of the Administrative Radio Conference,  
Geneva (1959);
- b) the decision reached by the present Conference to require  
the use of single sideband techniques, except under certain  
circumstances;
- c) the desirability of replacing double sideband emissions by  
single sideband emissions as early as possible in the maritime  
mobile service bands between 1605 and 4000 kc/s;

resolves that

unless otherwise specified in the Final Acts of this  
Conference, radiotelephone stations in the maritime mobile  
service operating in the bands between 1605 and 4000 kc/s  
shall comply with the conditions set out in the following  
provisions :

1. after 1 January 1973, the new or replacement installation of double sideband equipment shall not be permitted at ship stations, with the exception of the cases covered by Regulations Nos. 984, 987 and 1323;  
  
however, administrations shall endeavour to discontinue the installation of double sideband equipment at the earliest possible date after the Final Acts of this Conference come into force;
2. coast stations shall provide some single sideband capability at the earliest possible date; furthermore, they shall discontinue double sideband emissions as early as possible, but, in any case, not later than 1 January 1975;
3. until 1 January 1980, coast and ship stations equipped for single sideband operation shall also be equipped to transmit with A3H emission for compatibility with double sideband receivers. (On carrier frequency 2182 kc/s and ..... the requirement for A3H emission will continue beyond 1 January 1980.)
4. after 1 January 1980 only the use of class A3A and A3J emission is authorized, except that class A3 and A3H emissions are authorized for ship, survival craft and aircraft stations transmitting on carrier frequency 2182 kc/s, and class A3H emission is authorized for coast stations transmitting on carrier frequency 2182 kc/s. and on .....
5. ship and aircraft stations required to employ SSB operation on working frequencies shall use only A3H on 2182 kc/s after 1 January 1980.

further resolves

that Recommendation No. 28 of the Administrative Radio Conference, Geneva (1959), be abrogated.

---

A N N E X    2

ARTICLE 7

.....

ADD            445A            g 11 bis (1). The assigned frequency of a single  
sideband channel of a station in the radiotelephone  
maritime mobile service shall be 1 400 c/s higher  
than the carrier frequency.

.....

A N N E X 3

DRAFT RESOLUTION No. ...

Relating to the Conversion to Single Sideband Technique of Stations  
of the Radiotelephone Maritime Mobile Service operating as in the  
bands between 1 605 and 4 000 kc/s

The Maritime Conference, Geneva 1967,

considering

1. that double sideband radiotelephone stations in the maritime mobile service operating in the bands between 1 605 and 4 000 kc/s use a bandwidth of the order of 6 kc/s;
2. that these stations will have to use single sideband technique in future;
3. that during the period of conversion to single sideband technique, every precaution must be taken to avoid harmful interference between stations operating with double sideband and those operating with single sideband;

resolves

- a) that the transition to single sideband technique in the stations referred to in considerandum 1 above shall be made in accordance with the following provisions :
  - 1) - the carrier frequency of the single sideband channel in the upper part of the previous double sideband channel shall be the same as the carrier frequency of that channel;
  - 2) - the carrier frequency of the single sideband channel in the lower part of the previous double sideband channel shall be 3.0 kc/s lower than the carrier frequency of the previous double sideband channel when the latter has a carrier frequency at least 6 kc/s above that of the lower adjacent radiotelephone channel;
  - 3) - [.... (5 kc/s channels Region 1) ....]
- b) emissions in class A3H shall not be used on single sideband channels derived from the lower portion of previous double sideband channels.

WORKING GROUP 6A

REPORT OF WG 6A AD HOC TO WG 6A

SELECTIVE CALLING DEVICES

1. Working Group 6A ad hoc met twice under the Chairmanship of Mr. C.J.T. Westerterp (Netherlands). The delegations of the following countries participated in the work of the Group : The United States of America, France, Japan, Norway, Federal Republic of Germany, the United Kingdom, the U.S.S.R. and Yugoslavia.

The terms of reference were :

On the bases of the decisions taken by Committees 4 and 5 on the technical aspects and choice of frequencies (Document No. 275 refers), to consider the proposals for the elaboration of provisions introducing the use of selective calling systems for the maritime mobile service.

2. The Group unanimously agreed to recommend the adoption of the provisions appearing in the Annex attached hereto, subject to the comments below.
3. The delegate of Japan wished to record his understanding that the provisions of Article 28A apply only to the international selective calling system and are not mandatory for national systems.
4. Article 28A ADD 999F

4.1 The delegate of the United States wished to invite attention to the statements of his and other delegations recorded in the Fourth Report of Committee 4, Document No. 275, on pages 2 and 3.

4.2 The delegate of the United Kingdom announced that his delegation would wish to record a statement in Committee 6 when these provisions were adopted.



5. Since the proposals of the United Kingdom (Documents Nos. 91 and 113) had been used as a basis for the work of the Group, the delegation of the United Kingdom proposed, and the Group unanimously agreed, to invite the delegation of France to make any comments it may wish in WG 6A after having had the possibility of studying the present report.

C.J.T. WESTERTERP

Chairman

Annex : 1

A N N E XArticle 19Section I

(G/91(48)) MOD 737

(DT/2,  
p.117)

§ 2. A station shall be identified either 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, ship's selective call number, coast station identification numbers, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

Section II

MOD 750

(DT/2,  
p.117)

§ 11. (1) Each country shall choose the call signs, the ship's selective call number and the coast station identification number of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary-General the call signs which it has assigned together with the information which is to appear in Lists I to VI inclusive. These notifications do not include call signs assigned to amateur and experimental stations.

Section III

MOD 776

(DT/2,  
p.125)

(G/91(48))

(2) Ship stations

-- a call sign (see Nos. 765 and 766); or

- the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no possible confusion with distress, urgency and safety signals;

or

- its selective call numbers

Article 19 (cont.)

(G/91(49)) ADD

New Section IVA

(DT/2,  
p.126) ADD

Heading:

Selective Call Numbers in the  
Maritime Mobile Service

(F/109(92)) ADD 783A  
(ex. 788A)  
(DT/2,  
p.128)

§ 1. When stations of the maritime mobile service use selective calling devices, their call numbers shall be assigned by the responsible administrations in accordance with the provisions below.

(G/91(49)) ADD

Sub-heading:

(DT/2,  
p.126)

Formation of ship's selective call numbers  
and coast station identification numbers

(ex. 783A) ADD 783B

§ 25(bis) (1) The ten digits from 0 to 9 inclusive shall be used to form selective call numbers.

(ex. 783B) ADD 783C

(2) However, combinations of numbers commencing with the digits 00 (zero, zero) shall not be used when forming the identification numbers for coast stations.

(ex. 783C) ADD 783D

(3) Ship's selective call numbers and coast station identification numbers in the international series are formed as indicated in Nos. 783E, 783F and 783G.

(G/91(49)) ADD 783E  
(ex. 783D)

(4) Coast station identification numbers

- four figures (see No. 783C)

(ex. 783E) ADD 783F

(5) Ship stations selective call numbers

- five figures

(ex. 783F) ADD 783G

(6) Predetermined groups of ship stations

- five figures, as listed in No. 783M



Article 19 (cont.)(ex. DT/2,  
p.126)

ADD

Allocation of International Series and  
Assignment of Ship's Selective Call  
Numbers and Coast Station  
Identification Numbers

ADD

783H

§ 25 ter. (1) Where selective call numbers and coast station identification numbers are required for ships and coast stations open to the international public correspondence service they shall be given from the series allocated to each country by the Secretary-General. Upon notification by an administration of the introduction of selective calling for international use in the maritime mobile service, selective call numbers for ships will be allocated as required in blocks of 100 (one hundred); coast station identification numbers will be allocated in blocks of 10 (ten) to meet actual requirements.

783I

(2) Each administration shall choose the selective call numbers to be assigned to its ship stations from the blocks of the international series allocated to it and shall (in accordance with Article 20) notify to the Secretary-General the selective call numbers which it has assigned for inclusion in List V.

783J

(3) Each administration shall choose the coast station identification numbers to be assigned to its coast stations from the blocks of the international series allocated to it and shall (in accordance with Article 20) notify to the Secretary-General the coast station identification numbers which it has assigned for inclusion in List [IVA].

(G/91(50)) ADD  
(DT/2,  
p.207)

Article 28A

Selective Calling in the  
Maritime Mobile Service

(G/113(58)) ADD 999B

§ 1. The characteristics of the international selective calling system<sup>1</sup> shall be in accordance with Appendix 20C

Method of Calling

(G/91(50)) ADD 999C  
(DT/2,  
p.207)

§ 2. (1) The call shall consist of:

- the selective call number of the ship station called;
- the identification number of the coast station calling if included in the call;
- the whole transmitted twice.

ADD 999D

(2) When a station called does not reply, the call should not 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 30 minutes.

Reply to Calls

ADD 999E

§ 3. The reply to calls should be made in accordance with:

Nos. 1022-1023 when using radiotelegraphy;

Nos. 1241-1253 when using radiotelephony.

---

<sup>1</sup> ADD 999B.1

Committee 6 recognized that the final objective of a single international system could not be attained during the lifetime of the new provisions of the Radio Regulations at present being worked out.

Article 28A (cont.)

Frequencies and Classes of Emission to be used

(G/113(58)) ADD 999F  
(DT/2,  
p.207)

§ 4. Calls shall be radiated on one or more of the following frequencies as appropriate:

<u>Frequency</u>	<u>Class of Emission</u>
500 kc/s	A2H
2 182 kc/s	A2H
2 170.5 kc/s*	A2H
$\overline{4}$ --- kc/s )	
$\overline{8}$ --- kc/s )	
$\overline{13}$ --- kc/s )	A2H
/17 --- kc/s )	
$\overline{22}$ --- kc/s )	
156.8 Mc/s	F2
Any working frequency) listed for this )	A2H (MF and HF)
purpose in the List )	F2 (VHF)
of Coast Stations )	

Article 29

Section III

(G/91(51)) ADD 1013B  
(DT/2,  
p.218)

(4) When selective calling is used in the maritime mobile service, the provisions of Article 28A shall be observed.

---

\* At the latest, eight years after the date of entry into force of the revised Radio Regulations, this frequency will replace 2182 kc/s for selective calling.

Article 33

Section III

(ex.G/113(59)) ADD 1242A

When a ship station is called by selective calling 2170.5 kc/s (carrier frequency) it shall reply on 2191 kc/s (carrier frequency) where the coast station concerned keeps watch, otherwise on a frequency on which the coast station keeps watch.

(DT/2, MOD 1224  
p.292)

(3) When selective calling is used the provisions of Article 28A shall be observed.

Appendix 9

The The Group agreed to recommend the principle of G/91(53) DT/2, p. 448.

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/119-E

23 October 1967

Original : French

WORKING GROUP 5B

PRELIMINARY DRAFT OF ARTICLES 7, 33 AND 35

Article 7

- MOD 447 a) Ship stations, telephony (two-frequency channels)
- 4063 - 4139.5 kc/s
  - 6200 - 6210.4 kc/s
  - 8195 - 8281.2 kc/s
  - 12330 - 12421 kc/s
  - 16460 - 16565 kc/s
  - 22000 - 22094.5 kc/s
- MOD 448 b) Coast stations, telephony (two-frequency channels)
- 4361 - 4438 kc/s
  - 6513.5 - 6525 kc/s
  - 8728.5 - 8815 kc/s
  - 13105 - 13200 kc/s
  - 17255 - 17360 kc/s
  - 22624 - 22720 kc/s
- MOD 449 c) Ship stations and coast stations, telephony (single-frequency channels)
- 4139.5 - 4142.5 kc/s
  - 6210.4 - 6216.5 kc/s
  - 8281.2 - 8288 kc/s
  - 12421 - 12431.5 kc/s
  - 16565 - 16576 kc/s
  - 22094.5 - 22112 kc/s



Article 7 (contd.)

SUP 450

MOD 456 . § 13. (1) Appendix 17 gives the radiotelephone channels of the maritime mobile service in the frequency bands referred to in Nos. 447, 448 and 449.

Article 33 (for Committee 6)

1236 and The reference to Section B of Appendix 15 should be  
1249 replaced by Reference No. 1352.

