

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

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### MARITIME CONFERENCE

GENEVA, 1967

<u>Document No. 101-E</u> 27 July 1967

Original : French

PLENARY MEETING

SWITZERLAND

Proposals

Article 29 \*)

Section III

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.



<sup>\*</sup> Additional agenda item relating to the revision of the calling procedure, examination of which is proposed by Switzerland.

**GENEVA, 1967** 

Document No. 102-E 26 July 1967 Original: English

PLENARY MEETING

#### STATE OF ISRAEL

#### Proposals for the work of the Conference

Ref.	Agenda	Item *	
•			Article 23
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, 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.

#### 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 radiotelegraph operator.



<sup>\*</sup> Proposed under the introductory clause of the Conference agenda.

**GENEVA, 1967** 

Document No. 103-E

31 July 1967

Original: French

English Spanish

PLENARY MEETING

#### Memorandum by the General Secretariat and the International Frequency Registration Board

### SUGGESTIONS ON THE ORGANIZATION OF THE CONFERENCE AND THE STRUCTURE OF COMMITTEES

In view of the agenda of the Conference as laid down in Administrative Council Resolution No. 590 (Amended) (Document No. 1, Rev.), it is suggested that the following committees be set up:

#### 1. Steering Committee

(consisting of the Chairman and Vice-Chairmen of the Conference and the Chairman of Committees.)

#### Terms of reference:

to coordinate the work of Committees, establish the schedule of meetings, etc.

#### 2. Credentials Committee

#### Terms of reference:

to verify the credentials of the delegations (No. 639 of the General Regulations annexed to the Convention).

#### 3. Budget Control Committee

#### Terms of reference:

to determine the organization and the facilities available to the delegates, and to examine and approve the accounts for expenditure incurred throughout the duration of the Conference (Rule 5 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).



#### 4. Frequencies Committee

#### Terms of reference:

to consider, and revise as necessary, the provisions of the Radio Regulations pertaining to the sub-allocation, assignment and use of frequencies in the maritime mobile service, especially the provisions of:

- Article 7, Section IV, except Nos. 443, 444, 456 and 457
- Article 12, No. 677
- Article 28, Sections III, IV and VI
- Articles 32 and 35
- Appendices 15, 18 and 19;

and to take into consideration in this connection all proposals pertaining to these parts of the Radio Regulations, particularly proposals dealing with items 2, 3 (Appendix 15), 4, 5, 7.5 and, so far as frequency allocations are concerned, 7.1, 7.2, 7.3, and 7.6 of the agenda.

<u>Note</u>: This committee will probably consider it advisable to establish three working groups to deal with:

- the range of frequencies below 4 Mc/s
- the range of frequencies between 4 and 28 Mc/s, and
- the range of frequencies above 28 Mc/s.

#### 5. Single-sideband Committee

#### Terms of reference:

to consider, and revise as necessary, the provisions of the Radio Regulations which may be affected by the introduction of single-sideband technique in the radiotelephone maritime mobile service as well as the provisions concerning the notification and registration of frequencies in all bands allocated to the maritime mobile service, especially the provisions of:

- Article 7, Nos. 443, 444, 456 and 457
- Article 9, particularly Nos. 541 to 551 and 573 to 586
- Appendices 3, 17 and 25;

and to take into consideration in this connection all proposals pertaining to these parts of the Radio Regulations, particularly proposals dealing with items 1 and 3 (Appendices 17 and 25) of the agenda.

This Committee will also have to examine how far its findings will make Recommendation No. 28, adopted by the Ordinary Administrative Radio Conference, Geneva (1959), obsolete, and the action to be taken on Resolution No. 15 of that Conference.

<u>Note</u>: The Committee will probably consider it advisable to establish three working groups which, taking into account the transition arrangements to be made, would deal respectively with:

- the range of frequencies below 4 Mc/s
- the range of frequencies above 4 Mc/s, and
- the notification and registration of frequencies, taking into account the conclusions arrived at by the other two working groups of Committee 5 and by Committee 4.

#### 6. Operation Committee

#### Terms of reference:

to consider, and revise as necessary, the provisions of the Radio Regulations pertaining to operation in the maritime mobile service, including :  $\,$ 

- Article 20
- Chapter VI
- Article 28, Sections I and II
- Articles 29, 30, 31, 33 and 34

#### Document No. 103-E Page 4

- Chapters VIII and IX
- Appendices 9, 10, 11, 12, 13, 16, 20, 21 and 22

and the pertinent provisions of the Additional Radio Regulations;

and to take into consideration in this connection all proposals relating to these parts of the Radio Regulations, particularly proposals dealing with items 6, 7, 7.4 and, so far as operational questions are concerned, 7.1, 7.2, 7.3 and 7.6 of the agenda.

This Committee will also have to examine the action to be taken on Resolution No. 12 of the Ordinary Administrative Radio Conference, Geneva (1959), and Recommendations Nos. 17, 18, 22, 23, 24, 25, 26, 27, 29 and 30 of that Conference.

<u>Note</u>: The Committee will probably consider it advisable to establish three working groups to deal with:

- matters of radiotelegraph and radiotelephone procedure (including the revised International Code of Signals), and service documents;
- questions related to distress and safety, and the general provisions to be applied to ship stations;
- questions related to personnel, radiotelegrams and radiotelephone calls.

#### 7. Editorial Committee

#### Terms of reference:

to perfect the form, without altering the sense, of the texts prepared by the various Committees, and to combine them with those parts of former texts which have not been altered (Rule 21 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).

<u>Note</u>: The form of the Final Acts of the Conference might be discussed by a special working group of the Editorial Committee, which could submit suggestions directly to the Plenary Assembly.

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#### REMARKS

- a) The Frequencies Committee and the Single-sideband Committee, both of which would comprise mainly frequency specialists, should not meet simultaneously. They might find it advisable, however, to hold joint meetings, for example if it proved necessary to study the revision of Appendices 15 and 17 as a whole.
- b) The Operation Committee, on the other hand, which would consist mainly of specialists on administrative questions, could meet at the same time as either of the other two Committees.

**GENEVA, 1967** 

Document No. 104-E 8 August 1967 Original: English

#### PLENARY MEETING

#### DENMARK, NORWAY AND SWEDEN

#### Proposals for the work of the Conference

#### Radio frequencies for ocean data collecting stations

#### Proposal

It is proposed that the following recommendation be adopted by the W.A.R.C., Geneva 1967.

#### Draft RECOMMENDATION No.....

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 worldwide 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.

#### 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:

Frequ	ency	Bandwidth
kc/	s	kc/s
2850.0 =	2850.5	0.5
3400.0 -	3400.5	0.5
3499·5 <b>-</b>	3500.0	0.5
4650.0 -	4650.5	0.5
4699.5 -	4700.0	0.5
5480.0 -	5480.5	0.5

Frequ	ency	<u>Bandwidth</u>
kc/	's	kc/s
6525.0	<del>-</del> 6525.5	0.5
6683.5	- 6685.0	1.5
8815.0	<del>-</del> 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,  $21\,\mathrm{kc/s}$  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.

**GENEVA, 1967** 

Document No. 105-E 8 August 1967

Original : English

PLENARY MEETING

#### ICELAND, NORWAY AND SWEDEN

#### Proposals for the work of the Conference

# Preparation for a future transition into 25 kc/s channel spacing in the VHF bands for radiotelephony in the International Maritime Mobile Service

It is proposed that the following resolution be adopted by the W.A.R.C., Geneva 1967.

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:



#### Document No. 105-E Page 2

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.

### MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 106-E 9 August 1967 Original : English

PLENARY MEETING

#### CANADA

#### Proposals for the work of the Conference

#### Agenda Item 6:

Examination of the pertinent portions of the revised International Code of Signals.

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

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:



#### Document No. 106-E Page 2

#### Ref.

CAN/106

(cont.)

- 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.

**GENEVA, 1967** 

Document No. 107-E 9 August 1967 Original : English

PLENARY MEETING

CANADA

#### Proposals for the work of the Conference

#### Agenda Item 7.3

#### Conditions for the use of Selective Calling Devices

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.



CAN/107

#### 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.

**GENEVA, 1967** 

Document No. 108-E 9 August 1967 Original: English

#### PLENARY MEETING

#### CANADA

#### Proposals for the work of the Conference

#### Additional Agenda Item CAN - B \*)

Ref.

Article 20

CAN/108(26)

MOD

805 (IV) List IV. List of Coast Stations

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.

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



<sup>\*)</sup> Item not on the agenda of the W.A.R.C. but which Canada proposes that the Conference consider.

#### Document No. 108-E Page 2

Ref.

CAN/108(27) (contd.) 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.

#### 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.

ADD

788C

**GENEVA, 1967** 

Document No. 109-E 10 August 1967 Original: French

#### PLENARY MEETING

#### FRANCE

### Proposed amendments to the Radio Regulations

#### Item 7.3 of the Agenda

#### Conditions for the use of selective calling devices

COUGITIONS 16	or one use of selective c	alling devices				
Ref.	Article 19					
	Add the following Sect	ion VI :				
	Section VI - Selective mobile service	call numbers in the				
F/109(92) ADD 788A		calling devices, their assigned by the respons-				
	A - Ship stations					
ADD 788B	§ 2. Numbers assigned these numbers shall have	to groups of ships : ve 5 digits,				
	- consisting either repeated 5 times	r of the same digit;				
	- or of 2 different alternately.	t digits repeated				
	They shall be allocated	d as follows :				
	Number series	Allocated to:				
		(name of country)				

5 digits.

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

F/109(92) (cont.)

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)

B - Coast stations

ADD 788F

§ 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)

Ref	٠

F/109(92) (cont.)

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.

#### Article 20

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.

Ref.			Article 33
			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).
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 radiotelephone channel to be used for the reply and

in Appendix 18.

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

Ref.		•	
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.
			And the state of t
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.
			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
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).

F/109(102) MOD

#### Article 34

A) Place Nos. 1296 to 1318 under the heading:

"Section I - General"

B) Add a Section II as follows:

F/109(103) ADD

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	<b>11</b> 97	1275	1358	1446	1540	1640	<b>17</b> 47	1860	1981	2110

#### Document No. 109-E Page 8

#### Ref.

F/109(103) (cont.) 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.

- (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 ± 10 ms, and the time interval between two consecutive tones, measured between the points at 50% of maximum amplitude, shall be 3 ms ± 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 + 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);

#### Ref:

F/109(103) (cont.)

13180

- an interval of  $900 \pm 100 \text{ ms}$ ;
- 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 + 1 ms and the time interval between two consecutive tones, measured between the points at 50% of maximum amplitude, is less than 1 ms.

Ref.			Article 35
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."
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."

#### 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 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 l	Call number	Frequencies used for the selective call
-----------------------------	-------------	---

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).

F/109(106) (cont.) ADD

Part II - List of identification numbers of coast stations

Principal designation of the second s	Identification number l	Name and nationality of coast station	Frequencies used for the selective call

1 The numbers shall be shown in logical order.

#### 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.

**GENEVA, 1967** 

Document No. 110-E 10 August 1967 Original: French

#### PLENARY MEETING

#### FRANCE

#### Proposed amendments to the Radio Regulations

(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.



#### Document No. 110-E

Page 2

Ref.

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)

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.

#### Article 7

F/110(113)

MOD

2108 Replace this number by the following:

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)

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.

#### Document No. 110-E

Page 4

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

21**2**2

After = GPR =, insert the paid service

indication = MP =.

Reasons:

See proposal relative to No. 2121.

#### Document No. 110-E

Page 6

Ref.

Article 8

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.

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.

#### Document No. 110-E Page 8

Ref.

#### Article 9

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.

#### Article 10

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 ....".

#### Reasons:

Drafting clarification.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 111-E 10 August 1967 Original : French

PLENARY MEETING

#### FRANCE

#### Proposed amendments to the Radio Regulations

(Proposals submitted in pursuance of paragraph I, second sub-paragraph of Administrative Council Resolution No. 590 and not covered by agenda items 1 to 7)

Ref.

Article 12

F/111(131)

MOD

677

Delete second sentence of this number.

Reasons:

Text out of date.



Article 20

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.

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.

#### Article 29

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.

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.

Article 30

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).

#### Article 32

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.

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.

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.

### Document No. 111-E Page 6

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.

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.

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.

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.

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.

## Document No. 111-E Page 8

Ref.

F/111(147)

MOD

1121

Replace by the following:

In regions of heavy traffic, coast stations and ship stations should use class Al emissions on their working frequencies.

#### Reasons:

To prevent congestion of the frequency spectrum. See number 975.

#### Article 33

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.

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.

F/111(150)

MOD

1228

Replace, wherever necessary, in each of these

1230 numbers:

bу

1232

1233

"the frequency 2182 kc/s"

1234

1235:

1242

1247

"the carrier frequency 2182 kc/s".

1254

#### Reasons:

Consequence of using SSB.

## Document No. 111-E Page 10

#### Ref.

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(153)

MOD

1280 and Replace in both these numbers wherever necessary:

"commuter" by "à vous".

#### Reasons:

The word "commuter" is hardly ever used. This concerns only the French text.

F/111(154) MOD

1290

Replace:

"on 2182 kc/s or on 156.80 Mc/s"

bу

"on the carrier frequency 2182 kc/s or on 156.80 Mc/s".

#### Reasons:

Consequence of using SSB.

Article 34

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.

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.

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).

#### Article 35

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.

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.

Document No. 111-E Page 14

Ref.

#### Article 36

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.

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.

Add the following number 1448A:

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.

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.

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.

#### Document No. 111-E Page 16

Ref.

F/111(167)

MOD MOD 1477 and Delete last sentence in each of these

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.

I	3	9:	f	

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.

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.

## Document No. 111-E Page 18

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.

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.

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).

F/111(183)

MOD

1493

Second line :

Replace "the safety signal" by "the safety call".

#### Reasons:

See proposals relating to numbers 1490A and 1490B.

#### Document No. 111-E Page 22

Ref.

F/111(184)

MOD

1494

Second line::

Replace "the safety signal" by "the safety call".

Reasons:

See proposals relating to numbers 1490A and 1490B.

Article 40

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. Only affects the French text.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Addendum to

Document No. 112-E

12 September 1967

Original : English

#### PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, THE CHANNEL ISLANDS AND THE ISLE OF MAN

Proposals for the work of the Conference

#### Agenda Item 4

Possible revision of Appendix 18 to the Radio Regulations.

Ref.

G/Add.112(100)

ADD

#### APPENDIX 19A

Technical characteristics for transmitters and receivers using 25 kc/s channelling in the maritime mobile service in the band 156 - 174 Mc/s. (See Articles 28 and 35 and Appendix 18)

- 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  $\pm$  5 kc/s. However, it is recognized that under certain conditions, the percentage modulation may be decreased to avoid adjacent channel interference.
- The frequency tolerance of the transmitter shall not exceed:
  - (a) for coast stations + 1 kc/s (absolute);)
  - (b) for ship stations  $\pm 2 \text{ kc/s}$  (absolute).



Addendum to
Document No. 112-E
Page 2

#### Ref.

G/Add.112(100) (cont.) 4. Spurious emissions:

- (a) the mean power of spurious emissions due to harmonics of the carrier frequency should not exceed 2.5 NW measured at the antenna terminals of the transmitter when loaded with a resistance equal to the nominal antenna impedance;
- (b) the mean power of spurious emissions falling in any other international VHF maritime mobile channel due to the products of modulation should not exceed 10 aw measured at the antenna terminals of the transmitter or receiver when loaded with a resistance equal to the nominal antenna impedance;
- (c) the mean power output of any other spurious emission on any discrete frequency within the international VHF maritime mobile band should not exceed 2.5 JuW measured at the antenna terminals of the transmitter or receiver when loaded with a resistance equal to the nominal antenna impedance.
- 5. 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.
- 6. The audio frequency bandwidth shall be limited to 3000 c/s.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 112-E

Original : English

PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
THE CHANNEL ISLANDS AND THE ISLE OF MAN

Proposals for the work of the Conference

#### Agenda Item 4:

#### Possible revision of Appendix 18 to the Radio Regulations

- 1. With reference to Document No. 57, page 2, the proposals of the United Kingdom for reducing the channel spacing in the VHF maritime mobile radiotelephone service are contained in the draft Resolution in Annex I, the revision of the Table of Transmitting Frequencies in Annex II, and the draft Recommendation on the allocation of the new channels in Annex III.
- 2. The proposed dates in paragraph 6 of Annex I are based on the assumption that the Conference itself will decide upon the requisite technical standards. However, if the Conference decides to request the C.C.I.R. to study the technical standards, then the proposed dates would need to be adjusted accordingly. The technical standards given in Appendix 19, the frequency tolerances in Appendix 3 and levels of spurious emissions in Appendix 4 are those that need to be revised. These standards are under study in the United Kingdom.
- 3. With reference to the guard bands on either side of Channel 16, the Safety and Calling Channel, it is considered that they should not be reduced until equipment for a channel spacing of 25 kc/s is mandatory for all stations operating in the international maritime mobile service.
- 4. In view of C.C.I.R. draft Recommendation D.a(257-1), paragraph 2.2, and draft Resolution D.b, paragraph 6, the proposed numbering of the interleaved 25 kc/s channels has been confined to two digits, and the numbering of the existing channels has been retained.

Annexes: 3



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#### ANNEX I

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

- 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 so as to cause the least disturbance to existing services;

## Annex I to Document No. 112-E Page 4

#### 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
<del></del>	date by which channel allocations on interleaved channels may commence where possible	See draft Recommenda- tion in Annex III
<del>-</del>	date by which all equipments shall conform to 25 kc/s standards and all interleaved channels be	

1.7.79

introduced.

#### ANNEX II

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	Transmitting Frequencies (Mc/s)		Inter-	Port op	erations	Public	Other uses of inter-
desig- nators	Ship Stations	Coast Stations	ship	Single frequency	Two frequency	corres- pondence	leaved channels
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	Ì	
5	156.250	160.850			6		:
55	156.275	160.875			15	Í	
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****			
							:

<sup>\*</sup> For assistance in understanding the Table, see Notes a) to h) below

<sup>\*\*</sup> See Note e)

<sup>\*\*\*\*</sup> See Note h)

## Annex II to Document No. 112-E Page 6

Ref.
G/112(55) MOD
(cont.)

Channel	1	nitting .es (Mc/s)		Port operations		Publ <b>i</b> c	Other uses
desig- nators	Ship Stations	Coast Stations	Inter- ship	Single frequency	Two frequency	corres- pondence	leaved channels
59	156.475	<del></del>	6				
10	156.500	156.500	3	7	,		
60	156.525			· · · · · · · · · · · · · · · · · · ·	•		On board
11	156.550	156.550		3			'' :
61	156.575	156 <b>.57</b> 5				,	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		Guar	d band l	.56.7625-156	.7875 Mc/s		
16	156.800	156.800	CALLIN	G AND SAFET	Y	4	
66		Guar	d band 1	.56.8125-156	.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		•	具		
69	156.975	161.575		·		12	
20	157.000	161.600		:	1		, and the second

<sup>\*\*\*\*</sup> See Note h)

Ref.
G/112(55) MOD
(cont.)