The reference to Appendix 17 should be replaced by a  
reference to Sections A and B of Appendix 17.

1251 and "The carrier frequency of 6204 kc/s" would be better.  
1295

Article 35

NOC Section III. Bands between 4000 and 23 000 kc/s.

ADD A. Mode of operation of stations

ADD 1351A s 13 A. The classes of emission to be used for radio-telephony in the maritime mobile service bands between 4000 and 23 000 kc/s are as follows :

- a) class A3<sup>1)</sup>, or
- b) classes A3H<sup>2)</sup>, A3A and A3J

However, unless specified to the contrary in the Regulations [see Nos. .... ]

- after 1 January 1972, class A3 emissions shall no longer be authorized for coast stations, and,
- after 1 January 1978, class A3H emissions shall no longer be authorized for coast stations and classes A3 and A3H shall no longer be authorized for ship stations.

---

ADD 1351A-1 1) For the use of class A3B, see Resolution No. [Document No. ... ].

ADD 1351A-2 2) The conditions governing the use of class A3H are specified in Appendix 17 and Resolution No. [Document No. ... ].



Article 35 (continued)

ADD 1351B [See Document No. 214]

MOD AA. Call, Distress and Safety

MOD 1352 s 14. (1) Ship stations may use, for calling, one of the following frequencies :

4136.3 kc/s

6204.0 kc/s

8268.4 kc/s

12403.5 kc/s

16533.5 kc/s

22073.5 kc/s

ADD 1352A (2) Coast stations may use, for calling, one of the following frequencies <sup>1)</sup>:

4434.9 kc/s

6518.6 kc/s

8802.4 kc/s

13182.5 kc/s

17328.5 kc/s

22699.0 kc/s

ADD 1352A-1 <sup>1)</sup> These frequencies may also be used by radiotelegraph coast stations for selective calling [see No....]

Article 35 (continued)

- MOD 1353 § 15.(1) In that part of the Tropical Zone situated in Region 3, 6204 kc/s is reserved for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.
- ADD 1353A (2) In that part of the Tropical Zone situated in Region 2 and extending to parallel 34°S and in that part of the Tropical Zone situated in Region 3 and extending to parallel 50°S, the carrier frequency 4 ... kc/s is reserved for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.
- Information should perhaps also be given on the classes of emission to be used in both cases (1353 and 1353A) especially after 1 January 1978 - see Document No. 262, page 2.
- ADD 1353B See 1353A of Document No. 264.
- MOD 1354 See Document No. 199.
- MOD 1355 § 17.(1) For the conduct of duplex telephony, the frequencies of emission of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Sections A and B of Appendix 17.

Article 35 (continued)

- |     |      |  |
|-----|------|--|
| MOD | 1356 | (2) Section C of Appendix 17 indicates the frequencies to be used for the conduct of simplex telephony. The peak envelope power of the coast station transmitters should not exceed 1 kW in these cases. |
| MOD | 1357 | The frequencies indicated in Sections A, B and C of Appendix 17 for ship transmissions may be used by ships of all categories, in accordance with traffic requirements.                                  |
| MOD | 1358 | /See Document No. 214/   |
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

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WORKING GROUP 5B

DRAFT PREAMBLE TO APPENDIX 17

Channels in bands between 4000 and 23 000 kc/s allocated  
to the radiotelephone mobile service  
(see Article 35)

1. For the frequencies used by coast and ship stations in the bands allocated to the radiotelephone maritime mobile service, the channel distribution shall be as indicated in the three sections below :  
Section A - Table of double-sideband transmitting frequencies (two-frequency channels), in kc/s.  
Section B - Table of single-sideband transmitting frequencies (carrier frequencies, two-frequency channels) in kc/s.  
Section C - Table of single-sideband transmitting frequencies (carrier frequencies, one-frequency channels), in kc/s.
2. In the single-sideband channels, the frequencies assigned shall be 1400 c/s above the carrier frequencies.
3. The technical characteristics of single-sideband transmitters operating in the bands between 4000 and 23 000 kc/s allocated for radiotelephony to the maritime mobile service are shown in Appendix 17A.
4. One or more series of frequencies in Section A or Section B (with the exception of those mentioned in paragraph 6 below) are assigned to each coast station, which uses the frequencies associated, so far as possible, in pairs; each pair comprises one transmitting and one receiving frequency. The series shall be selected with due regard to the areas served and so as to avoid, so far as possible, harmful interference between the services of coast stations.



5. The frequencies in Section C are provided for use in common by ships of all classes throughout the world, according to traffic requirements, for ship transmissions to coast stations and for intership communication. They may also be used in common throughout the world for transmissions by coast stations (simplex operation) provided the peak envelope power does not exceed 1 kW.

6. The following series of frequencies in Section B are reserved for calling :

- Series No. 24 in the 4 Mc/s and 8 Mc/s bands;
- Series No. 2 in the 6 Mc/s band;
- Series No. 22 in the 12, 16 and 22 Mc/s bands.

The other frequencies in Sections A, B and C are working frequencies. The double-sideband frequencies 8269, 12 403.5, 16 533.5 and 22 074 kc/s may be used until 1.1.1978.

6a) Stations using double-sideband emissions must operate solely on the frequencies in Section A in accordance with Nos. .... and .... (Article 35).

6b) Stations using single-sideband emissions must operate on the carrier frequencies indicated in Sections B and C, in accordance with the technical characteristics specified in Appendix 17A. These stations must always operate in the upper sideband.

6c) Stations using single-sideband emissions must transmit solely in the A3A and A3J classes of emission in accordance with Nos. ..... Until 1.1.1978 Class A3H emissions in accordance with No. 1351A are authorized exclusively on the carrier frequencies in Section B which coincide with the frequencies in Section A or which are not more than 100 c/s from these frequencies.

6d) Assignments to stations utilizing independent sideband emissions shall be considered to comply with the Table in Section A when the necessary bandwidth does not extend beyond the upper or lower limits of the bandwidth provided for double-sideband emissions.

7. Should an administration authorize the use of frequencies other than those contained in Sections A, B and C, its radiotelephone service must not cause harmful interference to radiotelephone stations of the maritime mobile service which use frequencies specified in the following tables.

INTERNATIONAL TELECOMMUNICATION UNION  
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WORKING GROUP 5B

If the provisions proposed in Document No. DT/114 are adopted, the attached preliminary Draft Resolution could be examined by Working Group 5D or an ad hoc Working Group.



PRELIMINARY DRAFT RESOLUTION No. ...

Relating to the Transfer of Frequency Assignments  
to Radiotelephone Coast Stations in the Bands  
allocated exclusively to the Maritime Mobile  
Service between 4 000 and 23 000 kc/s

The World Administrative Radio Conference, Geneva (1967),

considering

- a) that the frequency allotment plan appearing in Appendix 25 of the Radio Regulations, Geneva, 1959, is to be retained until a new plan is worked out by the Conference mentioned in Recommendation No. ... /Document No. 230/;
- b) that, following the extension of the bands allocated exclusively to the maritime mobile service for radiotelephony, new duplex radiotelephone channels will be made available to the maritime mobile service by means of a new section (Section III) of Appendix 25 (Resolution No. ... /Document No. 230/);
- c) that the separation between the transmitting frequencies of coast and ship stations should be the same in all duplex radiotelephone channels;
- d) that it is generally easier and cheaper to modify transmitting frequencies for coast stations than for ship stations;
- e) that the extension of the bands allocated exclusively to the maritime mobile service for radiotelephony will come into force on 1 March 1970;
- f) that the new channels should be brought into service as soon as possible;



resolves that

1. the transmitting frequencies appearing in Appendix 25 of the Radio Regulations, Geneva, 1959, for radiotelephone coast stations shall be transferred in accordance with the table of correspondences appearing in Annex I;
2. on:....., the I.F.R.B. shall modify the frequencies appearing opposite the allocations of Appendix 25 appearing in the Master International Frequency Register, in accordance with the table of correspondences given in Annex I;
3. frequency assignments to radiotelephone coast stations recorded in the Master International Frequency Register as of 1 March 1970 in the channels defined in Appendix 17 of the Radio Regulations, Geneva, 1959, shall be transferred in accordance with the tables of correspondence appearing in Annex I (double sideband or independent sideband emissions (see Resolution No. ... Document No. 266/)) and Annex II (single sideband emissions);
4. frequency assignments recorded in the Master Register as of 1 March 1970 outside the channels referred to in Appendix 17 of the Radio Regulations, Geneva, 1959, may be modified so as to retain with respect to the new frequencies specified in Section A of Appendix 17 revised, Document No. DT/114/ the same relative positions they occupied in relation to the frequencies referred to in Appendix 17 of the Radio Regulations, Geneva, 1959;
5. between 1 March 1970 and ..... 1970, administrations shall modify the transmitting frequencies of their radiotelephone coast stations as indicated in paragraphs 2 and 3 above; they shall notify these modifications to the I.F.R.B. in accordance with Article 9 of the Radio Regulations;
6. provided that the notification received by the I.F.R.B. in accordance with paragraph 5 above does not involve any change in the basic characteristics of the initial assignment apart from the assigned frequency, the I.F.R.B. shall modify the entry in the Master Register accordingly; the dates to be entered in the appropriate parts of Column 2 shall be those of the initial assignment; if the

notification involves any other change in the basic characteristics of the original assignment, this modification shall be treated in accordance with the provisions of Article 9 of the Radio Regulations;

7. on ....., the I.F.R.B. shall also make a provisional entry in the Master Register in accordance with paragraphs 3 and 4 above for each initial assignment, the transfer of which has not been notified to it by that date; the dates appearing in Column 2 opposite the initial assignments shall be retained in these provisional entries; the original assignments shall be retained in the Master Register, but they shall be accompanied by a special remark in the "Remarks" column, and any dates appearing in Column 2a shall be transferred to Column 2b;
8. thirty days after ....., the I.F.R.B. shall send administrations that have not yet notified it of the transfer of frequency assignments to their radiotelephone coast stations in accordance with the provisions of paragraphs 3 or 4 and 5 above, an extract from the Master Register giving information on the entries therein relating to those administrations, and it shall remind them of the provisions of the present resolution;
9. if, 60 days after the despatch of these extracts, an administration has not notified the I.F.R.B. of the transfer of an existing assignment in accordance with paragraphs 3 or 4 and 5 above, the relevant new provisional entry shall be removed from the Master Register and the original entry shall be retained with the date in Column 2b and a special remark in the "Remarks" column; however, if the administration concerned reports the transfer within these 60 days, the provisions of paragraph 6 shall be applicable.