Channel		mitting ies (Mc/s)		Port or	erations	Public	Other uses
desig- nators	Ship Stations	Coast	Inter- ship	Single frequency	Two frequency	corres- pondence	of inter - leaved channels
<b>7</b> 0	15 <b>7.</b> 025	161.625					Usage under consideration
21	157.050	156.050** or 161.650			5		
71	157.075	161.675		•	·		Usage under consideration
55	157.100	161.700		•	2		
72	157.125	161.725					Usage under consideration
23	157.150	156.150**				5	
		or 161.750					
<b>7</b> 3	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	

<sup>\*\*,</sup> See Note e)

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 motile 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.

### ANNEX III

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

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 113-E 11 August 1967

Original : English

PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND,
THE CHANNEL ISLANDS AND THE ISLE OF MAN

Proposals for the work of the Conference

### Agenda Item 7.3:

### Selective calling

- 1. The United Kingdom proposes that the draft Recommendation D.a (257-1) of the C.C.I.R. should be incorporated as an Appendix to the Radio Regulations. A proposal to this effect is given in Annex I.
- 2. Consequential amendments to Article 28A and Article 33 are given in Annex II.

Annexes: 2



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ANNEXI

G/113(57) ADD

APPENDIX 200

# Selective calling system for use in the international maritime mobile services

(See Articles 19, 28A, 29 and 33 and Appendix 9)

- 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	<b>3</b>	4	5	6	7	8	9	0	Figure repeti- tion
Audio fre- quency (c/s)	1124		1275	1358	1446	1540	1640	1747	1860	1981	2110

G/113(57) (cont.) For example, the series of audio-frequency pulses corresponding to the selective call 12 133 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;
- 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 ms ± 10 ms;
  - 1.2.7 the time interval between consecutive pulses, measured between the half-amplitude points, should be 3 ms ± 2 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 ms ± 1 ms;
- 1.2.9 the frequency tolerance of the audio frequencies given in Section 1.2.1 should be ± 4 c/s;

G/113(57) (cont.)

- 1.2.10 the selective call signal (ship's code number) should be transmitted twice with an interval of 900 ms ± 100 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 ± 30 ms;
- 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 ms ± 1 ms and the interval between consecutive pulses, measured between half-amplitude points, should not exceed 1 ms;

## Annex I to Document No. 113-E Page 6

### Ref.

G/113(57) (cont.)

- 4. that receiving selectors on ships should operate reliably in any radio conditions acceptable for satisfactory communication;
- 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 ms ± 40 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

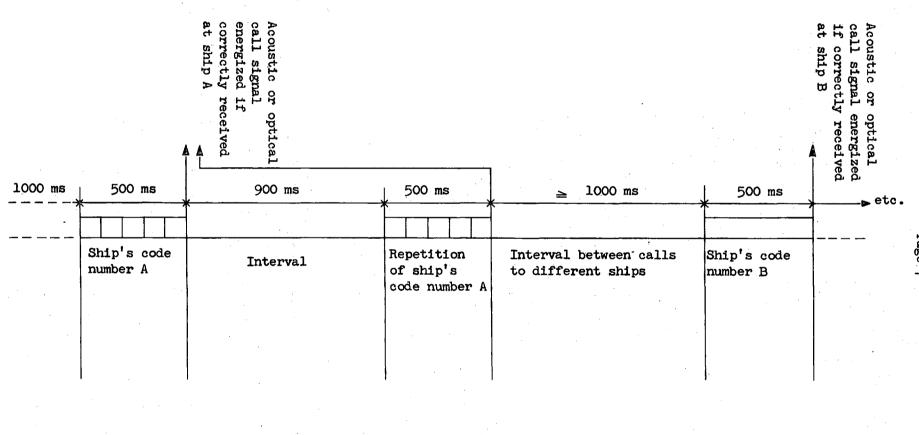
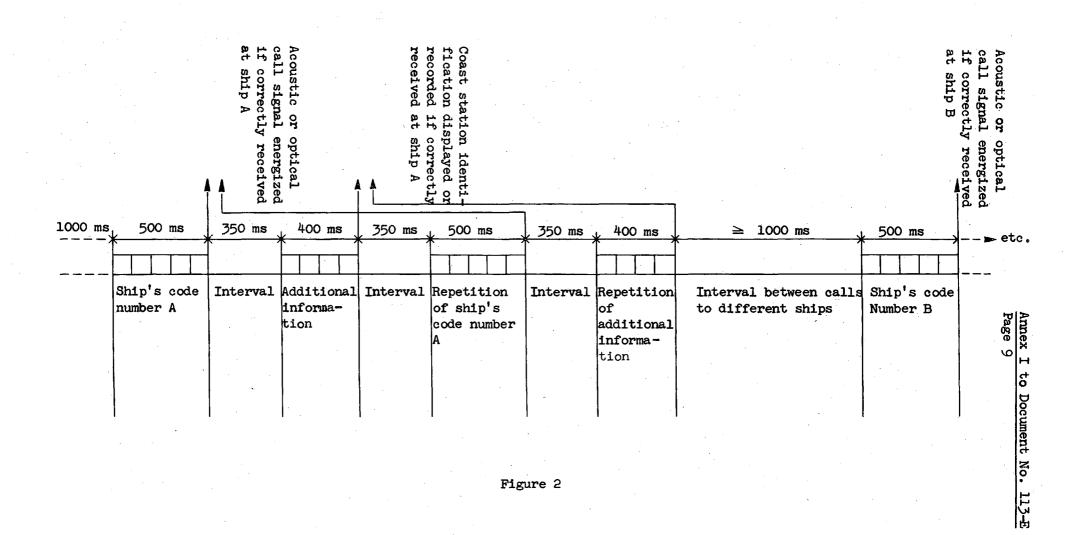


Figure 1

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### COMPOSITION OF SELECTIVE CALL SIGNALS WITH ADDITIONAL INFORMATION



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ANNEX II

G/113(58)

### Article 28A

(see Document No. 91, Proposal No. 0/91(50))

999B \$1. Amend to read: "The characteristics of the international selective calling system shall be in accordance with Appendix ..."

### Reasons:

Consequential upon proposals in Annex I for new Appendix  $20\text{C}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$ 

999F \$4. (see Document No. 91, Proposal No. 16/91(50))

Amend to read: "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	<b>F</b> 2
any working frequency listed for this purpose in the List of Coast Stations	) A2H (MF and HF) F2 (VHF)
O OU OTOTIO	<i>!</i>

<sup>\*)</sup> When brought into use.

# Annex II to Document No. 113-E Page 12

Ref.

G/113(59)

Article 33

Insert new 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)."

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 114-E 11 August 1967 Original: English

### PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND,
THE CHANNEL ISLANDS AND THE ISLE OF MAN

Proposals for the work of the Conference

## Additional Agenda Item UK 11:

Relating to the Maritime use of the band 450-470 Mc/s for Radiotelehpone Communication

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 radiotelephone 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

- 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.

Item not in the agenda of the W.A.R.C. but which the United Kingdom proposes that the Conference consider.



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 115-E 15 August 1967 Original : English

PLENARY MEETING

#### DENMARK AND NORWAY

Proposals for the work of the Conference .

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.



### 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.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 116-E 15 August 1967 Original: English

PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
THE CHANNEL ISLANDS AND THE ISLE OF MAN

### Proposal for the Committee Structure of the Conference

Committee No. 1

Steering

Committee No. 2

Credentials

Committee No. 3

Budget Control

Committee No. 4

Radiotelegraph

### Terms of reference:

To examine, and revise as necessary, the provisions relating to radiotelegraphy in the maritime mobile service which are contained in Section IV of Article 7, Article 9 (numbers 573 to 575), Section III of Article 28, Articles 29, 30, 31 and 32, and in the related Appendices (Appendix 13 and Section A of Appendix 15), to take into consideration, in this connection, all proposals relating to these parts of the Radio Regulations, and in particular those which relate to items 2.3, 2.4, 2.5, 3 (Section A of Appendix 15), 5 (frequency 500 kc/s), 6, 7.1 and 7.5 of the Agenda.

Committee No. 5

Radiotelephone

#### Terms of reference:

To consider, and revise as necessary, the provisions relating to radiotelephony in the maritime mobile service which are contained in Section IV of Article 7, Article 9 (numbers 541 to 551 and 577 to 586), Section IV of Article 28, Articles 33, 34 and 35 and the related Appendices (Appendix 3, Section B of Appendix 15, Appendices 16, 17, 18, 19 and 25);



### Document No. 116-E Page 2

to take into consideration in this connection all proposals relating to those parts of the Radio Regulations, and in particular those which relate to items 2.1, 2.2, 3 (Section B of Appendix 15, Appendices 17 and 25), 4, 5 (frequency 2182 kc/s), 7.2 and 7.3 of the Agenda.

Committee No. 6 - Personnel, Distress and Miscellaneous

### Terms of reference:

To consider, and revise as necessary, the provisions of number 677 of Article 12, the relevant provisions of Article 20, Chapter VI, Sections I and II of Article 28 and Chapters VIII and IX of the Radio Regulations and the relevant provisions of related Appendices (Appendices 9, 10, 11, 12, 20, 21 and 22) as well as the relevant provisions of the Additional Radio Regulations; to take into consideration, in this connection, all proposals relating to those parts of the Radio Regulations and those relating to the Additional Radio Regulations, and in particular those which relate to items 7.4 and 7.6 of the Agenda.

Committee No. 7 - Editorial

The Radiotelegraph Committee and the Radiotelephone Committee, both essentially formed of frequency specialists, should not meet simultaneously. On the other hand the Personnel, Distress and Miscellaneous Committee, formed essentially of specialists in administrative matters, could meet at the same time as either of the other committees.

In order to deal with certain matters (for instance, the revision of Section IV of Article 7, the revision of Appendices 15 and 17, the question of oceanographic frequencies), the Radiotelegraph Committee and the Radiotelephone Committee may require to hold joint meetings from time to time.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 117-E 15 August 1967 Original: English

### PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
THE CHANNEL ISLANDS AND THE ISLE OF MAN

### Additional Agenda Item UK12

# Rearrangement of the Radio Regulations appertaining to the maritime mobile service (Resolution No. 12)

- Between 1961 and 1964 considerable work was carried out on the subject of the revision of the layout of the Radio Regulations culminating in the adoption by the Administrative Council of Resolution No. 549. This invited Administrations when preparing their proposals for the next administrative radio conference competent to deal with the matter, to take into account the draft layout of the structure of the Radio Regulations prepared by the I.F.R.B. (I.F.R.B. Circular-letter No. 102 refers).
- 2. The provisions of Article 7 of the International Telecommunication Convention (Montreux, 1965) are such that the probability of a World Administrative Radio Conference being held to revise the whole of the Radio Regulations or to revise those regulations which refer to the mobile service is remote. In order to facilitate the work of future service conferences it is, therefore, necessary to segregate the operational requirements of the maritime mobile service from those of other mobile services, and to collect together in logical sequence, those maritime mobile radio regulations which are at present included in a number of separate Articles.
- A suggested rearrangement of the regulations contained in Articles 7, 28-35 and 43, together with the amendments submitted in connection with Agenda Items 1 to 7 and Additional Agenda Items UK 1 to 10, are included in Annex I.

The new arrangement consists of :

1) Article A - Special rules relating to the maritime mobile service (No. 442 only).



- 2) Article B General radiotelegraph procedure in the maritime mobile service. (Article 29 revised to include the maritime mobile regulations contained in Article 30.)
- 3) Article C Use of frequencies for radiotelegraphy in the maritime mobile service. (Article 32 revised to incorporate the appropriate maritime mobile regulations of Article 7 and Article 28.)
- 4) Article D Selective calling in the maritime mobile service

  (To provide for selective calling.)
- 5) Article 33 General radiotelephone procedure in the maritime mobile service

(Existing Article 33 revised to exclude regulations dealing with frequency usage and to include the appropriate regulations of Article 34.)

6) Article 35 - Use of frequencies for radiotelephony in the maritime mobile service

(Existing Article 35 revised to incorporate the appropriate regulations of Articles 7 and 33.)

- 7) Article 43 revised to incorporate Section V of Article 7.
- 8) Articles 7, 28, 29, 30, 32 and 34 Consequential amendements made necessary by 1) to 7) above.
- 4. A table showing the revised Articles and Regulation numbers is in Annex II.

Annexes: 2

### ANNEXI

### Article A

### Special rules relating to the maritime mobile service

In Region 1, frequencies assigned to stations of the (442) maritime mobile service, operating in the bands between 1605 and 3800 kc/s (see Article 5) should, whenever possible, be in accordance with the following sub-division:

- 1605 - 1625 kc/s: Radiotelegraphy exclusively;

- 1625 - 1670 kc/s: Low power radiotelephony;

- 1670 - 1950 kc/s: Coast stations;

- 1950 - 2053 kc/s: Ship stations working to coast

stations;

- 2053 - 2065 kc/s: Intership working;

- 2065 - 2170 kc/s: Ship stations working to coast

stations;

- 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);

- 2194 - 2440 kc/s: Intership working:

- 2440 - 2578 kc/s: Ship stations working to coast

stations;

→ 2578 - 2850 kc/s: Coast stations;

- 3155 - 3340 kc/s: Ship stations working to coast

stations;

- 3340 - 3400 kc/s: Intership working;

- 3500 - 3600 kc/s: Intership working;

- 3600 - 3800 kc/s: Coast stations.

### Article B

(Articles 29 and 30)

### General radiotelegraph procedure in the maritime mobile service

### SECTION I. GENERAL

- \*\* 1 \$1. In the maritime mobile service the procedure detailed in (1000) this Article is obligatory, except in cases of distress, urgency or safety, to which the provisions of Article 36 are applicable.
- \*\* 2 §2. The use of the Morse code signals specified in the Telegraph (1003) Regulations shall be obligatory. However, for radiocommunications of a special character, the use of other signals is not precluded.
- \*\* 3 §3. In order to facilitate radiocommunications, stations of (1004 the maritime mobile service shall use only the service abbreviations and given in Appendix 13. 1005)
- \* 4 §4. Mobile stations shall not radiate a carrier wave between (1081) calls.
- \*\* 5 §5. (1) The coast station may, by means of the abbreviation TR, ask (1083) the ship station to furnish it with the following information:
  - \* 6 a) position and, whenever possible, course and speed; (1084)
- \* 7 b) next port of call. (1085)
- \*\* 8 (2) The information referred to in Nos. 5 and 7, preceded by (1086) the abbreviation TR, should be furnished by ship stations, without prior request from the coast station, whenever such a measure seems appropriate.
- \*\* 9 (3) The information referred to in Nos. 5 to 7 is furnished on (1087) the authority of the master of the person responsible for the ship station.

<sup>\*</sup> Transferred unchanged.

<sup>\*\*</sup> Transferred with minor amendment.

### SECTION II. CONTROL OF OPERATIONS

- \*\* 10 §6. The provisions of this section are not applicable in cases (1058) of distress, urgency or safety. (See No. 1.)
- \*\* 11 §7. In communication between coast stations and ship stations, (1059) the ship station shall comply with the instructions given by the coast station, in all questions relating to the order and time of transmission, to the choice of frequency and class of emission, and to the duration and suspension of work.
- \*\* 12 §8. In communication between ship stations, the station called (1060) shall control the working in the manner indicated in No. 11. However, if a coast station finds it necessary to intervene, these stations shall comply with the instructions given by the coast station.
- \* 13 §9. (1) Before transmitting, a station shall take precautions to (1007) ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress.
- \* 14 (2) If, these precautions having been taken, the emissions of the (1008) station should, nevertheless, interfere with a transmission already in progress, the following rules shall be applied:
- \*\* 15
  (1009)

  a) The ship station whose emission causes interference to the correspondence of a ship station with a coast station, shall cease sending at the first request of the coast station.
- \*\* 16 b) The ship station whose emission causes interference to communications already in progress between ship stations shall cease sending at the first request of one of the other stations.
  - \* 17 c) The station which requests this cessation shall indicate the approximate waiting time imposed on the station whose emission it suspends.
- \* 18 \$10. In order to facilitate the reception of distress calls, other (1113) transmissions on the frequency 500 kc/s shall be reduced to a minimum, and in any case shall not exceed three minutes.

### SECTION III. CALLING PROCEDURE

- \* 19 \$11. (1) The call consists of: (1012)
  - 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.
  - 20 (2) However, 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.
- \*21 §12. (1) For making a call and for transmitting preparatory signals, (1014) the calling station shall use a frequency on which the station called keeps watch.
- \* 22 (2) A ship station calling a coast station in any of the (1015) frequency bands allocated to the maritime mobile service between 4000 and 27 500 kc/s shall use a frequency in the calling bands specially reserved for this purpose.
  - 23 (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.

- \* 24 \$13. (1) The call, as described in Nos. 19, 20 and 37 shall be (1016) followed by the service abbreviation indicating the working frequency and, if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.
- \*\* 25 (2) When, as an exception to this rule, the call is not (1017) 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 Coast Stations.
- \*\* 26 \$14. (1) As a general rule, it rests with the ship station to
  (1065) establish communication with the coast station. For this purpose,
  the ship station may call the coast station only when it comes within
  the service area of the latter, that is to say, that area within
  which, by using an appropriate frequency, the ship station can be
  heard by the coast station.
- \*\* 27 (2) However, a coast station having traffic for a ship station (1066) may call this station if it has reason to believe that the ship station is keeping watch and is within the service area of the coast station.
  - \* 28 (3) In addition, each coast station shall, so far as practicable, (1067) 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.
  - \* 29 §15. (1) Coast stations shall transmit their traffic lists on their (1069) normal working frequencies in the appropriate bands.
  - \* 30 (2) They may, however, announce this transmission by the (1070) 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;

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- GSW 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.

31 (3) The provisions of No. 30. (1071)

a) are obligatory when 500 kc/s is used;

b) do not apply when frequencies in the bands between 4000 and 27 500 kc/s are used.

\* 34 §16. (1) The hours at which coast stations transmit their traffic (1073) lists and the frequencies and classes of emission which they use for this purpose shall be stated in the List of Coast Stations.

\*\* 35 (2) Ship stations should, as far as possible, listen to the (1074) traffic lists transmitted by coast stations. On hearing their call sign in such a list they shall reply as soon as they can do so.

\*\* 36 (3) When the traffic cannot be sent immediately, the coast (1075) station shall inform each ship station concerned of the probable time at which working can begin, and also, if necessary, the frequency and class of emission which will be used.

\*\* 37 §17. When a coast station receives calls from several ship (1076) stations at practically the same time, it decides the order in which these stations may transmit their traffic. Its decision shall be based on the priority (see No. 1496) of the radiotelegrams or radiotelephone calls that ship stations have on hand and on the need for allowing each calling station to clear the greatest possible number of communications.

38 \$18. (1) When a station called does not reply, the call may be (1077) repeated at three minute intervals.

\*\* 39 (2) However, in the bands between 4000 and 27 500 kc/s when the (1013) requirements of No. C 107 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.

- \* 40 (3) Before renewing the call, the calling station shall (1079) ascertain that the station called is not in communication with another station.
- \* 41 §19. (1) Continuous or frequently repeated emissions of its call (1068) sign or of the enquiry signal CQ by a coast station should be avoided (see No. 693).
- 42 (2) However, in the bands between 4000 and 27 500 kc/s a coast (1068A) 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. Cl07).

### Indication of the number of radiotelegrams or of transmission in series

- \* 43 \$20. (1) When the calling station has more than one radiotelegram to (1020) transmit to the station called, the above-mentioned preparatory signals shall be followed by the service abbreviation and the figure giving the number of such radiotelegrams.
- \* 44 (2) Moreover, when the calling station wishes to send its (1021) radiotelegrams in series, it shall indicate this by adding the service abbreviation for requesting the consent of the station called.

### SECTION IV. REPLY TO CALLS

- \* 45 \$21. The reply to calls consists of: (1022)
  - the call sign of the calling station, not more than three times;
  - the word DE;
  - the call sign of the station called.
- \*\* 46 §22. Except as otherwise provided for in these regulations for (1023) 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.

### Agreement on the frequency to be used for traffic

- \* 47 §23. (1) If the station called is in agreement with the calling (1027) station, it shall transmit:
- \* 48 (1028)
- a) the reply to the call;
- \* 49 (1029)
- b) the service abbreviation indicating that from that moment onwards it will listen on the working frequency announced by the calling station;
- \* 50 (1030)
- c) if necessary, the indications referred to in No. 60;
- \* 51 (1031)
- d) the letter K if the station called is ready to receive the traffic of the calling station;
- \* 52 (1032)
- e) if useful, the service abbreviation and figure indicating the strength and/or intelligibility of the signals received (see Appendix 13).
- \* 53 (2) If the station called is not in agreement with the calling (1033) station on the working frequency to be used, it shall transmit:
- \* 5<sup>4</sup> (1034)
- a) the reply to the call;
- \* 55 (1035)
- b) the service abbreviation indicating the working frequency to be used by the calling station and, if necessary, the class of emission;
- \* 56 (1036)
- c) if necessary, the indications specified in No. 60.
- \* 57 (3) When agreement is reached regarding the working frequency (1037) which the calling station shall use for its traffic, the station called shall transmit the letter K after the indications contained in its reply.
- \* 58 §24. (1) If the station called is unable to accept traffic (1039) immediately, it shall reply to the call as indicated in Nos. 47 to 52, but it shall replace the letter K by the signal . \_ ... (wait), followed by a number indicating in minutes the probable duration of the waiting time. 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.

\* 59 (2) When a station receives a call without being certain that (1040) such a call is intended for it, it shall not reply until the call has been repeated and understood. When, on the other hand, a station receives a call which is intended for it but is uncertain of the call sign of the calling station, it shall reply immediately, using the service abbreviation in place of the call sign of this latter station.

### Reply to the request for transmission by series

\* 60 §25. The station called, in replying to a calling station which (1038) has proposed to transmit its radiotelegrams by series (see No. 44), shall indicate, by means of the service abbreviation, its acceptance or refusal. In the former case it shall specify, if necessary, the number of radiotelegrams which it is ready to receive in one series.

### SECTION V. TRAFFIC

- \* 61 §26. (1) As a general rule a station of the mobile service shall (1041) transmit its traffic on one of its working frequencies in that band in which the call has been made.
- \* 62 (2) In addition to its normal working frequency, printed in (1042) heavy type in the List of Coast Stations, a coast station may use one or more supplementary frequencies in the same band, in accordance with the provisions of Sections II, III and IV.
- \* 63 (3) The use of frequencies reserved for calling shall be for- (1043) bidden for traffic, except distress traffic.
- \* 64 (4) If the transmission of a radiotelegram is to take place on a (1044) frequency and/or with a class of emission other than those used for the call, the transmission of the radiotelegram shall be preceded by:
  - the call sign of the station called, not more than three times;
  - the word DE;
  - the call sign of the calling station, not more than three times.

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- \* 65 (5) If the transmission is to be made on the same frequency (1045) and with the same class of emission as the call, the transmission of the radiotelegram shall be preceded if necessary, by:
  - the call sign of the station called;
  - the word DE;
  - the call sign of the calling station.

### Number in daily series

- \*\* 66 \$27. (1) As a general rule, radiotelegrams of all kinds transmitted (1046) by ship stations shall be numbered in a daily series; number 1 shall be given to the first radiotelegram sent each day to each separate station.
- \* 67 (2) A series of numbers which has begun in radiotelegraphy (1.047) should be continued in radiotelephony and vice versa.

### Long radiotelegrams

- \* 68 \$28. (1) In cases where both stations are able to change from (1048) sending to receiving without manual switching, the transmitting station may continue to send until completion of the message or until the receiving station breaks in on the transmission with the service abbreviation BK. Before commencing, both stations normally agree on such a method of working by means of the abbreviation QSK.
- \* 69 (2) If this method of working cannot be employed, long radio—(1049) telegrams, whether in plain language or in secret language shall, as a general rule, be transmitted in sections, each section containing fifty words in the case of plain language and twenty words or groups if secret language is used.
- \* 70 (3) At the end of each section the signal .. \_\_\_. (?) meaning (1050) "Have you received the radiotelegram correctly up to this point?" shall be transmitted. If the section has been correctly received, the receiving station shall reply by sending the letter K and the transmission of the radiotelegram shall be continued.

### Suspension of traffic

\*\* 71 §29. When a ship station transmits on a working frequency of a (1051) coast station and causes interference with the transmission of such coast station, it shall suspend working at the first request of the latter.

### SECTION VI. END OF TRAFFIC AND WORK

### Signal for the end of transmission

- \* 72 § 30. (1) The transmission of a radiotelegram shall be terminated by (1052) the signal . \_ . \_ . (end of transmission), followed by the letter K.
- \* 73 (2) In the case of transmission by series, the end of each radio(1053) telegram shall be indicated by the signal . \_ . \_ . (end of transmission)
  and the end of the series by the letter K.

### Acknowledgement of receipt

- \* 74 §31. (1) The acknowledgement of receipt of a radiotelegram or a (1054) series of radiotelegrams shall be given by the receiving station in the following manner:
  - the call sign of the sending station;
  - the word DE;
  - the call sign of the receiving station;
  - the letter R followed by the number of the radiotelegram;

or

- the letter R followed by the number of the last radiotelegram of a series.
- \* 75 (2) The acknowledgement of receipt shall be transmitted by the (1055) receiving station on the traffic frequency (see Nos. 61 and 62).

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\* 76 § 32. When the name and address of the administration or private (1082) operating agency controlling a mobile station are not given in the appropriate list of stations or are no longer in agreement with the particulars given therein, it is the duty of the mobile station to furnish as a matter of regular procedure, to the land station to which it transmits traffic, all the necessary information in this respect.

### End of work

- \* 77 §33. (1) The end of work between two stations shall be indicated by (1056) each of them by means of the signal ... \_ . \_ (end of work).
- \* 78 (2) The signal . . . \_ . \_ (end of work) shall also be used : (1057)
  - when the transmission of radiotelegrams of general information, meteorological information and general safety notices is finished, and
  - when transmission is ended in long-distance radiocommunication services with deferred acknowledgement of receipt or without acknowledgement of receipt.

#### SECTION VIL TESTS

- \* 79 § 34. When it is necessary for a mobile station to send signals (1061) for testing or adjustment 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.
- \*80 §35. When it is necessary for a station in the mobile service (1062) 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 be composed of a series of VVV followed by the call sign of the station emitting the test signals.

### Article C

(Articles 7, 28 and 32)

# Use of frequencies for radiotelegraphy in the Maritime Mobile Service

### SECTION I. BANDS BETWEEN 405 AND 535 kg/s

*1 (9 <b>7</b> 2)	\$1. 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.						
*2 (9 <b>7</b> 3)	82. All ship stations equipped with radiotelegraph apparatus to work in the authorized bands between 405 and 535 kc/s shall be able to:						
3 (9 <b>7</b> 4)	a) send Class A2 or A2H emissions on 500 kc/s <sup>1</sup> ;						
4	b) receive Class A2 and A2H emissions on 500 kc/s $^1$ ;						
5 (9 <b>7</b> 5)	c) send, in addition, Class Al and either Class A2 or A2H emissions on at least two working frequencies;						
6 (976)	d) receive, in addition, Class Al, A2 and A2H emissions on all other frequencies necessary to their service.						
7 (976A)	83. Only Class A2 and A2H emission shall be used in the band between 490 and 510 kc/s $^{1}$ .						
*8 (9 <b>7</b> 7)	\$4. The provisions of Nos. 5 and 6 do not apply to apparatus provided solely for distress, urgency and safety purposes.						

<sup>974.1</sup> The type of A2 and A2H used shall be by the on-off keying of the modulated emission.

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- \*9 \$5. (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.
- \*10 (2) The separation between adjacent frequencies used respectively (441) by coast stations and by ship stations is 4 kc/s.

### A. Distress

- \*11 §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 message, 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. 32.)
- \*\*12 (2) However, ship stations which cannot transmit on 500 kc/s should (1108) use any other available frequency on which attention might be attracted.
- \*13 (3) In addition, 500 kc/s may be used only: (1109)
- \*14 a) for call and reply (see Nos. 24 and 26); (1110)
- \*15 b) by coast stations to announce the transmission of (1111) their traffic lists under the conditions provided for in Nos. 31 and 32, Article B.
- \*16 (4) Apart from the transmissions authorized on 500 kc/s, and (1112) taking account of No. 25, all transmissions on the frequencies included between 490 and 510 kc/s are forbidden.

### B. Watch

- \*17 §7. (1) In order to increase the safety of life at sea and over the (1130) sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, take the necessary measures to ensure watch on the international distress frequency 500 kc/s for three minutes twice an hour beginning at x h. 15 and x h. 45 Greenwich Mean Time (G.M.T.) by an operator using headphones or a loudspeaker.
- \*18 (2) During the periods mentioned above, except for the emissions (1131) provided for in Article 36:
- \*19 a) transmissions shall cease in the bands between 485 and (1132) 515 kc/s;
- \*20 b) outside these bands, transmissions of stations of the mobile service may continue; stations of the maritime mobile service may listen to these transmissions on the express condition that they first ensure watch on the distress frequency as required by No. 17.
- 21 §8. (1) Stations of the maritime mobile service open to public (1134) 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.
- \*22 (2) These stations, while observing the requirements of No. 17 (1135) are authorized to relinquish this watch only when they are engaged in communications on other frequencies.
- \*23 (3) When they are engaged in such communications: (1136)
  - Ship stations may maintain this watch on 500 kc/s by means of an operator using headphones or a loudspeaker or by some appropriate means such as an automatic alarm receiver.
  - Coast stations may maintain this watch on 500 kc/s by means of an operator using headphones or a loudspeaker; in the latter case an indication may be inserted in the List of Coast Stations.

#### C. Frequency to be used for call and reply

- \*24 89. (1) The general calling frequency, which shall be used by (1114) any ship station or coast station engaged in radiotelegraphy in the authorized bands between 405 and 535 kc/s, is the frequency 500 kc/s.
- \*25 (2) However, in order to reduce interference in regions of (1115) heavy traffic, administrations may consider the requirements of No. 24 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.
- \*26 \$10. (1) The frequency for replying to a call sent on the general (1116) calling frequency (see No. 24) is 500 kc/s, except where the calling station specifies the frequency on which it will listen for the reply (see Article B, No. 46).
- \*27 (2) However, in regions of heavy traffic, ship stations should (1117) 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 Article B, No. 46).

#### D. Traffic

- \*28 \$11. (1) Coast stations working in the authorized bands between 405 (1118) and 535 kc/s shall be able to use at least one frequency in addition to 500 kc/s. One of these additional frequencies, which is printed in heavy type in the List of Coast Stations, is the normal working frequency of the station.
- \*29 (2) In addition to their normal working frequency, coast (1119) stations may use, in the authorized bands, additional frequencies which are shown in ordinary type in the List of Coast Stations. The band 405 to 415 kc/s, however, is assigned to radio direction-finding; it may not be used by the mobile service except on the conditions fixed by Chapter II.
- \*30 (3) The working frequencies of coast stations shall be chosen (1120) so as to avoid interference with neighbouring stations.
- \*31 (4) In regions of heavy traffic, coast stations should use (1121) Class Al emissions on their working frequencies.

- \*32 As an exception to the provisions of Nos. 11, 13, 14 and 15 (1122) 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.
- \$12. (1) Ship stations operating in the authorized bands between (1123)
  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.
- \*34 (2) Coast stations are prohibited from transmitting on the (1124) 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.
- \*35 (3) In Regions 1 and 3 the frequency 512 kc/s may be used by (1125) ship stations as a supplementary calling frequency when 500 kc/s is being used for distress.
- \*36 (4) During these periods coast stations may:
- \*37 a) use 512 kc/s as a supplementary frequency for call and reply, or
- \*38 b) make use of other arrangements for call and reply (1128) which shall have been specified in the List of Coast Stations.
- \*39 (5) When 500 kc/s is in use for distress, ship stations shall (1129) not use 512 kc/s as a working frequency in those areas where it is in use as a supplementary calling frequency.

#### SECTION II. BANDS BETWEEN 1605 AND 4000 kc/s

#### A. Provisions applicable in Region 2 only

\*\*40 \$13. The frequencies in the band 2070 to 2080 kc/s are assigned (1138) to ship stations using wide-band telegraphy, facsimile and special transmission systems. The provisions of No. 62 are applicable.

#### B. Provisions applicable in Regions 2 and 3 only

- \*\*41 \$14. The band 2088.5-2093.5 kc/s is the calling band for the (1139) maritime mobile service of radiotelegraphy in those parts of the bands between 1605 and 2850 kc/s in which radiotelegraphy is authorized.
- \*42 815. 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.
- \*43 816. The frequencies assigned to ship stations for radiotele(1137) graphy in the bands between 1605 and 2850 kc/s shall, as far as
  possible, be harmonically related (sub-harmonics) to the frequencies
  assigned to ship stations in the 4000 kc/s radiotelegraph band
  (see Section III).

#### C. Provisions applicable in Region 3 only

- \*\*44 \$17. (1) Frequencies in the band 2088.5-2093.5 kc/s may be used for (1140) calls and replies.
- \*\*45 (2) Each coast station using the calling band 2088.5-2093.5 kc/s (1141) shall, as far as possible, maintain watch on this band during its working hours.
- \*\*46 (3) Coast stations which use frequencies in the band 2088.5-(1142) 2093.5 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.
- \*\*47 (4) One of these frequencies is printed in heavy type in the (1143) 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.
- \*\*48 (5) Working frequencies of coast stations shall be chosen in (1144) such a manner as to avoid interference with other stations.

#### BANDS BETWEEN 4000 AND 27500 kc/s

#### General

*49 (446)	\$18. (1) The bands exclusively allocated to the maritime mobile radiotelegraph service between 4000 and 27500 kc/s (see Article 5) are sub-divided into the following categories:
*50 (451)	a) Ship stations, wideband telegraphy, facsimile, and special transmission systems
	4140 - 4160 kc/s 6211 - 6240 kc/s 8280 - 8320 kc/s 12421 - 12471 kc/s 16562 - 16622 kc/s 22100 - 22148 kc/s
51 (452)	b) Ship stations, telegraphy  4160 - 4231 kc/s  6240 - 6346.5 kc/s  8320 - 8462 kc/s  12471 - 12693 kc/s  16622 - 16924 kc/s  22148 - 22370 kc/s  25070 - 25110 kc/s
52 (453)	c) <u>Coast stations</u> , telegraphy, facsimile and special transmission systems

The frequencies in the band 25070-25110 kc/s shall be used as working 51.1 (452.1) frequencies in addition to frequencies in the band 22148 kc/s.

52 (453) (cont.)		4231 - 4361 kc/s 6346.5- 6514.5 kc/s 8462 - 8731 kc/s 12693 - 13109 kc/s 16924 - 17262 kc/s 22370 - 22620 kc/s
*53 (454)		in the bands listed in No. 51 the following bands are sively for calling:
		4177 - 4187 kc/s
		6265.5- 6280.5 k <b>c</b> /s
		8354 - 8374 kc/s
		12531 - 12561 kc/s
		16708 - 16748 kc/s
		22220 - 22270 kc/s
*54 (979)	on frequencies	hip stations, all apparatus using Class Al emission in the authorized bands between 4000 and 27500 kc/s the following conditions:
55 (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. 95, 99 and 76);
*56 (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;
*57 (982)	c)	in the matter of frequency changing, receiving apparatus shall be capable of a performance equal to that of the transmitting apparatus.

<sup>\*52.1</sup> 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 22370-22620 kc/s.

- \$20. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 73, 94 and 97 shall employ only Class Al emission. However, other classes of emission are not precluded from the bands specified in No. 94 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).
- (2) Mobile stations equipped to operate in the frequency bands (1146) 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.
- \*60 (3) Coast radiotelegraph stations operating in the maritime (1147) mobile exclusive bands between 4000 and 27500 kc/s shall not use Type 2 transmissions.
- 61 (4) Coast radiotelegraph stations employing single channel (1148) Class Al or Fl emissions 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>		Maximum r	mean power
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

- 62 (5) Coast radiotelegraph stations employing multi-channel (1148A) 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 channel.
- 821. (1) Each of the bands reserved for ship radiotelegraph stations, (1149) except for the band 25070-25110 kc/s, shall be divided into five parts, beginning at the low frequency end:
- \*64 a) a band of working frequencies for ship stations (1150) using wideband telegraphy, facsimile and special transmission systems;

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- 65 a band of working frequencies for ship stations using narrow-band direct-printing telegraph systems; (1150A) **\*6**6 a band of working frequencies for the use of high c) (1151)traffic ship stations; \*67 a band of calling frequencies for the use of all ship stations entering into communication with stations of (1152)the maritime mobile service; \*68 e ) a band of working frequencies for the use of low (1153)traffic ship stations. \*69 The band 25070-25110 kc/s, allocated to ship radiotelegraph (1154)stations, consists solely of working frequencies which may be assigned to ships of all kinds. 70 \$22. (1) Stations installed on ships handling a large volume of traffic shall use the high traffic band at the discretion of the (1156)
- \*71 (2) Stations installed on ships other than those mentioned in (1157) No. 70 shall use the low traffic band (see No. 68).

Administration controlling the ship station concerned (see No. 66).

72 (3) The arrangement of the frequencies in the ship radiotele-(1158) graph bands is illustrated graphically in Appendix 15.

#### B. Assignment of frequencies to ship stations

#### 1. Calling frequencies of ship stations

- \*73 §23. (1) The calling frequencies assigned to ship stations are (1174) included in No. 53.
- 74 (2) In the band 4177 to 4187 kc/s, the calling frequencies (1175) 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.
- 75 (3) In each of the other maritime mobile service bands between (1176) 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 2.5 kc/s.

\*76 (1177) 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. In the bands between 4000 and 18000 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 as outlined in No. 74. The same system of uniform distribution shall be applied in the assignment of calling frequencies in the band 22220 to 22270 kc/s.

\*77 \$24. (1) The centre calling frequency in each of the calling bands (1178) indicated in No. 73 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:

4182; 6273; 8364; 12546; 16728 and 22245 kc/s.