A N N E X I

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS, IN kc/s  
(CLASSES OF EMISSION A3 AND A3B)

4 Mc/s band		8 Mc/s band		12 Mc/s band		16 Mc/s band		22 Mc/s band	
Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies
4 371.1	4 364.7	8 748.1	8 732.1	13 133.5	13 112.5	17 293.5	17 258.5	22 653.5	22 929.0
4 377.4	4 371.0	8 754.4	8 738.4	13 140.5	13 119.5	17 300.5	17 265.5	22 660.5	22 636.0
4 383.8	4 377.4	8 760.8	8 744.8	13 147.5	13 126.5	17 307.5	17 272.5	22 667.5	22 643.0
4 390.2	4 383.8	8 767.2	8 751.2	13 154.5	13 133.5	17 314.5	17 279.5	22 674.5	22 650.0
4 396.6	4 390.2	8 773.6	8 757.6	13 161.5	13 140.5	17 321.5	17 286.5	22 681.5	22 657.0
4 403.0	4 396.6	8 780.0	8 764.0	13 168.5	13 147.5	17 328.5	17 293.5	22 688.5	22 664.0
4 409.4	4 403.0	8 786.4	8 770.4	13 175.5	13 154.5	17 335.5	17 300.5	22 695.5	22 671.0
4 415.8	4 409.4	8 792.8	8 776.8	13 182.5	13 161.5	17 342.5	17 307.5	22 702.5	22 678.0
4 422.2	4 415.8	8 799.2	8 783.2	13 189.5	13 168.5	17 349.5	17 314.5	22 709.5	22 685.0
4 428.6	4 422.2	8 805.6	8 789.6	13 196.5	13 175.5	17 356.5	17 321.5	22 716.5	22 692.0
4 434.9	4 428.6	8 811.9	8 796.0						

A N N E X IITABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS,IN kc/s (SINGLE SIDEBAND)

4 Mc/s band				8 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
4 369.4	4 368.0	4 363.0	4 361.6	8 746.4	8 745.0	8 730.4	8 729.0
4 372.5	4 371.1	4 366.1	4 364.7	8 749.5	8 748.1	8 733.5	8 732.1
4 375.7	4 374.3	4 369.2	4 367.8	8 752.7	8 751.3	8 736.6	8 735.2
4 378.8	4 377.4	4 372.4	4 371.0	8 755.8	8 754.4	8 739.8	8 738.4
4 382.1	4 380.7	4 375.6	4 374.2	8 759.1	8 757.7	8 743.0	8 741.6
4 385.2	4 383.8	4 378.8	4 377.4	8 762.2	8 760.8	8 746.2	8 744.8
4 388.5	4 387.1	4 382.0	4 380.6	8 765.5	8 764.1	8 749.4	8 748.0
4 391.6	4 390.2	4 385.2	4 383.8	8 768.6	8 767.2	8 752.6	8 751.2
4 394.9	4 393.5	4 388.4	4 387.0	8 771.9	8 770.5	8 755.8	8 754.4
4 398.0	4 396.6	4 391.6	4 390.2	8 775.0	8 773.6	8 759.0	8 757.6
4 401.3	4 399.9	4 394.8	4 393.4	8 778.3	8 776.9	8 762.2	8 760.8
4 404.4	4 403.0	4 398.0	4 396.6	8 781.4	8 780.0	8 765.4	8 764.0
4 407.7	4 406.3	4 401.2	4 399.8	8 784.7	8 783.3	8 768.6	8 767.2
4 410.8	4 409.4	4 404.4	4 403.0	8 787.8	8 786.4	8 771.8	8 770.4
4 414.1	4 412.7	4 407.6	4 406.2	8 791.1	8 789.7	8 775.0	8 773.6
4 417.2	4 415.8	4 410.8	4 409.4	8 794.2	8 792.8	8 778.2	8 776.8
4 420.5	4 419.1	4 414.0	4 412.6	8 797.5	8 796.1	8 781.4	8 780.0
4 423.6	4 422.2	4 417.2	4 415.8	8 800.6	8 799.2	8 784.6	8 783.2
4 426.9	4 425.5	4 420.4	4 419.0	8 803.9	8 802.5	8 787.8	8 786.4
4 430.0	4 428.6	4 423.6	4 422.2	8 807.0	8 805.6	8 791.0	8 789.6
4 433.2	4 431.8	4 426.8	4 425.4	8 810.2	8 808.8	8 794.2	8 792.8
4 436.3	4 434.9	4 430.0	4 428.6	8 813.3	8 811.9	8 797.4	8 796.0

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS,  
IN kc/s (SINGLE SIDEBAND)

12 Mc/s band				16 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
13 131.6	13 130.2	13 110.4	13 109.0	17 291.6	17 290.2	17 256.4	17 255.0
13 134.9	13 133.5	13 113.9	13 112.5	17 294.9	17 293.5	17 259.9	17 258.5
13 138.6	13 137.2	13 117.4	13 116.0	17 298.6	17 297.2	17 263.4	17 262.0
13 141.9	13 140.5	13 120.9	13 119.5	17 301.9	17 300.5	17 266.9	17 265.5
13 145.6	13 144.2	13 124.4	13 123.0	17 305.6	17 304.2	17 270.4	17 269.0
13 148.9	13 147.5	13 127.9	13 126.5	17 308.9	17 307.5	17 273.9	17 272.5
13 153.6	13 152.2	13 131.4	13 130.0	17 312.6	17 311.2	17 277.4	17 276.0
13 155.9	13 154.5	13 134.9	13 133.5	17 315.9	17 314.5	17 280.9	17 279.5
13 159.6	13 158.2	13 138.4	13 137.0	17 319.6	17 318.2	17 284.4	17 283.0
13 162.9	13 161.5	13 141.9	13 140.5	17 322.9	17 321.5	17 287.9	17 286.5
13 166.6	13 165.2	13 145.4	13 144.0	17 326.6	17 325.2	17 291.4	17 290.0
13 169.9	13 168.5	13 148.9	13 147.5	17 329.9	17 328.5	17 294.9	17 293.5
13 173.6	13 172.2	13 152.4	13 151.0	17 333.6	17 332.2	17 298.4	17 297.0
13 176.9	13 175.5	13 155.9	13 154.5	17 336.9	17 335.5	17 301.9	17 300.5
13 180.6	13 179.2	13 159.4	13 158.0	17 340.6	17 339.2	17 305.4	17 304.0
13 183.9	13 182.5	13 162.9	13 161.5	17 343.9	17 342.5	17 308.9	17 307.5
13 187.6	13 186.2	13 166.4	13 165.0	17 347.6	17 346.2	17 312.4	17 311.0
13 190.9	13 189.5	13 169.9	13 168.5	17 350.9	17 349.5	17 315.9	17 314.5
13 194.6	13 193.2	13 173.4	13 172.0	17 354.6	17 353.2	17 319.4	17 318.0
13 197.9	13 196.5	13 176.9	13 175.5	17 357.9	17 356.5	17 322.9	17 321.5

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE  
COAST STATIONS, IN kc/s (SINGLE SIDEBAND)

22 Mc/s Band			
Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
22 651.6	22 650.2	22 626.9	22 625.5
22 654.9	22 653.5	22 630.4	22 629.0
22 658.6	22 657.2	22 633.9	22 632.5
22 661.9	22 660.5	22 637.4	22 636.0
22 665.6	22 664.2	22 640.9	22 639.5
22 668.9	22 667.5	22 644.4	22 643.0
22 672.6	22 671.2	22 647.9	22 646.5
22 675.9	22 674.5	22 651.4	22 650.0
22 679.6	22 678.2	22 654.9	22 653.5
22 682.9	22 681.5	22 658.4	22 657.0
22 686.6	22 685.2	22 661.9	22 660.5
22 689.9	22 688.5	22 665.4	22 664.0
22 693.6	22 692.2	22 668.9	22 667.5
22 696.9	22 695.5	22 672.4	22 671.0
22 700.6	22 699.2	22 675.9	22 674.5
22 703.9	22 702.5	22 679.4	22 678.0
22 707.6	22 706.2	22 682.9	22 681.5
22 710.9	22 709.5	22 686.4	22 685.0
22 714.6	22 713.2	22 689.9	22 688.5
22 717.9	22 716.5	22 693.4	22 692.0

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/122-E  
23 October 1967  
Original : English

WORKING GROUP 5A

USE OF 2170.5 AND 2191 kc/s

Summary of general discussions on the use

2170.5

(See also DT/89)

Region 1

Coast calling ships with A3A and A3J, also selcall with A2H and, exceptionally, coast stations sending safety messages with A3H. No special limit for power. (POL wants max. 400 W P<sub>p</sub>.)

Regions 2 and 3

Communication shore-ship and intership with A3A and A3J, max. 400 W P<sub>p</sub>. Some Region 3 countries want also to use it as a supplementary channel for calling. AUS and many others want it for maritime mobile service without further specification. Some Region 1 countries think that only calling and distress is allowed as the table, Art. 5, is unchanged. See, however, No. 201, MOD, Document No. 303.

2191.0

Region 1

Ships calling coast stations, when 2182 kc/s is used for distress.

Regions 2 and 3

Maritime mobile service, max. 400 W P<sub>p</sub> without further specification. Objection from some Region 1 countries as above.



Tentative advance draftsArticle 7

MOD 442 Region 1

2170 -2173.5 kc/s : Coast stations calling ship stations  
(including selective calling);  
exceptionally coast stations trans-  
mitting safety messages.

2173.5-2190.5 kc/s : As accepted in Document No. 201.

2190.5-2194 kc/s : Ship stations calling coast stations.

Article 33

ADD 1227AA

(A radiotelephone ship station calling  
a coast station of its own nationality  
should use for the call)

c) the carrier frequency 2191.0 kc/s  
(assigned frequency 2192.4 kc/s),  
when 2182 kc/s is used for distress.  
(See also Nos. 1341 and 1322A1)

ADD 1235A

As in DT/74, but only 2170.5 kc/s.

MOD 1233

As in DT/74.

1233A

Delete, (covered by 1235A).

1242A and 1248A

As in DT/74? but insert frequencies.

Article 35

ADD 1322A1

Transmissions in the bands 2170-2173.5  
and 2190.5-2194 kc/s respectively with  
carrier frequency 2170.5 kc/s (assigned  
frequency 2171.9 kc/s) and carrier



- ADD 1322A1 frequency 2191 kc/s (assigned frequency 2192.4 kc/s)  
(cont.) are limited to emissions of Class A3A and A3J.  
(Already approved, Document No. 236.)
- New However, for special purposes /, in Region 1,/ also  
Class A2H and, exceptionally, A3H may be used.
- ADD 1342A (Region 1?) The frequency band 2170-2173.5 kc/s with  
carrier frequency 2170.5 kc/s (assigned frequency  
2171.9 kc/s) may also be used with Class A2H emissions  
by coast stations for selective calling and, exceptionally,  
with Class A3H emissions for safety messages from coast  
stations.
- NOC 1336 The latter part of proposed text in DT/99 ought to be  
transferred to 1336A, Document No. 303.  
Proposal No. J/84(20), DT/2, page 336 withdrawn?
- ADD 1336A The latter part in Document No. 303, left in abeyance,  
should stand either as it is or with the text of the  
latter part of proposed 1336 in DT/99.
- ADD 1339A1 As in DT/74, but insert frequencies.
- ADD 1339A2 As in DT/74, but insert frequencies. Partly covered  
by 1227AA.
- ADD 1339AA As in DT/74, but insert dates for transition period.  
1339AA ought to come before 1339A2.
- ADD 1339A3 DT/74. Regions 2 and 3? Ought then to be renumbered  
B 1351A.  
C
- MOD 1344 See Document No. 247. Possibly 2170.5 kc/s as a working  
frequency ship to shore.
- 1344A DT/74. Withdrawn?
- 1351 DT/74. Withdrawn?
-

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

Document No. DT/123-E  
23 October 1967  
Original : French,  
English,  
Spanish

COMMITTEE 4

DRAFT

EIGHTH REPORT OF COMMITTEE 4

Subjects : Annex I : Article 7, Nos. : 438A, 441, 451, 451A, 451B,  
452, 452.1, 453 and 453.1

Article 12, No. : 677

Article 28, Nos. : 955, 956, 964A, Section III  
(title after No. 970) and 971

Article 32, Nos. : 1137, 1138, 1147 and 1191E

Annex II : Appendix 10 OD and OE

Annex III : Appendix 20B

1. The texts in Annexes I, II and III have been unanimously adopted  
by Committee 4.

F.G. PERRIN  
Chairman of Committee 4

Annexes : 3



A N N E X I

Article 7, Section IV

- ADD 438A §8A. As a general rule, the separation between adjacent frequencies used respectively by coast stations and by ship stations is 4 kc/s.
- SUP 441
- MOD 451 (e) Ship stations, wideband telegraphy, facsimile, and special transmission systems.
- 4 142.5 - 4 162.5 kc/s  
6 216.5 - 6 244.5 kc/s  
8 288 - 8 328 kc/s  
12 431.5 - 12 479.5 kc/s  
16 576 - 16 636.5 kc/s  
22 112 - 22 160.5 kc/s
- ADD 451A (e)A Ship stations, oceanographic data transmission (see note shown with one asterisk in Appendix 15A).
- 4 162.5 - 4 166 kc/s  
6 244.5 - 6 248 kc/s  
8 328 - 8 331.5 kc/s  
12 479.5 - 12 483 kc/s  
16 636.5 - 16 640 kc/s  
22 160.5 - 22 164 kc/s
- ADD 451B (e)B Ship stations, narrow-band direct-printing telegraph and data systems
- 4 166 - 4 172.25 kc/s  
6 248 - 6 258.25 kc/s  
8 331.5 - 8 341.75 kc/s  
12 483 - 12 503.25 kc/s  
16 640 - 16 660.5 kc/s  
22 164 - 22 184.5 kc/s

Article 7 - Section IV (cont.)