\*78 (1179) (2) The frequency 8364 kc/s, however, shall not be assigned to or used by ship stations except to establish communications relating to the safety of life. It is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands between 4000 and 27500 kc/s, and if they desire to establish with stations of the maritime and aeronautical mobile services communications relating to search and rescue operations.

#### 2. Working frequencies of ship stations

#### a) Channel spacing and assignment of frequencies

79 \$25. In all bands the working frequencies for ship stations (1180) 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.

### Insert new:

80

826. 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.

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- 81 \$27. (1) The working frequencies for high traffic ships in the band (1181) 4170 to 4177 kc/s are so spaced as to provide channels 0.5 kc/s wide, the extreme frequencies assignable being 4171 and 4176.5 kc/s as shown in Appendix 15.
- 82 (2) In the band 4187 to 4231 kc/s, the working frequencies of (1182) 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.
- 83 §28. The working frequencies assigned to each ship station in (1183) 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. 79 and 80.
- 84 §29. In case of the 22 Mc/s band, which is not in harmonic (1184) relationship with the other bands, the frequencies are spaced as follows, as shown in Appendix 15.
- a) in the high traffic band, the working frequencies are (1185) spaced 2.5 kc/s apart, the extreme frequencies assignable being 22172.5 and 22220 kc/s;
- 86 b) in the low traffic band, the working frequencies are (1186) spaced 2.5 kc/s apart, the extreme frequencies assignable being 22272.5 and 22365 kc/s.
- 87 830. In the 25 Mc/s band, the frequencies are spaced 2.5 kc/s (1187) apart, the extreme frequencies assignable being 25075 and 25105 kc/s, as shown in Appendix 15.

# b) Working frequencies for ship stations using wide-band telegraphy, facsimile and special transmission systems

- 88 S31. The working frequencies assigned to ship stations using (1188) wide-band telegraphy, facsimile and special transmission systems are included within the bands specified in No. 50.
- 89 \$32.(1) Each administration shall assign to each ship station (1189) 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.

- \*90 (2) When ship stations employing wide-band telegraphy,
  (1190) 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.
- (3) However, within the limits of the bands given in No. 50 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.

# c) Working frequencies for ship stations using narrow-band teleprinter services

92 §33. The working frequencies assigned to ships for narrow-band direct-printing telegraph systems are included within the following band limits:

4160 - 4170 kc/s

6240 - 6250 kc/s

8320 - 8330 kc/s

12471 - 12491 kc/s

16622 - 16642 kc/s

22148 - 22168 kc/s

93 \$34. Assignments shall be made in accordance with the channel spacing given in Appendix 15.

### d) Working frequencies for high traffic ships

94 \$35. The working frequencies assigned to high traffic ships are (1192) included within the following band limits:

4170 - 4177 kc/s

6250 - 6265.5 kc/s

8330 - 8354 kc/s

12491 - 12531 kc/s

16642 - 16708 kc/s

22168 - 22220 kc/s

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- 95 §36. (1) Each administration shall assign to each high traffic (1193) 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.
- \*96 (2) When high traffic ships are assigned less than the total (1194) 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 which will ensure approximately the same number of assignments on any one frequency.

#### e) Working frequencies for low traffic ships

97 §37. Working frequencies assigned to low traffic ships shall be (1196) included within the following band limits:

4187 - 4231 kc/s

6280.5 - 6346.5 kc/s

8374 - 8462 kc/s

12561 - 12693 kc/s

16748 - 16924 kc/s

22270 - 22370 kc/s

- 98 §38. (1) In each of the low traffic bands, the assignable (1197) 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).
- \*99 (2) Each administration shall assign to each of its low traffic (1198) 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 by half the width of the assignable band.
- \*100 (3) For example, if the frequency assigned to a ship station is the lowest frequency assignable in Group A, the other must 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 must be the second frequency from the low frequency end of Group B, etc.

- \*101 (4) Each administration shall assign successively one such (1200) pair of frequencies to each of its ship stations commencing at either end of the band. When all available working frequencies in a band have been assigned in this manner, the process shall be repeated as often as is necessary to satisfy all its requirements and to ensure a uniform distribution of assignments throughout the band.
- \*102 (5) Administrations shall try to ensure that Group A and Group B (1201) frequencies are equally used for traffic, and to this end should arrange for half their ship stations to operate generally on Group A frequencies, and for the other half to operate generally on Group B frequencies.

### f) Working frequencies available for use by all ships

\*103 \$39. The working frequencies in the band 25070 to 25110 kc/s may (1202) be assigned to ships of all kinds. For operational purposes, they shall be considered as frequencies additional to the working frequencies in the 22 Mc/s band.

#### C. Watch

\*104 \$40. When notifying the transmitting frequencies of a coast (1168) station, administrations shall indicate on which of the ship calling bands the station keeps watch and, as far as possible, the approximate hours of watchkeeping in Greenwich Mean Time (G.M.T.). This information shall be published in the List of Coast Stations.

#### D. Cald and Reply

- \*\*105 §41. (1) In order to establish communication with a station in the (1160) maritime mobile service, each ship station shall use a calling frequency in the bands listed in No. 32A-71.
- \*106 (2) Frequencies in the calling bands are assigned to each (1161) mobile station in accordance with the provisions of Nos. 74 to 78 inclusive.
- \*\*107 \$42. In order to reduce interference, ship stations shall, (1162) within the means at their disposal, endeavour to select for calling the band with the most favourable propagational characteristics for effecting reliable communication. In the absence of more precise data, a ship station shall, before making a call, listen for the signals of the station with which it desires to communicate. The strength

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1 ago		

and intelligibility of such signals are useful as a guide to propagational conditions and indicate which is the preferable band for calling.

- \*\*108 §43. (1) The calling frequency to be used by a coast station, in (1163) each of the bands for which it is equipped, is the frequency shown in heavy type in the List of Coast Stations (see No. 52).
  - \*109 (2) So far as is practicable, a coast station shall transmit (1164) its calls at specified times in the form of traffic lists on the frequency or frequencies indicated in the List of Coast Stations (see Article B, Nos. 28 and 29).
- \*110 §44. Unless the calling station specifies otherwise, the (1165) frequency for reply to a call made in any maritime mobile band is as follows:
- \*\*111 a) for a ship station, its assigned calling frequency (1166) in the same band as that used by the calling station;
  - 112 b) for a coast station, its normal working frequency in (1167) the same band as that used by the calling station, this frequency being indicated in the List of Coast Stations.

#### Reasons: Transferred from No. 1167, and modified to include No. 1026.

- \*113 §45. In the bands between 4000 and 27500 kc/s the following (1203) system of abbreviations may be used:
- \*114 a) to designate a working frequency, the last three (1204) figures of the frequency excluding fractions of a kilocycle per second may be transmitted;
- \*115 b) when the calling station does not know the working frequencies of a low traffic ship station, it may request the ship station to reply on its working frequency in Group A or on its working frequency in Group B by transmitting QSW A or QSW B as the case may be;
- \*116 c) in case of poor receiving conditions on the working (1206) frequency, stated by the low traffic ship according to No. 115 the coast station may request the ship to change to transmissions on its supplementary working frequency band. This request is made by the transmission of QSY B or QSY A as the case may be.

#### E. Traffic

- \*117 \$46 (1) A mobile station, after establishing communication on a (1169) calling frequency (see No. 105) shall change to a working frequency for the transmission of traffic. The use of frequencies in the calling bands for any purpose other than calling, shall be prohibited.
- \*118 (2) Working frequencies shall be assigned to mobile stations in (1170) accordance with the provisions of Nos. 79 to 101 inclusive.
- \*119 §47. (1) A coast station shall transmit its traffic on its normal (1171) working frequency or on other working frequencies assigned to it.
- \*120 (2) Countries which share a channel in one of the exclusive (1172) maritime mobile bands between 4000 and 27500 kc/s should give special consideration to the countries among them which have no other channel in the same band and should endeavour to use their primary channel to the greatest extent possible, in order to permit the latter countries to satisfy their minimum communication requirements.

#### Article D

#### Selective calling in the maritime mobile service

1 §1. The characteristics of the international selective calling (999B) system shall be in accordance with the Recommendations of the C.C.I.R.

#### Method of calling

(999C)

- 2 §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.
- 3 (2) When a station called does not reply, the call may be repeated (999D) after an interval of not less than fifteen minutes and shall not be renewed until after an interval of 1 hour.

#### Reply to calls

4 §3. The reply to calls should be made in accordance with: (999E)

Nos. 1022-1026 when using radiotelegraphy

Nos. 1241-1253 when using radiotelephony

#### Frequencies and classes of emission to be used

5 \$4. Calls shall be radiated on one or more of the following (999F) frequencies as appropriate:

Frequency		Class of emission
500	kc/s	A2H
2182	kc/s	A2H
*2170.5	5 kc/s	A2H

<sup>\*</sup> when brought into use

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Frequency	Class of emission
4361.7 kc/s ) 8732.4 kc/s ) 13 109.2 kc/s ) 17 262.2 kc/s ) 22 622.3 kc/s )	А2Н
156.8 Mc/s	F2
any working frequency ) listed for this purpose ) in the List of Coast ) Stations )	A2H (MF and HF) F2 (VHF)

#### Article 33

#### General Radiotelephone Procedure in the maritime mobile service

#### SECTION I. GENERAL

- 1209 S1. 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 Deleted)
- 1211 \$2. (1) The service of ship radiotelephone stations shall be performed by an operator satisfying the conditions specified in Article 23.
- 1212 (2) For the call signs or other means of identification for coast or ship radiotelephone stations see Article 19.
- 1213 §3. The radiotelephone public correspondence service provided on ships should, if possible, be operated on a duplex basis.
- 1214 §4. (1) Automatic calling and identification devices, and devices providing for the emission of a signal to indicate that a channel is in use, may be used in this service on a non-interference basis to the service provided by coast stations.
- (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.
- 1216 §5. Stations of the maritime mobile service equipped for radiotelephony may transmit and receive radiotelegrams by means of radiotelephony.
- 1216A §5.(bis) To facilitate radiocommunications the service abbreviations given in Appendix 13 may be used.

- 1216B \$5.(ter) 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.
- \*\*1216C \$5.(quater) Mobile stations shall not radiate a carrier wave between (1312) calls.
- \*\*1216D §5.(quinquies) (1) The land station may ask the mobile station to (1314) furnish it with the following information:
  - \*1216E a) position, and whenever possible, course and speed; (1315)
- \*1216F b) next port of call. (1316)
- \*\*1216G (2) The information referred to in Nos. 1216D to 1216F should (1317) be furnished by ship 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 ship station.

#### SECTION II. CONTROL OF OPERATIONS

- \$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:
- a) the ship station whose emission causes interference to the correspondence of a ship station with a coast station shall cease sending at the first request of the coast station;

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1220

b) the ship station whose emission causes interference to communications already in progress between ship stations, shall cease sending at the first request of the other stations;

1221

- the station which requests this cessation shall indicate the approximate waiting time imposed on the station whose emission it suspends.
- \$6.(bis) To facilitate the reception of distress calls, all trans-\*1221A missions on 2182 kc/s shall be kept to a minimum. (1331)
- 1221B 56.(ter) (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 (1290)cases of distress, urgency or safety to which the provisions of Article 36 apply.
- \*\*1221C
  - (2) In communications between coast stations and ship stations, the ship station shall comply with the instructions given (1291)by the coast 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.
- \*\*1221D (1292)
- (3) In communications between ship stations, the station called controls the working in the manner indicated in No. 1221C. However, if a coast station finds it necessary to intervene, these stations shall comply with the instructions given by the coast station.

#### CALLING PROCEDURE SECTION III.

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.

- (2) When contact is established, the call sign or other identification may thereafter be transmitted once only.
- 1224 (3) When selective calling is used the provisions of Article D shall be observed.
- \*\*1224A §7.(bis) (1) As a general rule, it rests with the ship station to (1298) establish communication with the coast station. For this purpose the ship station may call the coast station, only when it comes within the service area of the latter, that is to say, that area within which, by using an appropriate frequency, the ship station can be heard by the coast station.
- \*\*1224B (2) However, a coast station having traffic for a ship (1299) station may call this station if it has reason to believe that the ship station is keeping watch and is within the service area of the coast station.
- \*\*1224C §7.(ter) (1) In addition, each coast station shall, so far as (1300) practicable, transmit its calls in the form of "traffic lists" consisting of the call signs or other identification in alphabetical order of all ship stations for which it has traffic on hand. These calls shall be made at specified times fixed by agreement between the administrations concerned and at intervals of at least two hours and not more than four hours during the working hours of the coast station.
- \*1224D (2) Coast stations shall transmit their traffic lists on (1301) their normal working frequencies in the appropriate bands.
- \*\*1224E (3) They may, however, announce this transmission by the (1302) following brief preamble sent on a calling frequency:
  - "Hullo 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.

- \*1224F (4) The provisions of No. 1224E are obligatory when (1303) 2182 kc/s or 156.80 Mc/s is used.
- \*1224G (5) The hours at which coast stations transmit their (1304) traffic lists and the frequencies and classes of emission which they use for this purpose shall be stated in the List of Coast Stations.
- \*\*1224H (6) Ship stations should as far as possible listen to the (1305) traffic lists transmitted by coast stations. On hearing their call sign or other identification in such a list they must reply as soon as they can do so.
- \*\*1224I (7) When the traffic cannot be sent immediately, the coast (1306) station shall inform each ship station concerned of the probable time at which working can begin, and also, if necessary, the frequency and class of emission which will be used.
- \*\*1224J §7.(quater) When a coast station receives calls from several ship (1307) stations at practically the same time, it decides the order in which these stations may transmit their traffic. Its decision shall be based on the priority (see No. 1496) of the radiotelegrams or radiotelephone calls that ship stations have on hand and on the need for allowing each calling station to clear the greatest possible number of communications.
  - 1224K §7. (quinquies) (1) When a station called does not reply the call may (1308) be repeated at three minute intervals.
- \*\*1224L (2) Before renewing the call, the calling station shall (1310 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.
  - 1225 to Transferred to Article 35, Nos. 1335G to 1335 Q. 1235
  - 1236
    and Transferred to Article 35, Nos. 1351H and 1351I.
    1237

The preliminary operations of the establishment of radiotelephone communications may also be carried out by radiotelegraphy using the procedure appropriate to radiotelegraphy (see Article B, Nos. 21 and 22).

1239 and 1240

Transferred to Article 35, Nos. 1368A and 1368B.

#### SECTION III A. REPLY TO CALLS

- 1241 \$11. The reply to calls consists of:
  - the call sign or another 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.
- 1241A \$11.(bis) (1) If the station called is unable to accept traffic (1266) 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.
- 1241B (2) When a station receives a call without being certain (1267) that such a call is intended for it, it shall not reply until the call has been repeated and understood.
- 1241C (3) When a station receives a call which is intended for it, (1268) but is uncertain of the identification of the calling station, it shall reply immediately, asking for a repetition of the call sign or other identification of the calling station.

#### Insert:

#### SECTION IV. TRAFFIC

- 1241D § (1) Every station of the maritime mobile service should transmit (1269) its traffic (radiotelephone calls or radiotelegrams) on one of its working frequencies in the band in which the call has been made.
- 1241E (2) In addition to its normal working frequency, printed in (1270) heavy type in the List of Coast Stations, a coast station may use one or more supplementary frequencies in the same band.
- 1241F (3) The use of frequencies reserved for calling shall be (1271) forbidden for traffic except distress traffic.

#### Insert:

- 12416 (1) If the station called is in agreement with the calling (1259) station it shall transmit:
- a) an indication that from that moment onwards it will listen on the working frequency or channel announced by the calling station;
- b) an indication that it is ready to receive the traffic of (1261) the calling station.
- 1241J (2) If the station called is not in agreement with the calling (1262) station on the working frequency or channel to be used, it shall transmit an indication of the working frequency or channel proposed.
- 1241K (3) For communications between a coast station and a ship station (1263) the coast station shall finally decide the frequency or channel to be used.
- 1241L (4) When agreement is reached regarding the working frequency or (1264) channel which the calling station shall use for its traffic, the station called shall indicate that it is ready to receive the traffic.
- 1241M \$11.(ter) When the calling station wishes to exchange more than one (1265) radiotelephone call, or to transmit more than one radiotelegram, it should indicate this when contact is established with the station called.

1241N (1 <b>27</b> 2)	Sll.(quater) (1) After contact has been established on the frequency to be used for traffic (see No Article 35), the transmission of a radiotelegram or radiotelephone call shall be preceded by:
1241/0 (1273)	<ul> <li>the call sign or other identification of the station called;</li> </ul>
•	- the words 'THIS IS';
	- the call sign or other identification of the calling station.
1241P (1274)	(2) The call sign or other identification need not be sent more than once.
1242 to 1248 and 1248A	Transferred to Article 35, Nos. 1335R to 1335X and 1335Y.
1249 and 1250	Transferred to Article 35, Nos. 1351J and 1351K.
1251 to 1253	Transferred to Article 35, Nos. 1358B to 1358D.
1254	Transferred to Article 35, No. 1335Z.
1255	Transferred to Article 35, No. 1351L.
1256 to 1258	Transferred to Article 35, Nos. 1368E to 1368G.
1259 to 1265	Transferred to Nos. 1241G to 1241M.
1266 to 1268	Transferred to Nos. 1241A to 1241C.

1269 Transferred to Nos. 1241D to 1241F. to 1271 1272 Transferred to Nos. 1241N to 1241P. to 1274 A. Establishment of radiotelephone calls 1275 §22. (1) In setting up a radiotelephone call, the coast station should establish connection with the telephone network as quickly as possible. In the meantime the mobile station shall maintain watch on the appropriate working frequency as indicated by the coast station. 1276 (2) However, if the connexion cannot be quickly established, the coast station shall inform the mobile station accordingly. The latter station shall then either: 1277 a) maintain watch on the appropriate frequency until an effective circuit can be established; or 1278 b) contact the coast station later at a mutually agreed time. (3) When a radiotelephone call has been completed, the procedure 1279 indicated in No. 1289 shall be applied unless further calls are on hand at either station. 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.
- (2) As a general rule radiotelegrams of all kinds transmitted by ship stations, and radiotelegrams in the public correspondence service transmitted by aircraft stations shall be numbered in a daily series; number 1 shall be given to the first radiotelegram sent each day to each separate station.
- 1282 (3) A series of numbers which has begun in radiotelegraphy should be continued in radiotelephony and vice versa.
- 1283 (4) Each radiotelegram should be transmitted once only by the sending station. However, it may, when necessary, be repeated in full or in part by the receiving or the sending station.
- (1284 Deleted)
- 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".
- 1286 (7) Numbers written in letters shall be spoken as they are written, their transmission being preceded by the words "in letters".

#### SECTION IVA. END OF TRAFFIC AND WORK

#### Acknowledgement of receipt

1287 §24. (1) The acknowledgement of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner:

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- 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 acknowledgement has been received.
- \*\*1288A \$24.(bis) When the name and address of the administration or private operating agency controlling a ship station are not given in the appropriate list of stations or are no longer in agreement with the particulars given therein, it is the duty of the ship station to furnish as a matter of regular procedure, to the coast station to which it transmits traffic, all the necessary information in this respect.
  - 1289 §24(ter) The end of work between two stations shall be indicated by each of them by means of the word "Out".

(1290 to Transferred to Nos. 1221B to 1221D.) 1292)

#### SECTION V. TESTS

- \$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 2182 kc/s, 156.80 Mc/s and in the Tropical Zone of Region 3 on 6204 kc/s.

#### Article 35

#### Use of frequencies for radiotelephony in the maritime mobile service

#### SECTION I. GENERAL

- 1319 \$1. The provisions of this Article are applicable to radiotelephone stations of the maritime mobile service.
- (1320 Deleted)
- (1321 Transferred to Article 28, No. 993A)
- 1322 §2. The frequencies of transmission (and reception when these frequencies are in pairs as in the case of duplex radiotelepheny) assigned to each coast station shall be indicated in the List of Coast Stations. This list shall also indicate any other useful information concerning the service performed by each coast station.

#### SECTION II. BANDS BETWEEN 1605 AND 4000 kc/s

#### A. General

- \$2.(bis) 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.
- 1322B §2.(ter) (1) All ship stations equipped with radiotelephony apparatus (983) operating in the double sideband mode to work in the authorized bands between 1605 and 2850 kc/s shall be able to:

# <u>Insert:</u> \* 1322C (984)

a) send and receive Class A3 emissions on 2182 kc/s;

* 1,522D (985)	b)	working frequencies; 1
* 1322E (98 <b>6</b> )	<b>c)</b> ,	receive, in addition, Class A3 emissions on all other frequencies necessary for their service.
** 1322F (987)		The provisions of Nos. 1322L and 1322M do not apply provided solely for distress, urgency and safety purposes.
1322G (987A)	apparatus ope	All ship stations equipped with radiotelephony rating in the single sideband mode to work in the nds between 1605 and 2850 kc/s shall be able to:
1322H <b>(</b> 987В <b>)</b>	a)	send and receive Class A3H emissions on 2182 kc/s;
1322I <b>(9</b> 870)	b)	send, in addition, Class A3H, A3A and A3J emissions on at least two working frequencies; <sup>2</sup>
1 <b>322</b> J (987D)	c)	receive, in addition, class A3H, A3A and A3J emissions on all other frequencies necessary for their service;
1322K	(4)	The provisions of Nos. 1322I and 1322J do not apply

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#### SECTION II. BANDS BETWEEN 1605 AND 4000 kc/s

(987E) to apparatus provided solely for distress, urgency and safety purposes.

#### A. Distress

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 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.

<sup>\* 1322</sup>D.1 In certain areas, administrations may reduce this requirement to (985.1) one working frequency.

<sup>1322</sup>I.1 <sup>2</sup>In certain areas, administrations may reduce this requirement to one working frequency.

- 1324 (2) However, ship and aircraft stations which cannot transmit on 2182 kc/s should use any other available frequency on which attention might be attracted.
- 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.
- 1326 (4) Any coast station using 2182 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).
- (1327 1330 Transferred to Nos. 1335C to 1335F.)
- (1331 Transferred to Article 33, No. 1221A.)

#### B. Watch

- 1332 §6. (1) All coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes, shall, during their hours of service, maintain a watch on 2182 kc/s.
- 1333 (2) These stations shall maintain this watch by means of an operator using some aural method such as headphones, split headphones or loudspeaker.
- 1334 (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.
- 1335 \$7. Ship stations open to public correspondence should, as far as possible during their hours of service, keep watch on 2182 kc/s.

Additional provisions applying to Regions 1 and 3.

1335A \$7.(bis) (1) In order to increase the safety of life at sea and over (1349) the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 1605 and 2850 kc/s shall, during their hours of service, and as far as possible,

1335A take steps to keep watch on the international distress frequency (1349) 2182 kc/s for three minutes twice each hour beginning at x h.00 and (cont.) x h.30 Greenwich Mean Time  $(G.M.T.)^{1}$ .

1335B (2) During the periods mentioned above, except for the (1350) transmissions provided for in Article 36, transmissions shall cease within the band 2173.5 and 2190.5 kc/s.

#### C. Frequency to be used for call

1335C \$7.(ter) (1) The frequency 2182 kc/s may also be used: (1327)

1335D a) For call and reply in accordance with the provisions (1328) of Nos. 1335G to 1335Q.

b) By coast stations to announce the transmission, on another frequency, of traffic lists (see Nos. 1224D to 1224G).

1335F (2) In addition, an administration may assign to its (1330) stations other frequencies for call and reply.

#### Insert:

- \* 1335G \$7.(quater) (1) A radiotelephone ship station calling a coast (1225) station of its own nationality should use for the call:
- \* 1335H a) the frequency 2182 kc/s; (1226)
- \* 1335I b) a working frequency, whenever and wherever traffic density is high.
- \* 1335J (2) A radiotelephone ship station calling a coast (1228) station of another nationality should, as a general rule, use the frequency 2182 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.
- \* 1335K (3) A radiotelephone ship station calling another ship (1229) station should use for the call:

<sup>1335</sup>A.1 In Region 3, this Regulation does not apply to Japan and the (1349.1) Philippines.

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- \* 1335L a) the frequency 2182 kc/s; (1230)
- \* 1335M b) an inter-ship frequency, whenever and wherever traffic (1231) density is high and prior arrangements can be made.
- \* 1335N (4) An aircraft station calling a coast station or a (1232) ship station may use the frequency 2182 kc/s.
- \* 1335/0 (5) Coast stations shall, in accordance with the (1233) 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 2182 kc/s.
- \* 1335P (6) However, a ship station which keeps watch (1234) simultaneously on 2182 kc/s and a working frequency should be called on the working frequency.
- \* 1335Q (7) As a general rule, coast stations should call radio—(1235) telephone ship stations of another nationality on the frequency 2182 kc/s.

#### D. Frequency to be used for reply

- \* 1335R \$7.(quinquies) (1) When a ship station is called on 2182 kc/s it (1242) should reply on the same frequency unless another frequency is indicated by the calling station.
- \* 1335S (2) When a ship station is called on a working (1243) 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.
- \* 1335T (3) A ship station, after calling a coast station or (1244) 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.
- \* 1335U (4) A ship station which frequently exchanges traffic (1245) 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.

- \* 1335V (5) As a general rule a coast station shall reply: (1246)
- \* 1335W a) on 2182 kc/s to calls made on 2182 kc/s unless another (1247) frequency is indicated by the calling station;
- \* 1335X b) on a working frequency to calls made on a working frequency.
  - c) on a working frequency to calls made on the frequency (1248A)
    2192.35 kc/s (carrier frequency 2191 kc/s). (See
    No. 1339A.)

#### E. Frequency to be used for traffic

#### Insert:

- \*\* 1335Z \$7.(Sexies) If contact is established on the frequency 2182 kc/s, (1254) coast and ship stations shall transfer to one of their normal working frequencies for the exchange of traffic.
  - 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.
  - (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 and A3H emissions on 2182 kc/s.
  - 1338 (3) One of the frequencies which coast stations are required to be able to use (see No. 1336) is printed in heavy type in the List of Coast Stations to indicate that it is the normal working frequency of the stations. Supplementary frequencies, if assigned, are shown in ordinary type.
  - 1339 (4) Working frequencies of coast stations shall be chosen in such a manner as to avoid interference with other stations.
  - 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.

#### F. 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 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.
- 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 32N
    ( 8 Kilowatts (Pp) for Class A3A and
    ( A3J emissions

     coast stations
    located south of
    latitude 32N
    ( 14 Kilowatts (Pp) for Class A3A and
    ( A3J emissions;
    latitude 32N
    ( A3J emissions
- 1343 \$10. (1) All stations on ships making international voyages should be able to use:
- a) the ship-shore working frequency 2049 kc/s, if required by their service;
- 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;
- ab) the ship-shore working frequency 2192.35 kc/s (carrier frequency 2191 kc/s) / see No. 1339A /;
- b) the intership frequency 2056 kc/s, if required by their service. This frequency may be used as an additional ship-shore frequency.

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.
- (2) These frequencies shall not be used for working between 1346 stations of the same nationality.
- 1347 \$11. (1) Additionally, when a ship station of one country wishes to communicate with a coast station in another country, the ship station may use one of its own assigned ship-to-shore frequencies, by agreement with the coast station, even if the use of such frequency is not provided for in the area where the ship is located.
- 1348 (2) Ships frequently exchanging correspondence with a coast station of a nationality other than their own may use the same frequencies as ships of the nationality of the coast station where mutually agreed by the administrations concerned.

(1349 and

1350

Transferred to Nos. 1335A and 1335B)

#### G. Additional provisions applying to Regions 2 and 3

- \$13. (1) All stations on ships making international voyages should be 1351 able to use the intership frequency 2638 kc/s, if required by their service.
- \*\* 1351A (2) The frequency 2638 ke/s is used as an intership radiotelephony working frequency in addition to the specific frequencies (445) prescribed for common use in certain services. In Region 3, this frequency is protected by a guard-band between 2634 and 2642 kc/s.

#### SECTION III. BANDS BETWEEN 4000 and 23 000 kc/s

#### A. General

\$13.(bis) (1) Unless otherwise specified in these regulations, the (1351A) 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 should be indicated in the List of Coast Stations.

\*\* 1351C \$13.(ter) (1) The bands exclusively allocated to the maritime mobile (446) radiotelephone service between 4000 and 23 000 kc/s (see Article 5) are sub-divided into the following categories:

1351D (447) a) Ship stations, telephony

4063 - 4140 kc/s 6200 - 6211 "

8195 - 8280 "

12 330 - 12 421 "

16 160 16 560

16 460 - 16 562

22 000 - 22 100 '

1351E (448) b) Coast stations, telephony

4361 - 4438 kc/s

6514.5 - 6525 8731 - 8815

13 109 - 13 200 '

17 262 - 17 360 "

22 620 - 22 720 "

\* 1351F \$13.(ter) (1) Appendix 17 shows the two-way radiotelephone channels (456) of the maritime mobile service in the frequency bands listed in Nos. 1351D and 1351E.

(1352 Deleted)

(1353 Transferred to No. 1358A)

#### B. Watch

1351G \$13.(quater) The hours of service of coast stations open to public (1353A) correspondence, and the frequency or frequencies on which watch is maintained shall be indicated in the List of Coast Stations.

#### C. Frequencies to be used for call

Insert:

\*\* 1351H \$13.(quinquies) (1) A ship station calling a coast station by radio—(1236) telephony should use the working frequency associated with that of the coast station in accordance with Appendix 17. (See No. 1351I.)

\* 1351I (2) A coast station calling a ship station by radiotelephony (1237) shall use one of its working frequencies specified in the List of Coast Stations.

#### D. Frequency to be used for reply

#### Insert:

1351J \$13. (Sexies) (1) When a ship station is called by a coast station, (1249) it should reply on the working frequency associated with that of the coast station in accordance with Appendix 17.

#### Insert:

\*\* 1351K (2) When a coast station is called by a ship station, (1250) the coast station should reply on the working frequency associated with that of the ship station in accordance with Appendix 17.

#### E. Frequency to be used for traffic

1351L \$13.(Septies) After a ship station has established contact with a (1255) coast station, or another ship station, traffic shall be exchanged on their respective working frequencies.

(1352 Deleted)

(1353 Transferred to No. 1358A)

(1354 Deleted)

#### F. 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

and

1357 Deleted)

(2) Equipment intended for use on radiotelephony in these bands should conform to the Recommendations of the C.C.I.R. and other technical standards in Appendix 17A.

#### G. Call, reply and safety in Region 3

- 1358A \$17.(bis) (1) In that part of the Tropical Zone situated in Region 3, (1353) 6204 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.
- \*\* 1358B (2) When a station is called on 6204 kc/s, it should reply (1251) on the same frequency.

#### SECTION IV. BANDS BETWEEN 156 AND 174 Mc/s

- \* 1358c \$17.(ter) All ship stations equipped with radiotelephony to work in (988) 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:
- \* 1358D a) the calling and safety frequency 156.80 Mc/s; (989)
- \* 1358E b) the primary intership frequency 156.30 Mc/s; and (990)
- \* 1358F c) all the frequencies necessary for their service. (991)

#### A. Call and safety

- 1359 \$18. (1) The frequency 156.80 Mc/s is designated for world-wide use by the international maritime mobile radiotelephone service in the band 156 to 174 Mc/s for call, reply and safety purposes. It may also be used for messages preceded by the urgency and safety signals and, if necessary, for distress messages.
- 1360 (2) This frequency may also be used by coast stations to announce the transmission on another frequency of their traffic lists and important maritime information.
- (1361 and 1362 Deleted)
- (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.

#### B. Watch

- \$19. (1) A coast station providing an international maritime mobile service of radiotelephony in the band 156 to 174 Mc/s should, during working hours in that band, maintain, as far as possible, an efficient aural watch on 156.80 Mc/s.
- (2) In addition to the watch referred to in No. 1364, a coast station open to the international public correspondence service should, during its hours of service, maintain watch on its receiving frequency or frequencies indicated in the List of Coast Stations for receiving calls from mobile stations.
- 1366 (3) The method of watch on a working frequency shall be no less efficient than watch by an operator.
- (4) Ship stations should, where practicable, maintain watch on 156.80 Mc/s when within the service area of a coast station providing international maritime mobile radiotelephone service in the band 156 174 Mc/s.
- 1367A 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.
- \$20. A coast station in the port operations service in an area where 156.80 Mc/s is being used for distress, urgency or safety, shall, during its working hours, keep an additional watch on 156.60 Mc/s or other port operations frequency indicated in heavy type in the List of Coast Stations.

#### C. Alternative frequency for call

- 1368A §20.(bis) (1) In the bands between 156 and 174 Mc/s used for the (1239) 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 the channels designated in Appendix 18. Such use shall be listed in the List of Coast Stations.
- \* 1368B (2) When 156.80 Mc/s is being used for distress, urgency (1240) 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.

#### D. Frequency to be used for reply

- \* 1368C \$20.(ter) (1) When a station is called on 156.80 Mc/s it should (1252) reply on the same frequency.
- \* 1368D (2) When a coast station open to public correspondence (1253) 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.
- \* 1368E \$20.(quater) (1) Whenever contact has been established between a (1256) 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. 1368A) 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. (See Appendix 18.)
- \* 1368F (2) When contact on 156.80 Mc/s has been established (1257) 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.
- \* 1368G (3) A ship station, when it has established contact with (1258) 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.

#### E. Traffic

- 1369 §21. (1) Where practicable, coast stations open to the international public correspondence service shall be capable of working with ship stations equipped for duplex or semi-duplex operation.
- 1370 (2) The method of working (single-frequency or two-frequency) specified in Appendix 18 for each channel should be used in the international services.

- 1371 §22. Communications in the port operations service shall be restricted to those relating to the movement and the safety of ships and, in emergency, to the safety of persons.
- 1372 §23. (1) Coast stations which use 156.80 Mc/s for calling shall be able to use at least one other authorized channel in the international maritime mobile radiotelephone service in the band 156 to 174 Mc/s.
- (2) In the band 156 to 174 Mc/s, administrations shall, where practicable, assign frequencies to coast and ship stations in accordance with the Table of Transmitting Frequencies given in Appendix 18 for such international services as administrations consider necessary.
- 1374 (3) In assigning frequencies to their coast stations, administrations should collaborate in cases where harmful interference might occur.
- 1375 (4) Channels are designated by numbers in the Table of Transmitting Frequencies given in Appendix 18.
- 1376 §24. (1) In assigning frequencies to stations of authorized services, other than maritime mobile, administrations shall avoid the possibility of interference to international maritime services in the bands between 156 and 174 Mc/s.
- (2) The use of channels for maritime mobile purposes other than those indicated in the Table of Transmitting Frequencies given in Appendix 18 shall not cause harmful interference to services which operate in accordance with that Table and shall not prejudice the future development of such services.
- 1378 §25. (1) In Region 1, the carrier power of ship station transmitters should not exceed 20 watts.
- 1379 (2) In Regions 2 and 3, the carrier power of ship station transmitters up to 50 watts may be allowed.

1576 to No change. 1595

#### SECTION IIIA. MARITIME RADIOBEACONS

- \*1595A \$13.(bis) (1) The protection ratio required for maritime radiobeacons (458) operating in the bands between 285 and 325 kc/s is based on the radiated power being kept to the value necessary to give the desired field strength at the service range.
- \*1595B (2) The daylight service range of the radiobeacons referred (459) to in No. 1595A shall be based on the following field strengths:
- \*1595C (3) Region 1 (460)
  - 50 microvolts per metre for radiobeacons north of 43°N.
  - 75 microvolts per metre for radiobeacons between 43°N and 30°N.
  - 100 microvolts per metre for radiobeacons between 30°N and 30°S.
  - 75 microvolts per metre for radiobeacons between 30°S and 43°S.
  - 50 microvolts per metre for radiobeacons south of 43°S.
- \*1595D (4) Region 2 (461)
  - 50 microvolts per metre for radiobeacons north of 40°N.
  - 75 microvolts per metre for radiobeacons between 40°N and 31°N.
  - 100 microvolts per metre for radiobeacons between 31°N and 30°S.
  - 75 microvolts per metre for radiobeacons between 30°S and 43°S.
  - 50 microvolts per metre for radiobeacons south of 43°S.

\*1595E (462)

- (5) Region 3
  - 75 microvolts per metre for radiobeacons north of 40°N.
  - 100 microvolts per metre for radiobeacons between 40°N and 50°S.
  - 75 microvolts per metre for radiobeacons south of 50°S.
- \*1595F (6) In Region 1, for maritime radiobeacons in these bands the (463) assignment of frequencies is based on a separation of 2.3 kc/s between adjacent frequencies used for Class A2 emissions.
- \*1595G (7) In Region 1, for maritime radiobeacons, the depth of (464) modulation should be at least 70%.

#### SECTIONS I, II and III. NO CHANGE

#### SECTION IV. MARITIME MOBILE SERVICE

(438 and 439	Deleted)
(440 and 441	Transferred to new Article C, Nos. 9 and 10)
(442	Transferred to new Article A, No. 1)
(445	Transferred to Article 35, No. 1351A)
(446	Transferred to Article 35, No. 1351C and new Article C, No. 50)
(44 <b>7</b> and 448	Transferred to Article 35, Nos. 1351D and 1351E)
(449 and 450	Deleted)
(451, 452, 452.1	Transferred to new Article C, Nos. 50, 51 and 51.1)
<b>(</b> 453 <b>,</b> 453 <b>,1</b> 454	Transferred to new Article C, Nos. 52, 52.1 and 53)
<b>(</b> 455	Deleted)
(456	Transferred to Article 35, No. 1351F)
<b>(</b> 45 <b>7</b>	Deleted)
	SECTION V. MARITIME RADIO BEACONS
(485 <b>-</b> 464	Transferred to Article 43, Nos. 1395A to 1595G)

#### SECTION I. GENERAL PROVISIONS

- 955 S1. 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 Deleted)
- 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 **87.** 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.

964A §8.(bis) 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.