- MOD 452 (f) Ship station, telegraphy
- 4 172.25 - 4 231 kc/s
  - 6 258.25 - 6 345.5 kc/s
  - 8 341.75 - 8 459.5 kc/s
  - 12 503.25 - 12 689 kc/s
  - 16 660.5 - 16 917.5 kc/s
  - 22 184.5 - 22 374 kc/s
  - 25 070 - 25 110 kc/s<sup>1</sup>
- SUP 452.1
- MOD 453 (g) Coast stations, wideband and manual telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems.
- 4 231.5 - 4 361.5 kc/s
  - 6 345.5 - 6 514 kc/s
  - 8 459.5 - 8 728.5 kc/s
  - 12 689 - 13 107.5 kc/s
  - 16 917.5 - 17 255 kc/s
  - 22 372 - 22 624.5 kc/s
- MOD 453.1<sup>1</sup> Frequencies in the bands 25 010 - 25 070 kc/s, 25 110 - 25 600 kc/s and 26 100 - 27 500 kc/s may be assigned to coast stations.

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Note to the Editorial Committee

No. MOD 453 (title) appears in Document No. 231.

Article 12

MOD 677 88. The use of class B emissions is forbidden in all stations.

Article 28

NOC Section I. General provisions.

(MOD) 955 81. Mobile stations shall be established in such a way as to conform to the provisions of Chapter II as regards frequencies and classes of emission.

SUP 956

ADD 964A Equipment intended for use on narrow-band direct-printing telegraph and data systems should conform to the characteristics given in Appendix 20B.

Section III

SUP Title after No. 970. Bands between 110 and 160 kc/s.

SUP 971

Article 32

SUP 1137

MOD 1138 815. In Region 2, the frequencies in the band  $\left[ 20\text{--} \text{ to } 20\text{--} \text{ kc/s} \right]$  are assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems. The provisions of No. 1146 are applicable.

Article 32 (cont.)

- MOD 1147 (3) Except as provided for in No. 1352B, coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 and 27 500 kc/s shall not use Type 2 emissions. (See No. 1105A.)
- ADD 1191E §38E. When assigning frequencies listed in Appendix 15, Administrations shall take due account of the information entries in the Master Register as a result of the notification procedure contained in Resolution No. ... [E].

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Note to the Editorial Committee

In No. MOD 1138 : the limits of the band in square brackets will be finally agreed upon in Committee<sup>5</sup>.

A N N E X    II

Appendix 10

ADD	OD	Ocean data station
ADD	OE	Ocean data interrogating station.

A N N E X    III

ADD

APPENDIX 20B

Narrow-band direct-printing telegraph equipment  
(see Articles 28 and 29)

1.        The equipment for narrow-band direct-printing telegraphy in the maritime mobile service shall fulfil the following conditions :
    - (a)    Equipment intended for interconnection with the Public Telegraph Network shall accept signals conforming to International Telegraph Alphabet No. 2 at a modulation rate of 50 bauds and shall provide similar signals at its output.
    - (b)    The modulation rate over the radio path shall not exceed 100 bauds.
    - (c)    Class F1 emission shall be used, with a total frequency shift of 170 c/s.
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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/124-E  
27 October 1967  
Original : English

COMMITTEE 5

DRAFT

RECOMMENDATION No. ...

relating to channel spacing in the  
exclusive maritime mobile radiotelephone bands  
between 4 and 22 Mc/s

The World Administrative Radio Conference to deal with matters  
relating to the maritime mobile service (Geneva, 1967),

considering

- a) that in Recommendation No. ... the Conference recommended that a World Maritime Radio Conference be convened in 1973 to deal with the matters referred to in paragraph 1 of that Recommendation;
- b) that this Conference be preceded by a preparatory meeting in accordance with No. 73 of the Convention;
- c) that in the interests of efficient utilization of the radio frequency spectrum it is desirable to adopt the minimum channel spacing consistent with the production of economically priced radio receivers having good adjacent channel selectivity characteristics;
- d) that in bands between 1 605 and 3 850 kc/s the present Conference has adopted a spacing of 3000 c/s between the assigned frequencies of adjacent single sideband channels;



- e) that frequency tolerances as set out in Appendix ... have been adopted for the same service in all frequency bands;

recommends

that the preparatory meeting referred to in b) above should be invited to consider the adoption of a common single sideband channel spacing of 3000 c/s per second for maritime mobile radiotelephone purposes in proposing technical standards to the World Maritime Radio Conference referred to in a) above.

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INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**  
GENEVA, 1967

Document No. DT/125-E  
24 October 1967  
Original : French,  
English,  
Spanish

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WORKING GROUP 5B AD HOC

DRAFT REPORT BY WORKING GROUP 5B AD HOC  
TO COMMITTEE 5

The Ad hoc Group submits the attached draft Resolution for  
approval by Committee 5.

P.E. WILLEMS  
Chairman

Annex : 1



A N N E X

DRAFT RESOLUTION No. ...

Relating to the Transfer of Frequency Assignments  
to Coast Radiotelephone Stations in the Frequency  
Bands allocated exclusively to the Maritime Mobile  
Service between 4 000 and 23 000 kc/s

The World Administrative Radio Conference, Geneva (1967),

considering

- a) that the Frequency Allotment Plan appearing in Appendix 25 to the Radio Regulations, Geneva, 1959, is to be retained until a new plan is worked out by the Conference mentioned in Recommendation No. ... [Document No. 230];
- b) that, as a result of the extension of the bands allocated exclusively to the maritime mobile service for radiotelephony, new duplex radiotelephone channels will be available to the maritime mobile service and will be contained in a new section (Section III) of Appendix 25 (Resolution No. ... [Document No. 230]);

- c) that the separation between the transmitting frequencies of coast and ship stations should remain constant within each band;
- d) that on the whole it is easier and cheaper to change transmitting frequencies for coast stations than for ship stations, taking into account the large number of ship stations;
- e) that the additions to the bands allocated exclusively to the maritime mobile service for radiotelephony will become available on 1 March 1970 [see Annex 2 to Document No. 3077];
- f) that the new channels should be brought into service as soon as possible;

resolves

1. on 1 March 1970, the frequencies appearing in Appendix 25 to the Radio Regulations (Geneva, 1959) shall be replaced by the frequencies appearing in Annex I to this Resolution. This Appendix as modified shall also contain the new Section III referred to in Resolution No. I and shall then be known as Appendix 25 MOD;
2. on 1 March 1970, the I.F.R.B. shall bring the appropriate initial entries 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), into conformity with the allotments included in Appendix 25 MOD referred to above;

3. frequency assignments to HF coast radiotelephone stations recorded in the Master Register on 1 March 1970 on the channels defined in Appendix 17 to the Radio Regulations (Geneva, 1959), shall be transferred in accordance with the tables appearing in Annex I (double sideband or independent sideband emissions (see Resolution No. ... /Document No. 266/)) and Annex II (single sideband emissions);
4. frequency assignments to coast radiotelephone stations in the HF bands allocated exclusively for that purpose, but not in accordance with Appendix 17 of the Radio Regulations (Geneva, 1959), shall be transferred in such a way as to retain with respect to the frequencies specified in Section A of /Appendix 17 revised, Document No. DT/114/ the same relative positions they occupied in relation to the frequencies listed in Appendix 17 of the Radio Regulations, (Geneva, 1959);
5. on 1 March 1970 at 0001 GMT, administrations shall modify the transmitting frequencies of their radiotelephone coast stations as indicated in paragraphs 3 and 4 above; they shall notify these modifications to the I.F.R.B. in accordance with Section I of Article 9 of the Radio Regulations;

6. provided that the notices received by the I.F.R.B. in accordance with paragraph 5 above do not contain any change 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 be notified in the basic characteristics of the original assignment, it shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;
7. on 1 March 1970, 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 I.F.R.B., a provisional entry determined in accordance with the provisions of paragraphs 3 or 4 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;
8. thirty days after that date, the I.F.R.B. shall send to those administrations which have not yet notified the transfer

of frequency assignments to their coast radiotelephone stations in accordance with paragraphs 3 or 4 and 5 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;

9. if, sixty 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 3 or 4 and 5 above, the corresponding provisional new entry shall be deleted from the Master Register and the original entry shall be retained with its date in column 2b and a special remark in the "Remarks" column; if, however, the administration concerned notifies the transfer during the sixty days period, the provisions of paragraph 6 above shall apply;



A N N E X ITABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS, IN kc/s(CLASSES OF EMISSION A3 AND A3B)

4 Mc/s band		8 Mc/s band		12 Mc/s band		16 Mc/s band		22 Mc/s band	
Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies
4 371.1	4 364.7	8 748.1	8 732.1	13 133.5	13 112.5	17 293.5	17 258.5	22 653.5	22 929.0
4 377.4	4 371.0	8 754.4	8 738.4	13 140.5	13 119.5	17 300.5	17 265.5	22 660.5	22 636.0
4 383.8	4 377.4	8 760.8	8 744.8	13 147.5	13 126.5	17 307.5	17 272.5	22 667.5	22 643.0
4 390.2	4 383.8	8 767.2	8 751.2	13 154.5	13 133.5	17 314.5	17 279.5	22 674.5	22 650.0
4 396.6	4 390.2	8 773.6	8 757.6	13 161.5	13 140.5	17 321.5	17 286.5	22 681.5	22 657.0
4 403.0	4 396.6	8 780.0	8 764.0	13 168.5	13 147.5	17 328.5	17 293.5	22 688.5	22 664.0
4 409.4	4 403.0	8 786.4	8 770.4	13 175.5	13 154.5	17 335.5	17 300.5	22 695.5	22 671.0
4 415.8	4 409.4	8 792.8	8 776.8	13 182.5	13 161.5	17 342.5	17 307.5	22 702.5	22 678.0
4 422.2	4 415.8	8 799.2	8 783.2	13 189.5	13 168.5	17 349.5	17 314.5	22 709.5	22 685.0
4 428.6	4 422.2	8 805.6	8 789.6	13 196.5	13 175.5	17 356.5	17 321.5	22 716.5	22 692.0
4 434.9	4 428.6	8 811.9	8 796.0						

## A N N E X II

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS,IN kc/s (SINGLE SIDEBAND)

4 Mc/s band				8 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
4 369.4	4 368.0	4 363.0	4 361.6	8 746.4	8 745.0	8 730.4	8 729.0
4 372.5	4 371.1	4 366.1	4 364.7	8 749.5	8 748.1	8 733.5	8 732.1
4 375.7	4 374.3	4 369.2	4 367.8	8 752.7	8 751.3	8 736.6	8 735.2
4 378.8	4 377.4	4 372.4	4 371.0	8 755.8	8 754.4	8 739.8	8 738.4
4 382.1	4 380.7	4 375.6	4 374.2	8 759.1	8 757.7	8 743.0	8 741.6
4 385.2	4 383.8	4 378.8	4 377.4	8 762.2	8 760.8	8 746.2	8 744.8
4 388.5	4 387.1	4 382.0	4 380.6	8 765.5	8 764.1	8 749.4	8 748.0
4 391.6	4 390.2	4 385.2	4 383.8	8 768.6	8 767.2	8 752.6	8 751.2
4 394.9	4 393.5	4 388.4	4 387.0	8 771.9	8 770.5	8 755.8	8 754.4
4 398.0	4 396.6	4 391.6	4 390.2	8 775.0	8 773.6	8 759.0	8 757.6
4 401.3	4 399.9	4 394.8	4 393.4	8 778.3	8 776.9	8 762.2	8 760.8
4 404.4	4 403.0	4 398.0	4 396.6	8 781.4	8 780.0	8 765.4	8 764.0
4 407.7	4 406.3	4 401.2	4 399.8	8 784.7	8 783.3	8 768.6	8 767.2
4 410.8	4 409.4	4 404.4	4 403.0	8 787.8	8 786.4	8 771.8	8 770.4
4 414.1	4 412.7	4 407.6	4 406.2	8 791.1	8 789.7	8 775.0	8 773.6
4 417.2	4 415.8	4 410.8	4 409.4	8 794.2	8 792.8	8 778.2	8 776.8
4 420.5	4 419.1	4 414.0	4 412.6	8 797.5	8 796.1	8 781.4	8 780.0
4 423.6	4 422.2	4 417.2	4 415.8	8 800.6	8 799.2	8 784.6	8 783.2
4 426.9	4 425.5	4 420.4	4 419.0	8 803.9	8 802.5	8 787.8	8 786.4
4 430.0	4 428.6	4 423.6	4 422.2	8 807.0	8 805.6	8 791.0	8 789.6
4 433.2	4 431.8	4 426.8	4 425.4	8 810.2	8 808.8	8 794.2	8 792.8
4 436.3	4 434.9	4 430.0	4 428.6	8 813.3	8 811.9	8 797.4	8 796.0