#### SECTION II. SPECIAL PROVISIONS REGARDING SAFETY

- 965 §9. (1) The International Convention for the Safety of Life at Sea prescribes which ships and which of their survival craft shall be fitted with radio equipment and which ships shall carry portable radio equipment for use in survival craft. It also prescribes the requirements which shall be complied with by such installations.
- (2) The Annexes to the Convention on International Civil Aviation state which aircraft should be fitted with radio equipment and which aircraft should carry portable radio equipment for use in survival craft. They state also the requirements which should be complied with by such installations.
- 967 \$10. The applicable provisions of the present Regulations shall, however, be observed in the use of all such installations.
- 968 §11. (1) Mobile stations of the maritime mobile service may communicate, for safety purposes, with stations of the aeronautical mobile service.
- (2) For these purposes only, they may use the aeronautical emergency frequency 121.5 Mc/s using Class A3 emissions. They shall then comply with any special arrangements between the governments concerned by which the aeronautical mobile service is regulated.
- 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.
- (971 Deleted)
- (972- (including 974A and 976A) Transferred to new Article C, Nos. 1-8).

- (978 Transferred to new Article C, No. 42)
- (979- Transferred to new Article C, Nos. 54-57)
- (983- (including 985.1) Transferred to Article 35, Nos. 1322B-1322K) 987E
- (988- Transferred to Article 35, Nos. 1358C-1358F) 991

#### 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, Class A2 or A2H emissions, or on the frequency 2182 kc/s, Class A3 or A3H 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.
- \*993A (3) Any aircraft in distress shall transmit the distress call on (1321) the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service, the provisions of Nos. 1323 and 1324 shall be complied with.

#### 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 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.

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- 996 in the bands between 1605 and 2850 kc/s, be able to transmit on 2182 kc/s using 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;
- 997 in the bands between 4000 and 27 500 kc/s, be able to transmit on 8364 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 8320 to 8745 kc/s;
- 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.

#### SECTION VII. EMERGENCY POSITION INDICATING RADIO BEACONS

999A Emergency position-indicating radio beacons when transmitting on 2182 kc/s shall use Class A2 emissions.

#### General radiotelegraph procedure in the aeronautical mobile services

#### SECTION I. GENERAL PROVISIONS

- 1000 \$1. (1) In the aeronautical mobile service the procedure detailed in this Article is obligatory, except in cases of distress, urgency or safety, to which the provisions of Article 36 are applicable.
- (2) However, in the aeronautical mobile service the procedure specified in Sections III, IV and V of the present Article is applicable only in the absence of special arrangements to the contrary concluded between the governments concerned.
- 1002 (3) Aircraft stations when communicating with stations of the maritime mobile service shall use the procedure specified in this Article.
- 1003 §2. The use of the Morse code signals specified in the Telegraph Regulations shall be obligatory in the aeronautical mobile service. However, for radiocommunications of a special character, the use of other signals is not precluded.
- 1004 §3. (1) In order to facilitate radiocommunications, stations of the mobile service shall use the service abbreviations given in Appendix 13.
- (1005 Transferred to new Article B, No. 3 (combined with No. 1004))

#### SECTION II. PRELIMINARY OPERATIONS

#### (1006 Deleted)

- 1007 §5. (1) Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress.
- 1008 (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:

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1009

a) The mobile station whose emission causes interference to the correspondence of a mobile station with an aeronautical station, shall cease sending at the first request of the aeronautical station.

1010

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.

1011

c) The station which requests this cessation shall indicate the approximate waiting time imposed on the station whose emission it suspends.

## 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.
- (1012A Transferred to new Article B, No. 20)
- (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, 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.
- (1013A Transferred to new Article B, No. 39)

1013B (3) When selective calling is used the provisions of Article D shall be observed.

#### Frequency to be used for calling and for preparatory signals

- 1014 §7. For making the call and for transmitting preparatory signals, the calling station shall use a frequency on which the station called keeps watch.
- (1015 Transferred to new Article B, No. 22)

#### Indication of the frequency to be used for traffic

- 1016 §8. (1) The call, as described in Nos. 1012 and 1013, shall be followed by the service abbreviation indicating the working frequency and, if useful, the class of emission which the calling station proposes to use for the transmission of its traffic.
- 1017 (2) When, 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:
- a) where the calling station is a land station, that it proposes to use for traffic its normal working frequency shown in the appropriate list of stations;
- b) where the calling station is a mobile station, that the frequency to be used for traffic is to be chosen by the station called from the frequencies on which the calling station can transmit.

#### Indication of the number of radiotelegrams or of transmission in series

- 1020 **§**9. (1) When the calling station has more than one radiotelegram to transmit to the station called, the above-mentioned preparatory signals shall be followed by the service abbreviation and the figure giving the number of such radiotelegrams.
- 1021 (2) Moreover, when the calling station wishes to send its radiotelegrams in series, it shall indicate this by adding the service abbreviation for requesting the consent of the station called.

#### Form of reply to calls

- 1022 \$10. The reply to calls consists of:
  - the call sign of the calling station, not more than three times;
  - the word DE:
  - the call sign of the station called.
- 1023 \$11. 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.

#### (1024, 1025 and 1026 Deleted)

#### Agreement on the frequency to be used for traffic

- 1027 \$12. (1) If the station called is in agreement with the calling station, it shall transmit:
- 1028 a) the reply to the call;
- b) the service abbreviation indicating that from that moment onwards it will listen on the working frequency announced by the calling station;
- 1030 c) if necessary, the indications referred to in No. 1038;
- d) the letter K if the station called is ready to receive the traffic of the calling station;
- e) if useful, the service abbreviation and figure indicating the strength and/or intelligibility of the signals received (see Appendix 13).
- (2) If the station called is not in agreement with the calling station on the working frequency to be used, it shall transmit:

- 1034
- a) the reply to the call;
- 1035
- b) the service abbreviation indicating the working frequency to be used by the calling station and, if necessary, the class of emission:
- 1036
- .c) if necessary, the indications specified in No. 1038.
- (3) When agreement is reached regarding the working frequency which the calling station shall use for its traffic, the station called shall transmit the letter K after the indications contained in its reply.

#### Reply to the request for transmission by series

1038 \$13. The station called, in replying to a calling station which has proposed to transmit its radiotelegrams by series (see No. 1021), shall indicate, by means of the service abbreviation, its acceptance or refusal. In the former case it shall specify, if necessary, the number of radiotelegrams which it is ready to receive in one series.

#### Difficulties in reception

- \$14. (1) If the station called is unable to accept traffic immediately, it shall reply to the call as indicated in Nos. 1027 to 1032, but it shall replace the letter K by the signal . . . . (wait), followed by a number indicating in minutes the probable duration of the waiting time. 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.
- (2) When a station receives a call without being certain that such a call is intended for it, it shall not reply until the call has been repeated and understood. When, on the other hand, a station receives a call which is intended for it but is uncertain of the call sign of the calling station, it shall reply immediately using the service abbreviation in place of the call sign of this latter station.

#### SECTION IV. FORWARDING (ROUTING) OF TRAFFIC

#### Traffic frequency

1041 \$15. (1) As a general rule a station of the mobile service shall transmit its traffic on one of its working frequencies in that band in which the call has been made.

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- (1042 Transferred to new Article B, No. 62)
- (2) The use of frequencies reserved for calling shall be forbidden for traffic, except distress traffic (see Article 32).
- 1044 (3) If the transmission of a radiotelegram is to take place on a frequency and/or with a class of emission other than those used for the call, the transmission of the radiotelegram shall be preceded by:
  - the call sign of the station called, not more than three times;
  - the word DE;
  - the call sign of the calling station, not more than three times.
- (4) If the transmission is to be made on the same frequency and with the same class of emission as the call, the transmission of the radiotelegram shall be preceded, if necessary, by:
  - the call sign of the station called;
  - the word DE;
  - the call sign of the calling station.
- 1046 \$16. (1) As a general rule, radiotelegrams in the public correspondence service transmitted by aircraft stations shall be numbered in a daily series; number 1 shall be given to the first radiotelegram sent each day to each separate station.
- 1047 (2) A series of numbers which has begun in radiotelegraphy should be continued in radiotelephony and vice versa.

#### Long radiotelegrams

\$17. (1) In cases where both stations are able to change from sending to receiving without manual switching, the transmitting station may continue to send until completion of the message or until the receiving station breaks in on the transmission with the service abbreviation BK. Before commencing, both stations normally agree on such a method of working by means of the abbreviation QSK.

- (2) If this method of working cannot be employed, long radiotelegrams, whether in plain language or in secret language shall, as a general rule, be transmitted in sections, each section containing fifty words in the case of plain language and twenty words or groups if secret language is used.
- 1050 (3) At the end of each section the signal . . \_ . . (?) meaning "Have you received the radiotelegram correctly up to this point?" shall be transmitted. If the section has been correctly received, the receiving station shall reply by sending the letter K and the transmission of the radiotelegram shall be continued.

#### Suspension of traffic

1051 \$18. When a mobile station transmits on a working frequency of a land station and causes interference with the transmission of such land station, it shall suspend working at the first request of the latter.

#### SECTION V. END OF TRAFFIC AND WORK

#### Signal for the end of transmission

- 1052 \$19. (1) The transmission of a radiotelegram shall be terminated by the signal . \_ . \_ . (end of transmission), followed by the letter K.
- (2) In the case of transmission by series, the end of each radiotelegram shall be indicated by the signal . \_ . \_ . (end of transmission) and the end of the series by the letter K.

#### Acknowledgement of receipt

- 1054 \$20. (1) The acknowledgement of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner:
  - the call sign of the sending station;
  - the word DE;
  - the call sign of the receiving station;
  - the letter R followed by the number of the radiotelegram; or

### Annex I to Document No. 117-E Page 74

- the letter R followed by the number of the last radiotelegram of a series.
- 1055 (2) The acknowledgment of receipt shall be transmitted by the receiving station on the traffic frequency (see Nos. 1041 and 1042).

#### End of work

- 1056 \$21. (1) The end of work between two stations shall be indicated by each of them by means of the signal . . . \_ . \_ (end of work).
- 1057 (2) The signal . . . \_ . \_ (end of work) shall also be used:
  - when the transmission of radiotelegrams of general information, meteorological information and general safety notices is finished, and
  - when transmission is ended in long-distance radiocommunication services with deferred acknowledgement of receipt or without acknowledgement of receipt.

#### SECTION VI. CONTROL OF WORKING

- 1058 §22. The provisions of this section are not applicable in cases of distress, urgency or safety (see No. 1000).
- 1059 \$23. In communication 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 class of emission, and to the duration and suspension of work.
- 1060 \$24. In communication between mobile stations, the station called shall control the working in the manner indicated in No. 1059. However, if a land station finds it necessary to intervene, these stations shall comply with the instructions given by the land station.

#### SECTION VII. TESTS

1061 §25. When it is necessary for a mobile station to send signals for testing or adjustment which are liable to interfere with the working of neighbouring coast or aeronautical stations, the consent of these stations shall be obtained before such signals are sent.

1062 §26. When it is necessary for a station in the mobile service 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 be composed of a series of VVV followed by the call sign of the station emitting the test signals.

## Calls by radiotelegraphy - mobile services other than maritime mobile

- 1063 \$1. (1) The provisions of this Article are not applicable to the aeronautical mobile service when special agreements exist between the governments concerned.
- 1064 (2) Aircraft stations when communicating with stations of the maritime mobile service shall use the procedure specified in Article B.
- 1065 §2. (1) As a general rule, it rests with the mobile station to establish communication with the land station. For this purpose, the mobile station may call the land station only when it comes within the service area of the latter, that is to say, that area within which, by using an appropriate frequency, the mobile station can be heard by the land station.
- 1066 (2) However, a land station having traffic for a mobile station may call this station if it has reason to believe that the mobile station is keeping watch and is within the service area of the land station.
- (1067 Transferred to new Article B, No. 28).
- (1068, Transferred to new Article B, Nos. 41 and 42). 1068A
- (1069- (including 1071A) Transferred to new Article B, Nos. 29-36).
- 1076 §4. When a land station receives calls from several mobile stations at practically the same time, it decides the order in which these stations may transmit their traffic. Its decision shall be based on the priority (see No. 1496) of the radiotelegrams or radiotelephone calls that mobile stations have on hand and on the need for allowing each calling station to clear the greatest possible number of communications.

- 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.
- 1081 §6. Mobile stations shall not radiate a carrier wave between calls.
- 1082 S7. When the name and address of the administration or private operating agency controlling a mobile station are not given in the appropriate list of stations or are no longer in agreement with the particulars given therein, it is the duty of the mobile station to furnish as a matter of regular procedure, to the land station to which it transmits traffic, all the necessary information in this respect.
- 1083 §8. (1) The land station may, by means of the abbreviation TR, ask the mobile station to furnish it with the following information:
- 1084 a) position and, whenever possible, course and speed;
- 1085 b) next port of call.
- 1086 (2) The information referred to in Nos. 1083 and 1085, preceded by the abbreviation TR, should be furnished by mobile stations, without prior request from the coast station, whenever such a measure seems appropriate.
- 1087 (3) The information referred to in Nos. 1083 to 1086 is furnished on the authority of the person responsible for the aircraft or other vehicle carrying the mobile station.

## Use of frequencies for radiotelegraphy in the aeronautical mobile services

#### SECTION I

(1095- Deleted) 1105

#### SECTION II. BANDS BETWEEN 405 AND 535 kc/s

1106 §5. The provisions of this Section are also applicable to aircraft stations when communicating with stations of the maritime mobile service.

#### 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.
- 1108 (2) However, 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:
- a) for call and reply (see Nos. 1114 and 1116).
- (1111 Transferred to new Article C. No. 15).

- 1112 (4) Apart from the transmissions authorized on 500 kc/s, and taking into 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 aircraft desiring to enter into communication on radiotelegraphy with a station of the maritime mobile service in the authorized bands between 405 and 535 kc/s, 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- Transferred to new Article C, Nos. 27-31).

#### C. Traffic

1122 \$10. As an exception to the provisions of Nos. 1107, 1109 and 1110 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.

(1122.1 Deleted)

(1123- Transferred to new Article C, Nos. 33-39 and Nos. 17-23) 1136

#### SECTION III. BANDS BETWEEN 1605 AND 4000 KC/S

(1137- Transferred to new Article C, Nos. 43 and 40) 1138

#### SECTION IV. ADDITIONAL PROVISIONS APPLICABLE IN REGION 3 ONLY

(1139- Transferred to new Article C, Nos. 41 and 44-48)

#### SECTION V. BANDS BETWEEN 4000 AND 27 500 kc/s

#### A. General Provisions

(1145- Transferred to new Article C, Nos. 58-69) 1154

(1155 Deleted)

(1156- Transferred to new Article C, Nos. 70-72)

\$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 4000 and 27 500 kc/s. When using these frequencies, aircraft stations shall comply with the provisions of Article 32A.

#### B. Call and reply

- 1160 §22. (1) In order to establish communication with a station in the maritime mobile service, each aircraft station shall use a calling frequency in the bands listed in Article C, No. 53.
- (2) Frequencies in the calling bands are assigned to each mobile station in accordance with the provisions of Article C, Nos. 74 to 78 inclusive.
- 1162 §23. In order to reduce interference, mobile stations shall, within the means at their disposal, endeavour to select for calling the band with the most favourable propagational characteristics for effecting

reliable communication. In the absence of more precise data, a mobile station shall, before making a call, listen for the signals of the station with which it desires to communicate. The strength and intelligibility of such signals are useful as a guide to propagational conditions and indicate which is the preferable band for calling.

(1163- Transferred to new Article C, Nos. 108-112 and 104).

#### C. Traffic

- 1169 §27. (1) A mobile station, after establishing communication on a calling frequency (see No. 1160) shall change to a working frequency for the transmission of traffic. The use of frequencies in the calling bands for any other purpose other than calling shall be prohibited.
- 1170 (2) Working frequencies shall be assigned to mobile stations in accordance with the provisions of Nos. 1180 to 1200 inclusive.
- (1171- Transferred to new Article C, Nos. 119 and 120) 1172
- (1173 Deleted covered in new Article C, No. 52)

#### D. Assignment of frequencies to mobile stations

- (1174- Transferred to new Article C, Nos. 73-76)
- 1178 \$31. (1) The centre 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: 4182; 6273; 8364; 12 546; 15 728 and 22 245 kc/s.
- (2) The frequency 8364 kc/s, however, shall not be assigned to or used by ship stations except to establish communications relating to the safety of life. It is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands between 4000 and 27 500 kc/s, and if they desire to establish with stations of the maritime and aeronautical mobile services communications relating to search and rescue operations.

- (1180- Transferred to new Article C, Nos. 79-96)
- 1195 §41. For the exclusive purpose of communication with stations of the maritime mobile service an aircraft station may be assigned one or more series of working frequencies in the high traffic bands. These frequencies shall be assigned in accordance with the same system of uniform distribution provided for high traffic ships.
- (1196- Transferred to new Article C, Nos. 97-103 and 113-116) 1206

#### SECTION VI. AERONAUTICAL MOBILE SERVICE

- 1207 §46. Governments may, by agreement, decide the frequencies to be used for call and reply in the aeronautical mobile service.
- 1208 §47. Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service, the provisions of Nos. 1107 and 1108 shall apply.

## Calls by radiotelephony, other than in the maritime mobile service

- 1296 \$1. (1) The provisions of this Article are not applicable to the aeronautical mobile service when special agreements exist between the governments concerned.
- (2) Aircraft stations when communicating with stations of the maritime mobile service shall use the procedure specified in Article 33.
- 1298 \$2. (1) As a general rule, it rests with the mobile station to establish communication with the land station. For this purpose the mobile station may call the land station, only when it comes within the service area of the latter, that is to say, that area within which, by using an appropriate frequency, the mobile station can be heard by the land station.
- (2) However, a land station having traffic for a mobile station may call this station if it has reason to believe that the mobile station is keeping watch and is within the service area of the land station.
- (1300- Transferred to Article 33, Nos. 1224C-1224I). 1306
- 1307 §4. When a land station receives calls from several mobile stations at practically the same time, it decides the order in which these stations may transmit their traffic. Its decision shall be based on the priority (see No. 1496) of the radiotelegrams or radiotelephone calls that mobile stations have on hand and on the need for allowing each calling station to clear the greatest possible number of communications.
- 1308 §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.
- (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.

- 1310 (3) Before renewing the call, the calling station shall ascertain that the station called is not in communication with another station.
- (4) If there is no reason to believe that harmful interference will be caused to other communications in progress, the provisions of Nos. 1308 and 1309 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.
- 1312 \$6. Mobile stations shall not radiate a carrier wave between calls.
- 1313 §7. When the name and address of the administration or private operating agency controlling a mobile station are not given in the appropriate list of stations or are no longer in agreement with the particulars given therein, it is the duty of the mobile station to furnish as a matter of regular procedure, to the land station to which it transmits traffic, all the necessary information in this respect.
- 1314 §8. (1) The land station may ask the mobile station to furnish it with the following information:
- a) position and, whenever possible, course and speed;
- b) next port of call.
- (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.