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE COAST STATIONS.IN kc/s (SINGLE SIDEBAND)

12 Mc/s band				16 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
13 131.6	13 130.2	13 110.4	13 109.0	17 291.6	17 290.2	17 256.4	17 255.0
13 134.9	13 133.5	13 113.9	13 112.5	17 294.9	17 293.5	17 259.9	17 258.5
13 138.6	13 137.2	13 117.4	13 116.0	17 298.6	17 297.2	17 263.4	17 262.0
13 141.9	13 140.5	13 120.9	13 119.5	17 301.9	17 300.5	17 266.9	17 265.5
13 145.6	13 144.2	13 124.4	13 123.0	17 305.6	17 304.2	17 270.4	17 269.0
13 148.9	13 147.5	13 127.9	13 126.5	17 308.9	17 307.5	17 273.9	17 272.5
13 153.6	13 152.2	13 131.4	13 130.0	17 312.6	17 311.2	17 277.4	17 276.0
13 155.9	13 154.5	13 134.9	13 133.5	17 315.9	17 314.5	17 280.9	17 279.5
13 159.6	13 158.2	13 138.4	13 137.0	17 319.6	17 318.2	17 284.4	17 283.0
13 162.9	13 161.5	13 141.9	13 140.5	17 322.9	17 321.5	17 287.9	17 286.5
13 166.6	13 165.2	13 145.4	13 144.0	17 326.6	17 325.2	17 291.4	17 290.0
13 169.9	13 168.5	13 148.9	13 147.5	17 329.9	17 328.5	17 294.9	17 293.5
13 173.6	13 172.2	13 152.4	13 151.0	17 333.6	17 332.2	17 298.4	17 297.0
13 176.9	13 175.5	13 155.9	13 154.5	17 336.9	17 335.5	17 301.9	17 300.5
13 180.6	13 179.2	13 159.4	13 158.0	17 340.6	17 339.2	17 305.4	17 304.0
13 183.9	13 182.5	13 162.9	13 161.5	17 343.9	17 342.5	17 308.9	17 307.5
13 187.6	13 186.2	13 166.4	13 165.0	17 347.6	17 346.2	17 312.4	17 311.0
13 190.9	13 189.5	13 169.9	13 168.5	17 350.9	17 349.5	17 315.9	17 314.5
13 194.6	13 193.2	13 173.4	13 172.0	17 354.6	17 353.2	17 319.4	17 318.0
13 197.9	13 196.5	13 176.9	13 175.5	17 357.9	17 356.5	17 322.9	17 321.5

TABLE OF CORRESPONDENCE OF TRANSMITTING FREQUENCIES OF RADIOTELEPHONE  
COAST STATIONS, IN kc/s (SINGLE SIDEBAND)

22 Mc/s Band			
Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
22 651.6	22 650.2	22 626.9	22 625.5
22 654.9	22 653.5	22 630.4	22 629.0
22 658.6	22 657.2	22 633.9	22 632.5
22 661.9	22 660.5	22 637.4	22 636.0
22 665.6	22 664.2	22 640.9	22 639.5
22 668.9	22 667.5	22 644.4	22 643.0
22 672.6	22 671.2	22 647.9	22 646.5
22 675.9	22 674.5	22 651.4	22 650.0
22 679.6	22 678.2	22 654.9	22 653.5
22 682.9	22 681.5	22 658.4	22 657.0
22 686.6	22 685.2	22 661.9	22 660.5
22 689.9	22 688.5	22 665.4	22 664.0
22 693.6	22 692.2	22 668.9	22 667.5
22 696.9	22 695.5	22 672.4	22 671.0
22 700.6	22 699.2	22 675.9	22 674.5
22 703.9	22 702.5	22 679.4	22 678.0
22 707.6	22 706.2	22 682.9	22 681.5
22 710.9	22 709.5	22 686.4	22 685.0
22 714.6	22 713.2	22 689.9	22 688.5
22 717.9	22 716.5	22 693.4	22 692.0

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/126-E  
25 October 1967  
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PLENARY MEETING  
COMMITTEES 4 AND 6

DRAFT SIXTH REPORT OF COMMITTEE 5

I. Article 5

Committee 5 adopted the text of the new No. 200A which is given in Annex 1.

II. Article 7

The Committee adopted the new texts relating to Nos. 442, 447, 448, 449, 450, 456 and 457 which appear in Annex 2.

III. Article 33

The Committee considered what amendments should be made to the provisions of Article 33 in consequence of the decisions it had taken regarding Appendix 17 in particular. The attention of Committee 6 should be drawn to the fact that in Nos. 1236 and 1249 the reference to Section B of Appendix 15 should be replaced by a reference to No. 1352. Furthermore, the reference to Appendix 17 should be replaced by a reference to Sections A and B of Appendix 17.

Similarly, "carrier frequency 6204 kc/s" should be substituted for "frequency 6204 kc/s".

As a consequence of the new No. 1352B, Committee 6 should perhaps include in Article 33 provisions similar to those of No. 1251.

Concerning the use of channels adjacent to the guardband of frequency 2182 kc/s, Committee 5 adopted the following amendments to Article 33. These provisions, which concern Nos. 1227A, 1228, 1233, 1235A and 1248A (see Annex 6) should be examined by Committee 6.

IV. Article 35

Committee 5 adopted the texts relating to Nos. 1322C, 1336, 1336A, 1351A, 1352, 1352A, 1352B, 1353, 1353A, 1355, 1356 and 1357 which are given in Annex 3.



The footnote 1352A.1 takes account of the proposal made by Committee 4 in Document No. 275, paragraph 2, point 4. Since Article 35 is solely concerned with radiotelephone emissions, appropriate provisions should be included in Article 32 concerning the use for selective calling by radiotelegraph coast stations of the frequencies mentioned in No. 1352A.

[ Working Group 5B also examined Document No. 244 containing a United States proposal concerning the following footnote to Nos. 1352 and 1352A :

"In Region 2, the frequencies 4 136.3, 4 413.9, 6 204 and 6 518.6 kc/s also may be used by coast and ship stations for single sideband radiotelephone simplex operation. Coast station power shall not exceed 1 kW peak envelope power. (See also MOD 488 Document No. 18, USA/18(27))".

Some delegations proposed extending the application of the provisions of this number to Region 3. However, definite opposition being shown to this proposal, the delegations of the United States of America, Canada and Japan decided to take up the matter again in Committee 5.]

V. Appendix 17

The Committee decided that Appendix 17 should consist of three sections. The new Appendix 17 as adopted appears in Annex 4.

In order that, when the new channels are brought into use on 1 March 1970, all the channels in each band should have the same spacing between ship station transmitting frequencies and coast station transmitting frequencies, it was decided that the frequencies assigned to radiotelephone coast stations should be changed. The draft Resolution adopted on this subject is contained in Annex 5.

[ Regarding possible power limitations in the new channels which will become available on 1 March 1970, it was agreed that the peak envelope power of ship stations should not exceed 1.5 kW. The proposals for the maximum peak envelope power of coast stations were spread between 3 and 15 kW. After discussion, some delegations were willing to accept 5 kW, whereas others were in favour of a figure of 10 kW. It proved impossible to reach a compromise between these two values.]

P. MORTENSEN  
Chairman

A N N E X 1

Article 5

ADD 200A

In Region 2, except in Greenland, coast stations and ship stations using radiotelephony shall be limited for class A3A or A3J emission to the upper sideband and to a peak envelope power (Pp) not exceeding 1 kW.

A N N E X 2

Article 7

- 
- MOD            442            § 11. (1) In Region 1, frequencies assigned to stations of the maritime mobile service, operating in the bands between 1 605 and 3 800 kc/s (see Article 5) should, whenever possible, be in accordance with the following subdivision :
- 1 605 - 1 625 kc/s : Radiotelegraphy exclusively,
  - 1 625 - 1 670 kc/s : Low power radiotelephony,
  - 1 670 - 1 950 kc/s : Coast stations,
  - 1 950 - 2 053 kc/s : Ship stations working to coast stations,
  - 2 053 - 2 065 kc/s : Intership working,
  - 2 065 - 2 170 kc/s : Ship stations working to coast stations,
  - 2 170 - 2 173.5 kc/s : Coast stations calling ship stations (including selective calling) and, exceptionally coast stations transmitting safety messages,
  - 2 173.5 - 2 190.5 kc/s : Guard-band for the distress frequency 2 182 kc/s,
  - 2 190.5 - 2 194 kc/s : Ship stations calling coast stations,



Article 7 (cont.)

- 2 194 - 2 440 kc/s : Intership working,
- 2 440 - 2 578 kc/s : Ship stations working  
to coast stations,
- 2 578 - 2 850 kc/s : Coast stations,
- 3 155 - 3 340 kc/s : Ship stations working  
to coast stations,
- 3 340 - 3 400 kc/s : Intership working,
- 3 500 - 3 600 kc/s : Intership working
- 3 600 - 3 800 kc/s : Coast stations.

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

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

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

4 361 - 4 438 kc/s  
6 514 - 6 525 kc/s  
8 728.5 - 8 815 kc/s  
13 107.5 - 13 200 kc/s  
17 255 - 17 360 kc/s  
22 624.5 - 22 720 kc/s

Article 7 (Cont.)

MOD 449 c) Ship stations and coast stations, telephony,  
simplex operation (single frequency channels)

4 139.5 - 4 142.5 kc/s

6 210.4 - 6 216.5 kc/s

8 281.2 - 8 288 kc/s

12 421 - 12 431.5 kc/s

16 565 - 16 576 kc/s

22 094.5 - 22 112 kc/s

SUP 450

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MOD 456 § 13. (1) Appendix 17 shows the two-way radio-  
telephone channels of the maritime mobile service  
in the frequency bands listed in Nos. 447, 448  
and 449.

MOD 457 Appendix 25 contains the allotment plan for  
radiotelephone coast stations in the bands  
listed in No. 448 (see however Resolution No. ....  
[page of this Document]).

A N N E X 3Article 35

- ADD 1322C (2) Transmissions in the bands 2170-2173.5 kc/s and 2190.5-2194 kc/s respectively with carrier frequency 2170.5 kc/s (assigned frequency 2171.9 kc/s) and carrier frequency 2191 kc/s (assigned frequency 2192.4 kc/s) are limited to class A3A and A3J emission with a peak envelope power of 400 W. However, on the carrier frequency 2170.5 kc/s, in Regions 1 and 3 and in Greenland, coast stations may also use class A2H emission for selective calling and exceptionally, class A3H emission for safety messages.
- NOC 1336
- ADD 1336A 1(bis) Coast stations authorized for radiotelephony on one or more frequencies other than 2182 kc/s in the authorized bands between 1605 and 2850 kc/s shall be capable of transmitting on those frequencies class A3 emission or classes A3H, A3A and A3J emissions. However, after [1 January 1975], class A3 emission shall no longer be authorized and after [1 January 1982] class A3H emission shall also be no longer authorized, except on 2182 kc/s. Coast stations in Regions 1 and 3 and in Greenland may nevertheless, in exceptional cases, continue to use class A3H emission when they transmit safety messages on the carrier frequency 2170.5 kc/s.

Article 35 (cont.)

NOC                      Section III. Bands between 4 000 and 23 000 kc/s

ADD                      A. Mode of operation of stations

ADD            1351A       §13 A. The classes of emission to be used for radio-  
telephony in the bands of the maritime mobile service  
between 4 000 and 23 000 kc/s are :

- a) Class A3<sup>1)</sup>, or
- b) Classes A3H<sup>2)</sup>, A3A and A3J.

However, unless otherwise specified in these  
Regulations (see Nos. 1353A/            ) :

- after 1 January 1972, class A3 emission shall no  
longer be authorized for coast stations and,
- after 1 January 1978, class A3H emission for  
coast stations and class A3 and A3H emission for  
ship stations shall no longer be authorized.

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ADD            1351A-1       <sup>1)</sup> For the use of class A3B emission, see Resolution  
No. ... Document No. 319.

ADD            1351A-2       <sup>2)</sup> The conditions of use of class A3H emission are  
specified in Appendix 17 and in Resolution No. ...  
Document No. 319.

Article 35 (cont.)

MOD

AA. Call, Reply and Safety

MOD

1352

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

4136.3 kc/s

6204.0 kc/s

8268.4 kc/s

12403.5 kc/s

16533.5 kc/s

22073.5 kc/s

ADD

1352A

(2) Coast stations may use the following carrier frequencies for calling in radiotelephony <sup>1)</sup> :

4434.9 kc/s

6518.6 kc/s

8802.4 kc/s

13182.5 kc/s

17328.5 kc/s

22699.0 kc/s

---

ADD

1352A-1 <sup>1)</sup>

These frequencies may also be used for calling by radiotelegraph coast stations which use selective calling systems [see Nos. 1147 and 1124].

Article 35 (Cont.)

- ADD 1352B § 15. (1) In the zone lying between the parallels 33° and 50°S, the carrier frequency 4 136.3 kc/s is to be used for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.
- MOD 1353 (2) In the part of Region 3 lying between the northern boundary of the tropical zone and the parallel 15°S, the carrier frequency 6 204 kc/s is designated for call, reply and safety purposes. It may also be used for messages preceded by the urgency or safety signals and, if necessary, for distress messages.
- ADD 1353A Stations using the frequencies 4 136.3 kc/s and 6 204 kc/s in the conditions specified in Nos. 1352B and 1353 may employ class A3H emissions as from 1 January 1978.
- MOD 1355 § 17 (1) For the conduct of duplex telephony, the transmitting frequencies of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Sections A and B of Appendix 17.
- MOD 1356 (2) The frequencies to be used for the conduct of simplex radiotelephony are shown in Section C of Appendix 17. The peak envelope power of the transmitters of coast stations must not exceed 1 kW in such cases.

Article 35 (cont)

MOD 1357

(3) The frequencies indicated in Sections A, B and C of Appendix 17 for ship stations emissions may be used by ships of any category according to traffic requirements.

## A N N E X 4

## APPENDIX 17

(See Article 35)

1. Channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile radio-telephone service are set out in three sections as follows :

Section A - Table of duplex (two-frequencies) double  
sideband transmitting frequencies (in kc/s)

Section B - Table of duplex (two-frequencies) single  
sideband transmitting frequencies (in kc/s)

Section C - Table of simplex (one-frequency) single  
sideband transmitting frequencies (in kc/s).

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, as far as possible, in pairs; each pair comprises 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 kW.

5. a) The following series of frequencies in Section B are allocated for calling purposes :

- Series No. 24 in the 4 Mc/s and 8 Mc/s bands;
- Series No. 2 in the 6 Mc/s band;
- Series No. 22 in the 12, 16 and 22 Mc/s bands.

The remaining frequencies in Sections A, B and C are working frequencies.

b) Use of the DSB calling frequencies 8 269, 12 403.5, 16 533.5 and 22 074 kc/s should, as far as possible, cease by 1 March 1970 to permit the use of the new SSB channels. In any event, the use of these frequencies for DSB calling shall cease by 1 January 1978.

6. Stations utilizing double sideband emissions shall operate only on the frequencies in Section A in accordance with Nos. .... and .... (Article 35) and on the frequencies mentioned in paragraph 5 b) above.

7. a) Stations utilizing single sideband emissions shall operate only on the carrier frequencies shown in Sections B and C in conformity with the technical characteristics contained in Appendix 17A. The upper sideband mode shall always be employed.
- b) Stations employing the single sideband mode shall only use A3A and A3J emissions. However, administrations should endeavour, as far as possible, to restrict to class A3J emissions, the use of frequencies of Series No. 1 from Section B.

Until 1 January 1978 class A3H emissions (in accordance with 1351A) are permitted only on those carrier frequencies shown in Section B which are coincident with, or within 100 cycles of, the frequencies shown in Section A. However, on calling frequencies for coast stations class A3H emissions may be used until 1 January 1978.

8. During the transition period (see Resolution No. ....  
[ Document No. 319 Annex 2 ] ) assignments to stations utilizing 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 contained 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 appended Tables.

SECTION ATable of Transmitting Frequencies for duplex operation in double sideband emissions (in kc/s)

Series No.	4 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
	Coast station frequency	Ship station 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	22 629.0	22 003.5
2	4 371.0	4 072.4	8 738.4	8 204.4	13 119.5	12 340.5	17 265.5	16 470.5	22 636.0	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	22 643.0	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	22 650.0	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	22 657.0	22 031.5
6	4 396.6	4 098.0	8 764.0	8 230.0	13 147.5	12 368.5	17 293.5	16 498.5	22 664.0	22 038.5
7	4 403.0	4 104.4	8 770.4	8 236.4	13 154.5	12 375.5	17 300.5	16 505.5	22 671.0	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	22 678.0	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	22 685.0	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	22 692.0	22 066.5
11	4 428.6	4 129.9	8 796.0	8 261.9						

## Section B

Table of Transmitting Frequencies for Duplex Operation in Single Sideband Emissions (in kc/s)

Series No.	4 Mc/s Band				6 Mc/s Band			
	Coast Stations		Ship Stations		Coast Stations		Ship Stations	
	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency
1	4 361.6	4 363.0	4 063.0	4 064.4	6 515.4	6 516.8	6 200.8	6 202.2
2	4 364.7	4 366.1	4 066.1	4 067.5	6 518.6*	6 520.0*	6 204.0*1)	6 205.4*
3	4 367.8	4 369.2	4 069.2	4 070.6	6 521.8	6 523.2	6 207.2	6 208.6
4	4 371.0	4 372.4	4 072.4	4 073.8				
5	4 374.2	4 375.6	4 075.6	4 077.0				
6	4 377.4	4 378.8	4 078.8	4 080.2				
7	4 380.6	4 382.0	4 082.0	4 083.4				
8	4 383.8	4 385.2	4 085.2	4 086.6				
9	4 387.0	4 388.4	4 088.4	4 089.8				
10	4 390.2	4 391.6	4 091.6	4 093.0				
11	4 393.4	4 394.8	4 094.8	4 096.2				
12	4 396.6	4 398.0	4 098.0	4 099.4				
13	4 399.8	4 401.2	4 101.2	4 102.6				
14	4 403.0	4 404.4	4 104.4	4 105.8				
15	4 406.2	4 407.6	4 107.6	4 109.0				
16	4 409.4	4 410.8	4 110.8	4 112.2				
17	4 412.6	4 414.0	4 114.0	4 115.4				
18	4 415.8	4 417.2	4 117.2	4 118.6				
19	4 419.0	4 420.4	4 120.4	4 121.8				
20	4 422.2	4 423.6	4 123.6	4 125.0				
21	4 425.4	4 426.8	4 126.8	4 128.2				
22	4 428.6	4 430.0	4 130.0	4 131.4				
23	4 431.8	4 433.2	4 133.2	4 134.6				
24	4 434.9*	4 436.3*	4 136.3*1)	4 137.7*				
25								
26								
27								
28								
29								
30								

\* The frequencies followed by an asterisk are calling frequencies (see Nos. [1352, 1352A]).

1) For the conditions of use of frequencies 4 136.3 and 6 204 kc/s, see Nos. 1352B and 1353 respectively.

Table of Transmitting Frequencies for Duplex Operation in Single Sideband Emissions (in kc/s)

Series Nos.	8 Mc/s Band				12 Mc/s Band			
	Coast Stations		Ship Stations		Coast Stations		Ship Stations	
	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency	Carrier Frequency	Assigned Frequency
	8 729.0	8 730.4	8 195.0	8 196.4	13 109.0	13 110.4	12 330.0	12 331.4
	8 732.1	8 733.5	8 198.1	8 199.5	13 112.5	13 113.9	12 333.5	12 334.9
	8 735.2	8 736.6	8 201.2	8 202.6	13 116.0	13 117.4	12 337.0	12 338.4
	8 738.4	8 739.8	8 304.4	8 205.8	13 119.5	13 120.9	12 340.5	12 341.9
	8 741.6	8 743.0	8 207.6	8 209.0	13 123.0	13 124.4	12 344.0	12 345.4
	8 744.8	8 745.2	8 210.8	8 212.2	13 126.5	13 127.9	12 347.5	12 348.9
	8 748.0	8 749.4	8 214.0	8 215.4	13 130.0	13 131.4	12 351.0	12 352.4
	8 751.2	8 752.6	8 217.2	8 218.6	13 133.5	13 134.9	12 354.5	12 355.9
	8 754.4	8 755.8	8 220.4	8 221.8	13 137.0	13 138.4	12 358.0	12 359.4
	8 757.6	8 759.0	8 223.6	8 225.0	13 140.5	13 141.9	12 361.5	12 362.9
	8 760.8	8 762.2	8 226.8	8 228.2	13 144.0	13 145.4	12 365.0	12 366.4
	8 764.0	8 765.4	8 230.0	8 231.4	13 147.5	13 148.9	12 368.5	12 369.9
	8 767.2	8 768.6	8 233.2	8 234.6	13 151.0	13 152.4	12 372.0	12 373.4
	8 770.4	8 771.8	8 236.4	8 237.8	13 154.5	13 155.9	12 375.5	12 376.9
	8 773.6	8 775.0	8 239.6	8 241.0	13 158.0	13 159.4	12 379.0	12 380.4
	8 776.8	8 777.2	8 242.8	8 244.2	13 161.5	13 162.9	12 382.5	12 383.9
	8 780.0	8 781.4	8 246.0	8 247.4	13 165.0	13 166.4	12 386.0	12 387.4
	8 783.2	8 784.6	8 249.2	8 250.6	13 168.5	13 169.9	12 389.5	12 390.9
	8 786.4	8 787.8	8 252.4	8 252.8	13 172.0	13 173.4	12 393.0	12 394.4
	8 789.6	8 791.0	8 255.6	8 257.0	13 175.5	13 176.9	12 396.5	12 397.9
	8 792.8	8 794.2	8 258.8	8 260.2	13 179.0	13 180.4	12 400.0	12 401.4
	8 796.0	8 797.4	8 262.0	8 263.4	13 182.5*	13 183.9*	12 403.5*	12 404.9*
	8 799.2	8 800.6	8 265.2	8 266.6	13 186.0	13 187.4	12 407.0	12 408.4
	8 802.4*	8 803.8*	8 268.4*	8 269.8*	13 189.5	13 190.9	12 410.5	12 411.9
	8 805.6	8 807.0	8 271.6	8 273.0	13 193.0	13 194.4	12 414.0	12 415.4
	8 808.8	8 810.2	8 274.8	8 276.2	13 196.5	13 197.9	12 417.5	12 418.9
	8 812.0	8 813.4	8 278.0	8 279.4				

\* The frequencies followed by an asterisk are calling frequencies (see Nos.  $\sqrt{1352}$ , 1352  $\underline{A}$ ).