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# REGLEMENT DES RADIOCOMMUNICATIONS RADIO REGULATIONS REGLAMENTO DE RADIOCOMUNICACIONS

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# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 118-E 22 August 1967 Original : English

### PLENARY MEETING

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND,
THE CHANNEL ISLANDS AND THE ISLE OF MAN

## Proposals for the work of the Conference

## Additional Agenda Item UK 13\*

### On-board procedure

Ref.		· .	Article 33 - Section III
	ADD		Internal radio communication on ships
G/118(61)	ADD	<b>12</b> 24A	§ 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 :		

## Reasons:

To provide for the use of radio equipment for internal communication on board ship, and to avoid confusion with other ships.

<sup>\*</sup> Item not on the agenda of the W.A.R.C. but which the United Kingdom proposes that the Conference consider.



# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 119-E 23 August 1967 Original: French

### PLENARY MEETING

### Note by the Secretary-General ad interim

SUGGESTIONS CONCERNING THE COMPILATION AND PUBLICATION OF THE LIST OF SHIP STATIONS (LIST V)
WITH THE AID OF THE I.T.U. COMPUTER

- 1. The General Secretariat, in cooperation with the I.F.R.B., has studied the possibility of compiling and publishing List V with the aid of the computer.
- 2. This study shows that the new method would offer the following advantages:
  - a) less time required to publish editions;
  - b) the possibility of obtaining at any time up-to-date lists by country, call sign, frequency band used, service provided, etc.;
  - c) automatic extraction of lists of ship call signs;
  - d) publication, with the aid of the computer, of the Alphabetical List of Call Signs of stations used by the maritime mobile service (List VII A).
- 3. However, in view of the special requirements of the electronic system, some changes would have to be made to Appendices 9 and 10 of the Radio Regulations. The changes suggested are contained in Annex 1 hereto.
- 4. Adoption of the new method would involve some extra initial costs (purchase of supplies, additional staff, lease of machines); on the other hand, the cost of printing the List by offset from lists prepared by the computer would certainly be lower than present typographical printing costs (see also paragraph 8).



- 5. Should these suggestions be accepted by the Maritime Conference, Lists V and VII A could be published in their new form starting with the 1969 edition.
- 6. Annex 2 below contains, by way of illustration:
  - a) two pages from the existing List;
  - b) one page from the List in its suggested form, containing particulars of the stations mentioned on the first page and part of the second page of the above extract.
    - This example shows the new format of the List and how certain information is given in the form of symbols.
  - c) an extract from the Preface to the List in the form suggested, to make it easier to understand the examples given under b).
- 7. The Conference is requested to be so good as to examine these suggestions and to take the relevant decisions.
- 8. Since List V is sometimes consulted in adverse conditions, a study is also being made of the possibility (by an intermediate process) of improving its layout as compared with that obtained by direct printing of the computer lists. The results of this study will be submitted to the Conference in due course.

Mohamed MILI Secretary-General a.i.

Annexes: 2

### ANNEX 1

# SUGGESTED AMENDMENTS TO APPENDICES 9 AND 10 OF THE RADIO REGULATIONS

(Should the principle of compiling the List of Ship Stations by computer be accepted)

#### APPENDIX 9

MOD

### LIST V. LIST OF SHIP STATIONS

## Particulars of ship stations

The information concerning these stations shall be published as shown below:

T Name of station	∾ Call sign	Selective call * number	≠ Country	Auxiliary س installations	o Class of ship	✓ Nature of service	ω Hours of service	Telegraph trans o mission frequency bands	Telephone trans— 5 mission frequency bands	Ship charge per H word for radio- telegrams	Ship charge for K radiotelephone calls	7 Remarks
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Column 1 The stations shall be arranged in alphabetical order of the names of the ships, irrespective of nationalilty. In the case of duplication of names, the name of the ship shall be followed by the call sign (separated from the name by a fraction bar).

Column 2 Call sign.

Column 3 Selective call number \*

In view of the C.C.I.R. Recommendation relative to the use of a selective calling system in the maritime mobile service (Doc. XIII/33 (Rev.l)), column 3 has been reserved for possible introduction of the selective call number of ship stations.

Naturally, if the Maritime Conference considers that during the next few years selective calling devices will be used only by a relatively small number of the ships mentioned in the List, there would be no point in reserving a column for this information. It would then suffice to place a reference mark after the call sign to indicate that the selective call number is given in the "Remarks" column.

# Annex 1 to Document No. 119-E

Page 4

- Column 4 Country having jurisdiction over the station (indicated by the appropriate symbol).
- Columns 5 In the form of service symbols (see Appendix 10). In addition, to 8 a list of the symbols used in column 6 to designate the class of ship shall be given in the Preface to the List.
- <u>Columns 9</u> Indication of the frequency bands and class of emission by means and 10 of the following symbols:

## <u>Radiotelegraphy</u>

#### Radiotelephony

W = 110	150	kc/s	Т	=	1605	_	4000	kc/s
X = 405	-	•			_		23 000	•
Y = 1605	- 3800						174	
_	- 25 110						•	•

These symbols should, if necessary, be followed by references to brief notes and indications of the frequencies for which the transmitters are adjusted, which shall appear at the end of the List.

- Column 11 Basic ship charge per word for a radiotelegram 1.
- Column 12 Minimum charge for a radiotelephone call of three minutes1.

The information in columns 11 and 12 shall be followed by a note reference to indicate the administration or private enterprise to which the accounts should be sent. In case of a change of address of the operating authority, a second note reference after the charge should give the new address and the date from which the change will take affect.

Column 13 When two or more ship stations of the same nationality bear the same name, or if the accounts for charges should be sent direct to theowner of the ship, the name of the shipping line or the firm to which the ship belongs shall be given in this column.

In addition, if there is no room in the appropriate column, further information relating to columns 1 to 12 may be given in column 13 by means of a note reference. This column may comprise several lines.

These charges are fixed or approved by each Administration.

<u>Reasons</u>: To enable the List to be published with the aid of the I.T.U. computer, with the resultant advantages.

### APPENDIX 10

# Service document symbols\*

(See Article 20 and Appendix 9)

MOD	GS	Station on board a warship or a military or naval aircraft
MOD	Δ	High-traffic ship ("HS")
MOD	R	Equipped with radar
MOD	CA	Cargo ship
MOD	PA	Passenger ship

<u>Reasons</u>: To enable the List to be published with the aid of the I.T.U. computer, with the resultant advantages.

MOD 1 The symbol shown in parenthesis or square brackets may be used in notifications and service documents.

<sup>\*</sup> Only those symbols for which changes are suggested are listed here.

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	* H.L. Pierce Motor Sales Corp., 250 S Grove Avenue, Elgin
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ELPE 40 <sup>21</sup> )	Gold Star/ELPE[1] Ca CP H8 LBR xyz
OPSL -1)	Goldstar/OPSL CR HX BEL t
6ZOG	Goldstone/6ZOG[1]@ Ca CP H8
$^{40}_{ ilde{ heta}}_{26)}$	LBR xz tu
HPOW 40 <sup>25</sup> )	Goldstone/HPOW © Ca CP H8 PNR xz t
DZFS 412)	Goleda CV HX PHL z u
DZND 412)	Goleda I CV HX PHL z u
DZNI	Goleda II CV HX
20 <sup>412</sup> ) DZNH	PHL z u Goleda III CV HX
20 412)	PHL z u
DZNF 20 412)	Goleda VII CV HX PHL z u
EPNE - 5)	Golestan CV HX IRN x 6) z 7) u
OPTZ	Golfbreker CR HX BEL t
GBYL	Golfito⊕ Pa▼ CP H8
40 8)	G xz tuv
ICSG 40 <sup>2</sup> )	Golfo di Napoli[1] Ca CP 118
ICRG 40 3)	Golfo di Palermo[1] Ca CP H8
•	Golfstraum @ Ca CR HX NOR t
DEDJ	Golfstrom @ Ca CP HX
${0 \choose 3} 1$	D t
DAEG	Goliath/DAEG@ Ca CP HX
${}^{40}_{3}^{2}$	D v
♦DHTT 20 1)	Goliath/DHTT CP HX DDR v
20-)	Grue-flottante. Floating crane. Grua flotante.
FAPT	Goliath/FAPT × CR HX
oxqx	Goliath/OXQX @ Ca CR <sup>13</sup> ) HX
(B) <sup>1</sup> )	DNK tv
- <sup>2</sup> )	Goliath/TQGJ CV HX F t
	Goliath II CR18) HX
(a) \bigg\{1\)	DNK v
	,

XPEZ Goliath III Ca CR13) HX (®) 1) DNK 5Q**Y**G Goliath V Ca CR<sup>13</sup>) HX (8) DNK OXZL Goliath Fur Ca CR18) HX DNK

Radiotélégraphie - Radiotelegraphy - Radiotelegrafia

W = 110- 150 kHz (kc/s) X = 405- 535 kHz (kc/s) Y = 1 605- 3 800 kHz (kc/s) z = 4 000-25 110 kHz (kc/s)

Radiotéléphonie - Radiotelephony - Radiotelefonia

t = 1 605- 4 000 kHz (kc/s) u = 4 000-23 000 kHz (kc/s) v = 156- 174 MHz (Mc/s)

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Colonne 3 \* : Exemples fictifs de nunéros d'appel sélectif.
Column 3 \* : Examples of selective call numbers hypothetical.
Columna 3 \* : Ejemples ficticies de números de llamada selectiva.

Columna 3 * : Eje			<del></del>		·			r	T	, T	1	T	
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# EXTRACT FROM THE PREFACE TO THE LIST REMARKS AND EXPLANATIONS

The List of Ship Stations is a service document of the International Telecommunication Union. It is published in a single edition in French, English and Spanish, and is republished each year without supplements. It contains the following parts:

Preface
Particulars of ship stations
Remarks regarding ship stations.

### Particulars of ship stations

This part contains particulars of :

- 1. ship stations fitted with radiotelegraph installations;
- 2. ship stations fitted with radiotelegraph and radiotelephone installations;
- 3. 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.

The information concerning these stations are published, as a general rule, in one line, sub-divided into 13 columns, in the following order:

Column 1 - Name of ship in alphabetical order irrespective of nationality, followed by the call sign in the case of duplication of names; in that event the name and the call sign are separated by a fraction bar.

The arrangement is based on the following principles in certain particular cases:

- Names of stations consisting of several words, such as Queen Mary, United States, have been placed where they would have appeared if the name had formed a single word. No account is taken in the arrangement of punctuation and the "&" sign: e.g. A. & J. is listed in the place corresponding to AJ; Song-Tu as if it were Songtu, etc.
- 2. The particulars of ship stations whose names begin with a number come at the beginning of the List. If the number is written in Roman characters it is given in this form in column 13 (Remarks) but it is listed

# Annex 2 c) to Document No. 119-E Page 14

in Arab characters in column 1. In addition, the names of these stations written in full (the number in the same language as the rest of the name) are to be found at their appropriate place in the List according to alphabetical order; opposite them, in column 13, is a reference indicating where the particulars are to be found.

When the name of a station begins with a number written in letters and this fact can be detected by the General Secretariat of the Union, a reference inserted at the beginning of the List at the appropriate place in numerical order will indicate where the particulars are to be found in the alphabetical order where the number is written in letters.

- 3. Names preceded by the articles De, Den, El, Er, L', La, etc. are listed in the alphabetical order of the article followed by the name as if they formed a single word.
- 4. Compound names beginning with Saint, Sainte, San, Sanct, etc., are included in the alphabetical order of S. followed by the principal name.

However, the abbreviation "S." may of course be replaced, in the address of a radiotelegram, by the word Saint, San, etc. written in full, or by any other abbreviation in current use.

Column 2 - Call sign.

Column 3 - Selective call number.\*

Column 4 - Name of country having jurisdiction over the station, indicated by the following symbols:

## Symbols designating the countries which have particulars of

## stations in the List

(in alphabetical order of symbols)

(no change; see the prefaces to service documents)

- Column 5 a) Carrying lifeboats equipped with radio sets; a figure in brackets indicates the number of such lifeboats carried.
  - b) Equipped with madar; symbol R.

<sup>\*</sup> See Annex 1, column 3, footnote.

Column 6 - Class of ship indicated by the following symbols: (see also the Table of Symbols)

high-traffic ship

ÇA cargo ship.

CBL cable ship

CIT tanker

EXP exploration ship

FRG refrigerator ship

GLC ice-breaker

GRU floating crane

GS warship

PA passenger ship

PCH fishing vessel

PLT pilot-boat

PMP fire-boat

ROC rock-breaker

SVT rescue vessel

TUG tug

YAT pleasure craft

... (this list will be amplified as required)

- Column 7 Nature of the service, indicated by a service symbol or reference.
- Column 8 Hours of service, indicated by a service symbol or reference; times not indicated by a service symbol are given in Greenwich Mean Time (G.M.T.) by groups of four figures from 0000 to 2400.
- Column 9 Frequency bands used for radiotelegraphy indicated by the following symbols:

W = 110 - 150 kg/s

X = 405 - 535 kc/s

Y = 1605 - 3800 kg/s

Z = 4000 - 25 110 kg/s

## Annex 2 c) to Document No. 119-E Page 16

<u>Column 10</u> - Frequency bands for radiotelephony indicated by the following symbols:

T = 1605 - 4000 kc/sU = 4000 - 23000 kc/s

V = 156 - 174 Mc/s

The symbols in columns 9 and 10 are followed, where necessary, by references to brief notes and indications of the frequencies for which the transmitters are adjusted; these appear at the end of the list.

Column 11 - Basic ship charge per word(in centimes of gold-franc) for radiotelegrams.

Column 12 - Minimum charge for a radiotelephone call of three minutes (in centimes of gold-franc).

The information in columns 11 and 12 is followed by a note indicating the Administration or private enterprise to which the accounts for charges should be sent. In the case of change of address of the operating authority, a second note after the charge gives the new address and a third note the date from which the change will take effect. The third note is in the following form: 1.4.66. The first figure indicates the day, the second the month, and the last two the year. This example thus means: from 1 April 1966. When there is a dotted line "..." where the amount of the charge should be, it means that a charge is collected but that its amount has not yet been communicated to the General Secretariat of the Union. On the other hand, when there is a dash " - " in place of the indication of the charge, it means that no ship charge is made for radiotelegrams exchanged by the ship.

#### Gelumn 13 - Remarks. This column is used for the following purposes:

- a) to complete certain information which cannot be accommodated in the other columns. In this case, the reference \* #(a) is inserted in the appropriate column, and the further information, preceded by the same sign, in column 13;
- b) when two or more ship stations of the same nationality bear the same name, the name of the shipping line or the firm to whom the ship belongs is given in this column. However, if this line or firm has already been indicated as the accounting

authority, this indication is not repeated. This procedure is not applied if a warship and a merchant ship of the same nationality bear the same name.

The symbols used for reference to the remarks are as follows:

- 1. The symbols \* #(a) indicate that the remark appears in column 13 of the particulars.
- 2. The numerical references 1, 2, 3, etc. indicate that the remark appears at the end of the List, under the symbol (in alphabetical order) of the name of the country having jurisdiction over the station.
- The alphabetical references A, B, C, etc. (excluding the letters T, U, V, W, X, Y, Z which are used as symbols for frequency bands) relate to charges. Their meaning is likewise given at the end of the List, immediately after the symbol for the name of the country or after the general notes, if any, relating to the country concerned.

# TABLE OF SYMBOLS \*

Δ high-traffic ship

information from sources outside the Union. The publication of this information implies no recognition by the I.T.U. of the status of the sender in relation to the I.T.U.

CA Cargo ship

GS station on board a warship or a military or naval aircraft

PA Passenger ship

R equipped with radar.

<sup>\*</sup> Only those symbols for which changes are suggested are mentioned here.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 120-E 29 August 1967 Original: English/French

PLENARY MEETING

#### AUSTRIA

# Proposed amendments to the Radio Regulations

## Item 7 of the Agenda:

Other questions relating to the Maritime Mobile Service

Ref.

7.6 Establishment of a separate category for mobile radiotelephone traffic on inland waterways

AUT/120(1)

MOD 287

Add the following passage after the last paragraph of this number:

In the areas where maritime mobile service overlaps with a mobile service used by the administrations concerned for inland navigation, with frequencies listed in Appendix 18 to the Radio Regulations, Geneva, 1959, having been allocated to such service, the maritime mobile service and the mobile service used for inland navigation shall enjoy equal rights (see Recommendation No...).

# Reasons :

To permit the regular use of the frequencies listed in Appendix 18 (maritime and port operations services) for mobile traffic on inland waterways.

In connection with the application of No. 287, the attention of the administrations shall be drawn to the existence of the Recommendation.



## Document No.120-E Page 2

## Ref.

### Appendix 18

AUT/120(2)

MOD

Table of transmitting frequencies for the band 156-174 Mc/s for radiotelephony in the international maritime mobile Service:

In the column "Channel designators", a symbol referring to a footnote shall be placed after the designators 10, 13, 16, 18, 20 and 22. This footnote shall read: See Note h).

In the footnote preceded by the symbol \*, the indication "a) to g)" shall be replaced by the indication "a) to h)".

## Notes referring to the Table

# Add after Note g):

h) As to the use for mobile traffic on inland waterways of the frequencies listed in the Table, see Recommendation No. ...

#### Reasons:

In connection with the application of Appendix 18, the attention of the administrations shall be drawn to the existence of the Recommendation.

# AUT/120(3)

The Radio Regulations shall be supplemented with the following Recommendation referred to in Proposals AUT/120(1) and AUT/120(2) above.

# Draft Recommendation No. ...

The Maritime World Administrative Radio Conference, Geneva, 1967,

## considering

a) that coordination of the mobile VHF radiotelephone traffic on inland waterways between maritime and inland navigation on the one hand and between the various administrations traversed by one and the same inland waterway on the other, is in the interest of navigation and its safety;

## Ref.

AUT/120(3) (cont.)

- b) that it is important from the point of view of economy to provide smaller vessels with simple equipment suitable for switching a maximum of 6 radiotelephone channels;
- c) that sea-going vessels built at inland dockyards must be able to use their radio equipment already on the journey to their seaport of destination; and
- d) that such coordination of VHF radiotelephone traffic has already been carried out successfully in respect of several inland waterways;

### recommends

- that the administrations of countries traversed by one and the same inland waterway allocate frequencies listed in Appendix 18 to the Radio Regulations, Geneva, 1959, for the radiotelephone traffic on such waterways or reserve frequencies for allocation at a later date in the event of there being no need for them at the moment;
- 2. that the allocation of channels be coordinated in good time between the administrations of all countries traversed by one and the same inland waterway; and
- 3. that the channels specified below be fixed by way of first choice for the following traffic relations:
  - 10 Intership
  - 13 Intership and ship port authorities
  - 16 Calling and safety
  - (Sluice service, meteorological Nautical information (service, warning of cataclysms, etc.

Should the Conference decide that the 50 kc/s channels be split up into 25 kc/s channels, then the above proposal concerning radiotelephone channels shall be modified accordingly.

# UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS CONFERENCE MARITIME

GENÈVE, 1967

Document Nº 121-F/E/S

4 septembre 1967

Original: français/anglais

espagnol

# Note du Secrétariat général

# CORRECTIF COLLECTIF AUX DOCUMENTS NOS 1-115

I. Un certain nombre des propositions présentées par les administrations et publiées dans les Documents de la conférence n'ont pas été numérotés.

Afin de faciliter les références à ces propositions, il convient d'ajouter les numéros suivants en regard des propositions dont il est question.