Table of Transmitting Frequencies for Duplex Operation in Single Sideband Emissions (in kc/s)

Series No.	16 Mc/s band				22 Mc/s band			
	Coast stations		Ship stations		Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
	17 255.0	17 256.4	16 460.0	16 461.4	22 625.5	22 626.9	22 000.0	22 001.4
	17 258.5	17 259.9	16 463.5	16 464.9	22 629.0	22 630.4	22 003.5	22 004.9
	17 262.0	17 263.4	16 467.0	16 468.4	22 632.5	22 633.9	22 007.0	22 008.4
	17 265.5	17 266.9	16 470.5	16 471.9	22 636.0	22 637.4	22 010.5	22 011.9
	17 269.0	17 270.4	16 474.0	16 475.4	22 639.5	22 640.9	22 014.0	22 015.4
	17 272.5	17 273.9	16 477.5	16 478.9	22 643.0	22 644.4	22 017.5	22 018.9
	17 276.0	17 277.4	16 481.0	16 482.4	22 646.5	22 647.9	22 021.0	22 022.4
	17 279.5	17 280.9	16 484.5	16 485.9	22 650.0	22 651.4	22 024.5	22 025.9
	17 283.0	17 284.4	16 488.0	16 489.4	22 653.5	22 654.9	22 028.0	22 029.4
	17 286.5	17 287.9	16 491.5	16 492.9	22 657.0	22 658.4	22 031.5	22 032.9
	17 290.0	17 291.4	16 495.0	16 496.4	22 660.5	22 661.9	22 035.0	22 036.4
	17 293.5	17 294.9	16 498.5	16 499.9	22 664.0	22 665.4	22 038.5	22 039.9
	17 297.0	17 298.4	16 502.0	16 503.4	22 667.5	22 668.9	22 042.0	22 043.4
	17 300.5	17 301.9	16 505.5	16 506.9	22 671.0	22 672.4	22 045.5	22 046.9
	17 304.0	17 305.4	16 509.0	16 510.4	22 674.5	22 675.9	22 049.0	22 050.4
	17 307.5	17 308.9	16 512.5	16 513.9	22 678.0	22 679.4	22 052.5	22 053.9
	17 311.0	17 312.4	16 516.0	16 517.4	22 681.5	22 682.9	22 056.0	22 057.4
	17 314.5	17 315.9	16 519.5	16 520.9	22 685.0	22 686.4	22 059.5	22 060.9
	17 318.0	17 319.4	16 523.0	16 524.4	22 688.5	22 689.9	22 063.0	22 064.4
	17 321.5	17 322.9	16 526.5	16 527.9	22 692.0	22 693.4	22 066.5	22 067.9
	17 325.0	17 326.4	16 530.0	16 531.4	22 695.5	22 696.9	22 070.0	22 071.4
	17 328.5*	17 329.9*	16 533.5*	16 534.9*	22 699.0*	22 700.4*	22 073.5*	22 074.9*
	17 332.0	17 333.4	16 537.0	16 538.4	22 702.5	22 703.9	22 077.0	22 078.4
	17 335.5	17 336.9	16 540.5	16 541.9	22 706.0	22 707.4	22 080.5	22 081.9
	17 339.0	17 340.4	16 544.0	16 545.4	22 709.5	22 710.9	22 084.0	22 085.4
	17 342.5	17 343.9	16 547.5	16 548.9	22 713.0	22 714.4	22 087.5	22 088.9
	17 346.0	17 347.4	16 551.0	16 552.4	22 716.5	22 717.9	22 091.0	22 092.4
	17 349.5	17 350.9	16 554.5	16 555.9				
	17 353.0	17 354.4	16 558.0	16 559.4				
	17 356.5	17 357.9	16 561.5	16 562.9				

\* The frequencies followed by an asterisk are the calling frequencies (see Nos. 1352, 1352A).

## Section C

Table of transmitting frequencies for simplex operation in single sideband emissions (in kc/s)

4 Mc/s Band		6 Mc/s Band		8 Mc/s Band		12 Mc/s Band		16 Mc/s Band		22 Mc/s Band	
Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
4139.5	4140.9	6210.4	6211.8	8281.2	8282.6	12421.0	12422.4	16565.0	16566.4	22094.5	22095.9
		6213.5	6214.9	8284.4	8285.8	12424.5	12425.9	16568.5	16569.9	22098.0	22099.4
						12428.0	12429.4	16572.0	16573.4	22101.5	22102.9
										22105.0	22106.4
										22108.5	22109.9

A N N E X 5

DRAFT RESOLUTION No. ....

Relating to the Transfer of Frequency Assignments  
to Coast Radiotelephone Stations in the Frequency  
Bands allocated exclusively to the Maritime Mobile  
Service between 4 000 and 23 000 kc/s

The World Administrative Radio Conference, Geneva (1967),

considering

- a) that the Frequency Allotment Plan appearing in Appendix 25 to the Radio Regulations, Geneva, 1959, is to be retained until a new plan is worked out by the Conference mentioned in Recommendation No. .... /Document No. 2307/;
- b) that, as a result of the extension of the bands allocated exclusively to the maritime mobile service for radiotelephony, new duplex radiotelephone channels will be available to the maritime mobile service and will be contained in Section III of Appendix 25 MOD (Resolution No. .... /Document No. 2307/);



- c) that the separation between the transmitting frequencies of coast and ship stations should remain constant within each band;
- d) that on the whole it is easier and cheaper to change transmitting frequencies for coast stations than for ship stations, taking into account the large number of ship stations;
- e) that the additions to the bands allocated exclusively to the maritime mobile service for radiotelephony will become available on 1 March 1970 [see Annex II to Document No. 307]
- f) that the new channels should be brought into service as soon as possible;

resolves

1. on 1 March 1970, the frequencies appearing in Appendix 25 to the Radio Regulations (Geneva, 1959) shall be replaced by the frequencies appearing in Annex I to this Resolution. This Appendix as modified shall also contain the new Section III referred to in Resolution No. [1] and shall then be known as Appendix 25 MOD;
2. on 1 March 1970, the I.F.R.B. shall bring the appropriate initial entries 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), into conformity with the allotments included in Appendix 25 MOD referred to above;

3. frequency assignments to HF coast radiotelephone stations recorded in the Master Register on 1 March 1970 on the channels defined in Appendix 17 to the Radio Regulations (Geneva, 1959), shall be transferred in accordance with the tables appearing in Annex I (double sideband or independent sideband emissions) or Annex II (single sideband emissions), as the case may be;
4. frequency assignments to coast radiotelephone stations in the HF bands allocated exclusively for that purpose, recorded in the Master Register on 1 March 1970, but not in accordance with Appendix 17 of the Radio Regulations (Geneva, 1959), shall be transferred in such a way as to retain with respect to the frequencies specified in Section A of Appendix 17 revised, Document No. DT/114/ the same relative positions they occupied in relation to the frequencies listed in Appendix 17 to the Radio Regulations (Geneva, 1959);
5. on 1 March 1970 at 0001 GMT, administrations shall modify the transmitting frequencies of their coast radiotelephone stations as indicated in paragraphs 3 and 4 above; they shall notify these modifications to the I.F.R.B. in accordance with the provisions of Section I of Article 9 of the Radio Regulations;

6. provided that the notices received by the I.F.R.B. in accordance with paragraph 5 above do not contain any change 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 be notified in the basic characteristics of the original assignment, it shall be dealt with in accordance with the provisions of Article 9 of the Radio Regulations;
7. on 1 March 1970, 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 I.F.R.B., a provisional entry determined in accordance with the provisions of paragraphs 3 or 4 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;
8. thirty days after that date, the I.F.R.B. shall send to those administrations which have not yet notified the transfer

of frequency assignments to their coast radiotelephone stations in accordance with paragraphs 3 or 4 and 5 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;

9. if, sixty 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 3 or 4 and 5 above, the corresponding provisional new entry shall be deleted from the Master Register and the original entry shall be retained with its date in column 2b and a special remark in the "Remarks" column; if, however, the administration concerned notifies the transfer during the sixty days period, the provisions of paragraph 6 above shall apply.

Annex I to the Resolution

Table of Transmitting Frequencies of Radiotelephone Coast Stations, in kc/s  
(Classes of Emission A3 and A3B)

4 Mc/s band		8 Mc/s band		12 Mc/s band		16 Mc/s band		22 Mc/s band	
Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies	Old frequencies	New frequencies
4 371.1	4 364.7	8 748.1	8 732.1	13 133.5	13 112.5	17 293.5	17 258.5	22 653.5	22 929.0
4 377.4	4 371.0	8 754.4	8 738.4	13 140.5	13 119.5	17 300.5	17 265.5	22 660.5	22 636.0
4 383.8	4 377.4	8 760.8	8 744.8	13 147.5	13 126.5	17 307.5	17 272.5	22 667.5	22 643.0
4 390.2	4 383.8	8 767.2	8 751.2	13 154.5	13 133.5	17 314.5	17 279.5	22 674.5	22 650.0
4 396.6	4 390.2	8 773.6	8 757.6	13 161.5	13 140.5	17 321.5	17 286.5	22 681.5	22 657.0
4 403.0	4 396.6	8 780.0	8 764.0	13 168.5	13 147.5	17 328.5	17 293.5	22 688.5	22 664.0
4 409.4	4 403.0	8 786.4	8 770.4	13 175.5	13 154.5	17 335.5	17 300.5	22 695.5	22 671.0
4 415.8	4 409.4	8 792.8	8 776.8	13 182.5	13 161.5	17 342.5	17 307.5	22 702.5	22 678.0
4 422.2	4 415.8	8 799.2	8 783.2	13 189.5	13 168.5	17 349.5	17 314.5	22 709.5	22 685.0
4 428.6	4 422.2	8 805.6	8 789.6	13 196.5	13 175.5	17 356.5	17 321.5	22 716.5	22 692.0
4 434.9	4 428.6	8 811.9	8 796.0						

Table of Transmitting Frequencies of Radiotelephone Coast Stations  
in kc/s (Single Sideband)

4 Mc/s band				8 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
4 369.4	4 368.0	4 363.0	4 361.6	8 746.4	8 745.0	8 730.4	8 729.0
4 372.5	4 371.1	4 366.1	4 364.7	8 749.5	8 748.1	8 733.5	8 732.1
4 375.7	4 374.3	4 369.2	4 367.8	8 752.7	8 751.3	8 736.6	8 735.2
4 378.8	4 377.4	4 372.4	4 371.0	8 755.8	8 754.4	8 739.8	8 738.4
4 382.1	4 380.7	4 375.6	4 374.2	8 759.1	8 757.7	8 743.0	8 741.6
4 385.2	4 383.8	4 378.8	4 377.4	8 762.2	8 760.8	8 746.2	8 744.8
4 388.5	4 387.1	4 382.0	4 380.6	8 765.5	8 764.1	8 749.4	8 748.0
4 391.6	4 390.2	4 385.2	4 383.8	8 768.6	8 767.2	8 752.6	8 751.2
4 394.9	4 393.5	4 388.4	4 387.0	8 771.9	8 770.5	8 755.8	8 754.4
4 398.0	4 396.6	4 391.6	4 390.2	8 775.0	8 773.6	8 759.0	8 757.6
4 401.3	4 399.9	4 394.8	4 393.4	8 778.3	8 776.9	8 762.2	8 760.8
4 404.4	4 403.0	4 398.0	4 396.6	8 781.4	8 780.0	8 765.4	8 764.0
4 407.7	4 406.3	4 401.2	4 399.8	8 784.7	8 783.3	8 768.6	8 767.2
4 410.8	4 409.4	4 404.4	4 403.0	8 787.8	8 786.4	8 771.8	8 770.4
4 414.1	4 412.7	4 407.6	4 406.2	8 791.1	8 789.7	8 775.0	8 773.6
4 417.2	4 415.8	4 410.8	4 409.4	8 794.2	8 792.8	8 778.2	8 776.8
4 420.5	4 419.1	4 414.0	4 412.6	8 797.5	8 796.1	8 781.4	8 780.0
4 423.6	4 422.2	4 417.2	4 415.8	8 800.6	8 799.2	8 784.6	8 783.2
4 426.9	4 425.5	4 420.4	4 419.0	8 803.9	8 802.5	8 787.8	8 786.4
4 430.0	4 428.6	4 423.6	4 422.2	8 807.0	8 805.6	8 791.0	8 789.6
4 433.2	4 431.8	4 426.8	4 425.4	8 810.2	8 808.8	8 794.2	8 792.8
4 436.3	4 434.9	4 430.0	4 428.6	8 813.3	8 811.9	8 797.4	8 796.0

Note : It is understood that in the final version of this table, the column "Carrier frequencies" will appear on the left of the column "Assigned frequencies".

Table of Transmitting Frequencies of Radiotelephone Coast Stations.in kc/s (Single Sideband)

12 Mc/s band				16 Mc/s band			
Old frequencies		New frequencies		Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
13 131.6	13 130.2	13 110.4	13 109.0	17 291.6	17 290.2	17 256.4	17 255.0
13 134.9	13 133.5	13 113.9	13 112.5	17 294.9	17 293.5	17 259.9	17 258.5
13 138.6	13 137.2	13 117.4	13 116.0	17 298.6	17 297.2	17 263.4	17 262.0
13 141.9	13 140.5	13 120.9	13 119.5	17 301.9	17 300.5	17 266.9	17 265.5
13 145.6	13 144.2	13 124.4	13 123.0	17 305.6	17 304.2	17 270.4	17 269.0
13 148.9	13 147.5	13 127.9	13 126.5	17 308.9	17 307.5	17 273.9	17 272.5
13 152.6	13 151.2	13 131.4	13 130.0	17 312.6	17 311.2	17 277.4	17 276.0
13 155.9	13 154.5	13 134.9	13 133.5	17 315.9	17 314.5	17 280.9	17 279.5
13 159.6	13 158.2	13 138.4	13 137.0	17 319.6	17 318.2	17 284.4	17 283.0
13 162.9	13 161.5	13 141.9	13 140.5	17 322.9	17 321.5	17 287.9	17 286.5
13 166.6	13 165.2	13 145.4	13 144.0	17 326.6	17 325.2	17 291.4	17 290.0
13 169.9	13 168.5	13 148.9	13 147.5	17 329.9	17 328.5	17 294.9	17 293.5
13 173.6	13 172.2	13 152.4	13 151.0	17 333.6	17 332.2	17 298.4	17 297.0
13 176.9	13 175.5	13 155.9	13 154.5	17 336.9	17 335.5	17 301.9	17 300.5
13 180.6	13 179.2	13 159.4	13 158.0	17 340.6	17 339.2	17 305.4	17 304.0
13 183.9	13 182.5	13 162.9	13 161.5	17 343.9	17 342.5	17 308.9	17 307.5
13 187.6	13 186.2	13 166.4	13 165.0	17 347.6	17 346.2	17 312.4	17 311.0
13 190.9	13 189.5	13 169.9	13 168.5	17 350.9	17 349.5	17 315.9	17 314.5
13 194.6	13 193.2	13 173.4	13 172.0	17 354.6	17 353.2	17 319.4	17 318.0
13 197.9	13 196.5	13 176.9	13 175.5	17 357.9	17 356.5	17 322.9	17 321.5

Note : It is understood that in the final version of this table, the column "Carrier frequencies" will appear on the left of the column "Assigned frequencies".

Table of Transmitting Frequencies of Radiotelephone Coast Stations,  
in kc/s (Single Sideband)

22 Mc/s Band			
Old frequencies		New frequencies	
Assigned frequencies	Carrier frequencies	Assigned frequencies	Carrier frequencies
22 651.6	22 650.2	22 626.9	22 625.5
22 654.9	22 653.5	22 630.4	22 629.0
22 658.6	22 657.2	22 633.9	22 632.5
22 661.9	22 660.5	22 637.4	22 636.0
22 665.6	22 664.2	22 640.9	22 639.5
22 668.9	22 667.5	22 644.4	22 643.0
22 672.6	22 671.2	22 647.9	22 646.5
22 675.9	22 674.5	22 651.4	22 650.0
22 679.6	22 678.2	22 654.9	22 653.5
22 682.9	22 681.5	22 658.4	22 657.0
22 686.6	22 685.2	22 661.9	22 660.5
22 689.9	22 688.5	22 665.4	22 664.0
22 693.6	22 692.2	22 668.9	22 667.5
22 696.9	22 695.5	22 672.4	22 671.0
22 700.6	22 699.2	22 675.9	22 674.5
22 703.9	22 702.5	22 679.4	22 678.0
22 707.6	22 706.2	22 682.9	22 681.5
22 710.9	22 709.5	22 686.4	22 685.0
22 714.6	22 713.2	22 689.9	22 688.5
22 717.9	22 716.5	22 693.4	22 692.0

e : It is understood that in the final version of this table, the column "Carrier frequencies" will appear on the left of the column "Assigned frequencies".



A N N E X 6Article 33

- .....
- ADD        1227A        c)    In Regions 1 and 3 and in Greenland, the carrier frequency 2191 kc/s (assigned frequency : 2192.4 kc/s) when carrier frequency 2182 kc/s is being used for distress.
- .....
- MOD        1228        (2)   A radiotelephone ship station calling a coast station of another nationality should, as a general rule, use the carrier frequency 2182 kc/s or, in Regions 1 and 3 and in Greenland, the carrier frequency 2191 kc/s (assigned frequency : 2192.4 kc/s) when the carrier frequency 2182 kc/s is being used for distress. However, where so agreed by administrations, the ship station may use a working frequency on which watch is kept by that coast station.
- .....
- MOD        1233        (5)   Subject to the provisions of No. 1235A, coast stations shall, in accordance with the requirements of their own country, call ship stations of their own nationality either on a working frequency, or, when calls to individual ships are made, on the carrier frequency 2182 kc/s.
- .....

Article 33 (cont.)

ADD        1235A        (8) Coast stations may call ships equipped to receive selective call signals by sending class A2H emissions on carrier frequency 2182 kc/s or, in Regions 1 and 3 and in Greenland, on carrier frequency 2170.5 kc/s (assigned frequency 2171.9 kc/s) should circumstances so require. After transmission of the ship call number, they shall transmit an identification number to inform the ship of the name of the calling coast station (Nos. 788F and 1318E to K 7 ).

.....  
ADD        1248A        e) On a working frequency to calls made in Regions 1 and 3 and in Greenland on the carrier frequency 2191 kc/s (assigned frequency 2192.4 kc/s).

PLENARY MEETING

## INTERVENTION BY THE FRENCH DELEGATION

(RR pp. 200-201)

- |                                  |     |       |   |
|----------------------------------|-----|-------|---|
|                                  | NOC | 1013  |   |
| (R1-11)                          | ADD | 1013A | (3) The procedure described in No. 1013 is not applicable to the maritime mobile service <u>see Nos. 1077A, 1077B and 1077C</u> .   |
| (Doc. 225<br>p. 6)               | ADD |       | <u>Method of calling in the maritime mobile service bands between 4000 kc/s and 27 500 kc/s</u>   |
| (Doc. 225<br>p. 6)<br>(ex 1077A) | ADD | 1013B | (1) bis. The call consists of : <ul style="list-style-type: none"><li>- the call sign of the station called, not more than three times;</li><li>- the word DE;</li><li>- the call sign of the calling station, not more than three times;</li><li>- the signal — ... — (separation sign);</li><li>- the call sign of the station called, once only;</li><li>- the letter K.</li></ul> |
| (Doc. 225<br>p. 6)<br>(ex 1077B) | ADD | 1013C | (1) ter. For normal calling, when the requirements of No. 1162 have been met, the call specified in No. 1013B may be repeated at intervals of not less than one minute for  |



- (Doc. 225  
p. 6)  
(ex 1077B)  
(cont.)      ADD      1013C      a period not exceeding five minutes and shall not be renewed until after an interval of ten minutes.
- (Doc. 225  
p. 6)  
(ex 1077C)      ADD      1013D      (1) quater. When, however, the conditions of establishing contact are difficult, the call sign may be transmitted not more than ten times in succession. The call shall consist of :
- (Doc. 225  
p. 7)  
(ex 1077C)      1013D  
(cont.)      - the call sign of the station called, not more than ten times;
- the word DE;
- the call sign of the calling station, not more than three times;
- the signal — ... — (separation sign);
- the call sign of the station called, once only;
- the letter K.
- If necessary, this call may be transmitted a second time (see No. 1079). The call or group of two consecutive calls may be repeated three times at intervals of two minutes; thereafter it shall not be repeated until an interval of 10 minutes has elapsed.
- (B10-07)  
(ex 1077D)      ADD      1013E      (1D) When calling a coast station which has indicated a special watch<sup>1)</sup> on the calling frequencies 4186.5 kc/s, 6279.75 kc/s,
- 
- (B10-07)  
(ex  
1077D.1)      ADD      1013E      <sup>1</sup> Administrations whose coast stations keep watch on the special calling frequencies (No. 1013E) provided for the study of the new calling procedure, shall ensure that watch is also maintained on normal calling bands (see No. 1174) required by their service.

(B10-07)  
(ex 1077D)  
(cont.)

ADD 1013E

8373 kc/s, 12 559.5 kc/s, 16 746 kc/s and  
22 262.5 kc/s ship stations do not apply the  
calling method contained in Nos. 1013B,  
1013C and 1013D.

In these circumstances the call consists  
of :

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

This call may be transmitted three times  
at intervals of one minute; thereafter it  
shall not be repeated until after an interval  
of three minutes.

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

GENEVA, 1967

Document No. DT/128-E  
25 October 1967  
Original : French

## COMMITTEE 3

### DRAFT REPORT BY THE BUDGET CONTROL COMMITTEE TO THE PLENARY MEETING

The Budget Control Committee met twice during the Maritime Conference to examine the various points covered by its terms of reference.

As a result of this work, this report is submitted for consideration by the Plenary Meeting, in accordance with Chapter 9, Rule 5, of the General Regulations annexed to the International Telecommunication Convention (Montreux, 1965).

#### 1. Budget of the Conference (Document No. 144)

The Committee took note of the budget of the Conference, the total of which was fixed at 1,050,000 Swiss francs by the Administrative Council.

#### 2. Statement of expenditure of the Conference

Chapter 9, Rule 5, of the General Regulations states that the Budget Control Committee shall present a report to the Plenary Meeting showing, as accurately as possible, the estimated total expenditure of the Conference.

The Committee accordingly submits to the Plenary Meeting a statement showing the total budget approved by the Administrative Council, the apportionment of this total sum among the various sub-heads and items, transfers of credits and the expenditure on the Maritime Conference up to 20 October 1967. The statement, which is annexed to this report, includes an indication of commitments to expenditure at that date, together with estimated expenditure to be incurred up to the end of the Conference.

The statement shows estimated total expenditure amounting to 982,500 Swiss francs, which leaves a margin of 67,500 francs with respect to the budget of 1,050,000 francs approved by the Administrative Council.



Under Chapter 9, Rule 5, No. 677, of the General Regulations, this report is to be transmitted, together with the observations of the Plenary Meeting, to the Secretary-General for submission to the Administrative Council at its next annual session.

3. Cost of printing the Final Acts (Document No. 324)

Under Administrative Council Resolution No. 83 (amended), it is for the Plenary Meeting to decide what share of the composition costs for the Final Acts shall be charged to the Conference account.

After considering this matter, the Budget Control Committee proposes to the Plenary Meeting that this share be fixed at one third.

4. Comments by the Committee

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\*      \*

The Plenary Meeting is requested to approve this Report.

J. HERNANDEZ

Chairman

Annexe : (Same as the annex to Document No. 323)

INTERNATIONAL TELECOMMUNICATION UNION  
**MARITIME CONFERENCE**

GENEVA, 1967

Document No. DT/129-E  
31 October 1967  
Original : English

PLENARY MEETING

RECOMMENDATION No. ...

relating to the study of a Selective-calling System for  
future operational requirements of the maritime mobile service

The World Administrative Radio Conference, Geneva, 1967,  
noting

- a) that the C.C.I.R. has prepared a draft Recommendation D.1a(257-1), giving the characteristics of a selective-calling system for the maritime mobile service to fulfill immediate requirements of those administrations having such a need;
- b) that the World Administrative Radio Conference, Geneva, 1967 has adopted and included in Articles 19, 28A and Appendix 20C of the Radio Regulations provisions for utilization of this system;
- c) that the C.C.I.R. has adopted Question 9/XIII on the subject of selective-calling system for future operational requirements of the maritime mobile service;

urges the C.C.I.R.

to complete the studies in response to Question 9/XIII  
as soon as possible;

and invites the administrations

in their participation in the work of the C.C.I.R. to give  
priority to these studies.

Add at the end of : 999B (See Recommendation No. ...).