## Note by the General Secretariat

### GENERAL CORRIGENDUM TO DOCUMENTS Nos.1+115

I. Some of the proposals submitted by Administrations and published in the documents of the Conference have not been numbered.

To facilitate reference to these proposals, the following numbers should be inserted next to the proposals concerned.

# Nota de la Secretaría General -

# CORRIGENDUM COLECTIVO A LOS DOCUMENTOS N.OS 1-115

I. No se han numerado cierto número de proposiciones presentadas por las administraciones y publicadas en los documentos de la Conferencia.

Para facilitar las referencias a esas proposiciones, conviene agregar los números siguientes frente a las mismas.



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10	11	F/10(186)	App. 25
14	1	F/14(187)	App. 15A
22	11	USA/22(53)	Point 7.3 de de l'ordre du jour/Agenda Item 7.3/Punto 7.3 del Orden del día
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23	1	USA/23(57)	MOD 1123, 1124, 1125
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25	1	USA/25(59)	MOD 158, 167
26	1	USA/26(60)	SUP 171
	1-2	USA/26(61)	SUP Art. 32
27	1	USA/27(62)	ADD 1148A
28	1	USA/28(63)	ADD 806A
	1	USA/28(64)	MOD 8. (App. 11 Section/Sección I)
	2	- do -	MOD 5. (App. 11 Section/Sección III)
	3	usa/28(65)	Résolution relative à l'établissement d'un manuel à l'usage du service mobile maritime/Resolution relating to the Establishment of a manual for use by the maritime mobile service/Resolución relativa a la preparación de un Manual para uso del servicio móvil marítimo

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29	1	agregarse USA/29(66)	MOD 863
ŕ	2	- do -	MOD 905
40	1	can/40(28)	Point 2.1 de l'ordre du jour/Agenda Item 2.1/Punto 2.1 del Orden del día
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·	1	can/45(34)	Point 7.2 de l'ordre du jour/Agenda Item 7.2/Punto 7.2 del Orden del día
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·	3	CAN/45(37)	Point 7.5 de l'ordre du jour/Agenda Item 7.5/Punto 7.5 del Orden del día & Recommandation/Recommendation/Recommendación
	4	can/45(38)	Point 7.6 de l'ordre du jour/Agenda Item 7.6/Punto 7.6 del Orden del día
47	ı	MDG/47(1)	
56	1	<b>G/</b> 56(62)	Point 2.2 de l'ordre du jour/Agenda Item 2.2/Punto 2.2 del Orden del día

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	15	G/60(65)	Point 7.6 de l'ordre du jour/Agenda Item 7.6/Punto 7.6 del Orden del día
61	1	G/61(66)	SUP 171-172
· Charles And Market State Control of the Control o	1	G/61 <b>/</b> 67)	SUP 971
	1	G/61(68)	SUP 1095-1105
	2	<b>G/61(69)</b>	SUP 1024 & 1025
62	2	G/62(70)	MOD 8
in the state of th	3	→ do →	Résolution relative à l'établissement d'un manuel à l'usage du service mobile maritime/Resolution relating to the Establishment of a manuel for use by the maritime mobile service/Resolución relativa a la preparación y publicación de un Manual para uso del servicio móvil marítimo
63	1	G/63 <b>(</b> 71)	MOD 677
	1	g/63 <b>(</b> 72)	MOD App. 20
	1	<b>c</b> /63(73)	SUP 956
64	23	<b>G</b> /64(74)	Art. 25
	3	c/64(75)	App. 12
65	1-3	c/65(76)	Art. 29
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67	1	g/67(82)	Art. 8
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68	2	G/68(100)	NOC 848-858
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	10	c/68(88)	Art. 24
71	1	HOL/71(30)	Point 2.1 de l'ordre du jour/Agenda Item 2.1/Punto 2.1 del Orden del día
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78	1. 1.	G/78(89)	Art. 7
	i	g/78(90)	Art. 19
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	3-4	g/78(93)	Art. 33
	4	g/78(94)	Art. 34
	5	g/78(95)	Art. 35
:	5	<b>G</b> /78(96)	Art, 36
79	13	G/79(97)	Art. 7
	13	g/79(98)	Art. 33
	14	g/79(99)	Art. 35
80	3	HOL/80(34)	Modification de l'App. 25/Consequential revision of App. 25/Consiguiente modificación del Ap. 25
90	1	J/90(85)	MOD 1013
	2	J/90(86)	MOD 455
	. 5	J/90(87)	MOD 996
	. 2	J/90(88)	ADD 996.1
	2	J/90(89)	MOD 1139
	2 /	J/90(9 <b>0</b> )	MOD 1140
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95	1	RFA/95(29)	App. 19
101	1	SUI/101(1)	MOD 1013
104	1.	DNK/NOR/S/104(1)	Projet de recommandation/Draft Recommendation/Proyecto de Recomendación
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106	1	CAN/106(39)	Recommandation/Recommendation/Recomenda- ción
107	1	CAN/107(35)	Point 7.3 de l'ordre du jour/Agenda Item 7.3/Punto 7.3 del Orden del día
115	2	DNK/NOR/115(1)	Conclusion/Conclusión

# II. Documento N.º 10, página 15, añádase el tercer párrafo siguiente:

- A las asignaciones no conformes al antiguo Plan (1959) pero que hayan dado lugar a una adjudicación en el nuevo Plan.

(Ne concerne pas le texte français) (Does not concern the english text)

Document No 35, page 2, en regard de I/35(26), lire MOD 1337

(Does not concern the english text) (No concierne al texto español)

Documento N° 54, página 2, frente a MOD 197, sustitúyase "...está asimismo atribuida..." por "...está también atribuida..."

(Ne concerne pas le texte français) (Does not concern the english text)

Document No 90, page 2, en regard de MOD 196, remplacer "...est <u>aussi</u> atribuée..." par "...est, <u>de plus</u>, attribuée..."

(Does not concern the english text) (No concierne al texto español)

Document Nº 99, en regar de MOD 199, remplacer "...est <u>aussi</u> attribuée..." par "...par est, <u>de plus</u>, attribuée..."

<u>Documento N.º 99</u>, frente a MOD 199, sustitúyase el texto actual por el siguiente:

MOD 199 En India, la banda 1800-2000 kc/s está también atribuida a título permitido, al servicio móvil aeronáutico.

(Does not concern the english text)

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 122-E 4 September 1967 Original: English

PLENARY MEETING

#### COMMONWEALTH OF AUSTRALIA

### Proposals for the work of the Conference

## Agenda Item 3:

Consequential revision of Appendices 15, 17 and 25 of the Radio Regulations.

### Revision of Appendix 15

The Commonwealth of Australia,

### considering that:

- in regard to the assignable working frequencies for high traffic ships,
  - (a) in so far as Australia is concerned the traffic handled in the High Traffic portions of the Ship Stations Telegraphy bands is very substantially less than that handled in the Low Traffic portions of the same bands;
  - (b) notwithstanding (a) above, the Low Traffic bands, although congested, are presently accommodating the traffic offering;
  - (c) the most effective method of accommodating increasing traffic volumes is by increasing the rate of traffic flow;
  - (d) a most effective method of increasing the rate of traffic flow is by means of direct printing telegraph systems;
  - (e) direct printing telegraph systems, to avoid conditions similar to those at present experienced in the Coast Station Telegraphy bands, should be allocated specific frequency bands;
  - (f) 500 c/s spaced, (170 c/s total shift) direct printing telegraph systems are demonstrably satisfactory for maritime mobile purposes;
  - (g) 500 c/s spaced, (170 c/s total shift) systems are readily produceable and operable within the present limit of the state of the art;

- (h) the present move to direct printing telegraph services is growing and will doubtless be irreversible;
- (i) the ships most likely to be equipped with direct printing telegraph facilities are high traffic ships;
- (j) the move to direct printing telegraph services should ultimately assist in reducing the traffic presently being handled in the Low Traffic bands;
- 2. in regard to the assignable calling and working frequencies for Low Traffic ships,
  - (a) with the advent of very stable transmitting and receiving equipment it appears possible to reduce the spacing of channels in certain of the bands;
  - (b) new techniques allow the continuous tuning of transmitting equipment and render crystal control of this equipment obsolescent;
  - (c) despite the increasing use of direct printing techniques, Al emission, especially for ship station calling will continue in use for some time;
  - (d) in the Australian area the traffic loading in the bands available for working is uneven approximately 85% of traffic being passed on Group A frequencies.
- The little used 8, 12, 16 and 22 Mc/s DSB (calling) and SSB radiotelephone frequencies at present provided in Appendix 15 Section B could be employed to provide channels additional to those listed in Appendix 17 for ship to shore SSB transmissions the corresponding coast station allotments being obtained from the upper portion of the coast station radiotelegraph band. In turn the coast radiotelegraph station assignments so displaced could be accommodated by extending downwards the lower limit of the coast station radiotelegraph band thus reducing the bandwidth available for the Low Traffic radiotelegraph ships.
- 4. The Conference may set aside for Ocean Data purposes a 3.5 kc/s wide band at the upper end of the bands involved in Appendix 15 Section B,

proposes the following amendments:

### APPENDIX 15

Ref.

AUS/122(10)

MOD

Table of Frequencies to be used by Ship Stations <u>for</u> telegraphy, facsimile and special transmission systems in the Bands between 4 and 27.5 Mc/s Allocated Exclusively to the Maritime Mobile Service.

(See Articles 32, 35 and Appendix 17, Nos. 1174 to 1202)

SUP 1.

MOD 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 assignable 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.

SUP 3.

MOD

SECTION A

replace the table in Appendix 15 Section A by the attached table -

SUP

SECTION B

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AUS/122(10) (cont.)

### SECTION-A

and le/s)		Assignable Frequencies Wide Band Telegraphy, for Facsimile and Special Transmission Systems	Assignable Frequencies for Direct Printing Systems - Single channel systems only	Assignable Working frequencies for high traffic ships	Assignable Calling Frequencies	Assignable Working Frequencies for Low Traffic Ships			
4	4140	4142 4158 5 Frequencies spaced 4	4160.5 4168 16 Frequencies spaced 0.5	4168.5 4177 18 Frequencies spaced 0.5	4178 4186 17 Frequencies spaced 0.5	4187 4237.5 102 Frequencies spaced 0.5	4238		
6	6211	62136237 7 Frequencies spaced 4	6239.5 6252 26 Frequencies spaced 0.5	6252.5 6266 28 Frequencies spaced 0.5	6267 6279 25 Frequencies spaced 0.5	6280 6356.5 154 Frequencies spaced 0.5	6357		
8	8280	82828318 10 Frequencies spaced 4	8320.5 8336 32 Frequencies spaced 0.5	8336.5 8355 38 Frequencies spaced 0.5	8356*	8373 8465 185 Frequencies spaced 0.5	8465.		
12	12421	12424 12468 12 Frequencies spaced 4	12470.5 12504 68 Frequencies spaced 0.5	12504.5 12533 58 Frequencies spaced 0.5	12534 12558 49 Frequencies spaced 0.5	12559 12695.5 274 Frequencies spaced 0.5	12696		
16	16562	16564 16620 15 Frequencies spaced 4	16622.5 16672 100 Frequencies spaced 0.5	16672.5 16711 78 Frequencies spaced 0.5	16712 16744 65 Frequencies spaced 0.5	16745 16922.5 356 Frequencies spaced 0.5	16923		
22	22100	2210222146 12 Frequencies spaced 4	22148.5 22186 76 Frequencies spaced 0.5	22186.5 22224 76 Frequencies spaced 0.5	22225 22265 81 Frequencies spaced 0.5	22266 22374.5 218 Frequencies spaced 0.5	22375		
	,		Ass	ignable Working Fr	equencies to Ships of	all Categories			
25	25 070		25070.5						

<sup>\*</sup> For particular conditions concerning the use of 8364 kc/s see No. 1179.

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### Revision of Appendix 17

The Commonwealth of Australia,

### considering that:

- (a) satisfactory SSB operation requires carrier frequency accuracy and stability of a high order;
- (b) for satisfactory SSB operation, the absolute value of carrier frequency error remains essentially constant regardless of the Mc/s order of the carrier frequency;
- (c) the audio frequency response characteristics of SSB transmitters are most unlikely to change with change of the Mc/s order of the carrier frequency;
- (d) DSB frequency assignments have in the past been made on the basis of occupying a 6.0 kc/s bandwidth regardless of the Mc/s order of the carrier frequency;
- (e) the audio frequency response characteristic of radiotelephone transmitters is usually restricted by design and if not by design then by the associated microphone and associated circuits at frequencies below 300 c/s and above 3000 c/s;
- (f) there will be advantage in allowing administrations currently operating fixed, land mobile and aeronautical mobile HF radiotelephone services to use existing 3.0 kc/s channel SSB equipment without modification for Maritime Mobile purposes

proposes the following amendments:

Ref.

AUS/122(11)

APPENDIX 17

Duplex Channelling of the Maritime Mobile Radiotelephone
Bands between 4000 and 23 000 kc/s

(See Article 35)

NOC 1.

NOC 2.

### Document No. 122-E Page 8

Ref.

AUS/122(11) (cont.)

SUP

3.

MOD

4. If an Administration assigns frequencies other than those indicated above in the table, 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.

MOD

Table of Transmitting Frequencies (in kc/s).

- replace the table by the attached table -

AUS/122(11) (cont.)

Page 9

Band	<del></del>	4 Mc/s	Band		<u> </u>	8 Mc/s	s Band		<u> </u>	12	Mc/s Band			16 Mc/s	Band			22 Mc/	s Band	·
Stations and Emission	Coast St Freque		Ship S Frequ		Coast St Freque			Station quency		Station uency		Station quency		Station quency	Ship S Freq	tation uency		Station quency		Station uency
Series No.	6A3,A3B	3A3A, A3H, A3J	6A3,A3B	3A3A,A3J	6A3,A3B	3á3á, á3H, A3J	6A3,A3B	3A3A,A3J	6A3,A3B	3A3A,A3H, A3J	6A3,A3B	3A3A,A3J	6A3,A3B	3A3A,A3H, A3J	6A3,A3B	3A3A,A3J	6A3,A3B	3A3A,A3H, A3J	6A3,A3B	3A3A,A3J
1A 1 1B	4371.1	4369.6 4372.6	4066.1	4064.6. 4067.6	8748.1	8746.6 8749.6	8198.1	8196.6 8199.6_	13133.5	13132 13135	12333.5	12332 12335	17293.5	17292 17295	16463.5	16462 ·	22653.5	22652	22003.5	22002 .
2A	4377•4	4375.9	4072•4	4070 <b>.</b> 9	8754•4	8752.9	8204.4	8202.9 8205.9	13140.5	13139 13142	12340.5	12339 12342	17300.5	17299 17302	16470.5	16469 16472	22660.5	22659	22010.5	22009
3A	4383.8	4382.3 4385.3	4078.8	4077.3	8760.8	8759.3	8210.8	8209.3	13147.5	13146	12347.5	12346	17307.5	17306 17309	16477.5	16476 16479	22667.5	22666	22017.5	22016
4A 4	4390.2	4388.7	4085•2	4080.3 4083.7 4086.7	8767.2	8765.7	8217.2		13154.5	13153 13156	12354.5	12353 12356	17314.5	17313 17316	16484.5	16483 16486	22674.5	22673	22024.5	22023
5A 5 5B	4396.6	4391.7 4395.1 4398.1	4091.6	4090.1	8773.6	8768.7 8772.1 8775.1.	8223.6	8218.7 8222.1 8225.1	13161.5	13160	12361.5	12360 12363	17321.5	17320 17323	16491.5	16490 16493 ·	22681.5	22680	22031.5	22026
6A ·	4403	4401.5	4098	4093.1	8780	8778.5	8230	8228.5	13168.5	13167	12368.5	12367 12370	17328.5	17327 17330	16498.5	16497	22688.5	22687	22038.5	22033
7A 7	4409.4		4104.4	4102.9	8786.4		8236.4		13175.5	13174 13177	12375.5	12374 12377	17335.5	17334 17337	16505.5	16504	22695.5	22694	22045.5	22040
	4415.8		4110.8	4105.9 4109.3	8792.8		8242.8		13182.5	13181	12382.5	12381	17342.5	17341	16512.5	16507 16511	22702.5	22697 22 <b>7</b> 01	22052.5	22047
	4422.2		4117.2	4112.3	8799.2		8249.2		13189.5		12389.5	12384 12388	17349.5	17344 17348	16519.5		22709.5	22704 22708	22059.5	22054 22058
	4428.6	4423.7	4123.6	4118.7	8805.6	8800.7	8255.6		13196.5	13191	12396.5	12391 12395	17356.5	17351 17355	16526.5		22716.5	22711	22066.5	22061 22065
	4434•9		4129.9		8811.9		8261.9	825 <b>7.</b> 1 8260.4	13116.5	13198 13115	12403.5	12398 12402	17265.5	17358 17264	16533.5	16528 16532	22629.5	22718	22073.5	22068 22072
11B 12Å 12		4436.4	·	4131.4	8738.7		8268.2	8263.4 826 <b>6.</b> 7	13123.5	13118 13122	12410.5	12405 12409	17272.5	17267 17271	16540.5	16535 16539	22636.5	226 <u>3</u> 1 226 <u>3</u> 5	22080.5	22075 22079
12B 13A 13	·	<del></del>				8740.2 8743.4		82 <b>69.7</b> 82 <b>73.</b> 0		13125 13128.5	,	12412 12415.5	17279.5	17274 17278	16547•5	16542 16546	22643.5	22638	22087.5	22082 22086
13B 14A 14 14B													17286.5	17281 17285 17288	16554.5	16549 16553 16556	.;	22645 22648 <b>.</b> 5		22089

Coast and Ship Stations - Emission 3A3A, A3J

15A	4134.5	6202
15B	-	6205.5 *

<sup>\*</sup> For particular conditions concerning the use of 6205.5 kc/s, see Nos. 1251 and 1353.

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### Revision of Appendix 25

The Commonwealth of Australia has no proposals to make at this juncture in connection with revision of this Appendix.

Consequential changes resulting from the proposals to modify Appendices 15 and 17.

Ref.

AUS/122(12) MOD 447

### Article 7

(a) Ship stations, telephony

4063 - 4133 kc/s

8195 - 8265 8276.5 kc/s

12330 - <del>12400</del> <u>12417.5</u> kc/s

16460 - <del>16530</del> 16558.5 kc/s

22000 - <del>22070</del> 22096.5 kc/s

AUS/122(13) MOD .448

(b) Coast stations, telephony

4368 - 4438 kc/s

8745 8735.5 - 8815 kc/s

<del>13130</del> 13113 - 13200 kc/s

<del>17290</del> <u>17262</u> - 17360 kc/s

22650 22626 - 22720 kc/s

## Document No. 122-E Page 12

Ref.		,	
AUS/122(14)	ADD .	448A	(c) Coast and ship stations, telephony (single sideband only)
			4133 - 4136.5 kc/s
			6200 - 6207.5 kc/s
AUS/122(15)	SUP	449	
		:	and the same of th
•			
AUS/122(16)	SUP	450	
A007 122(10)		<del>ار</del> ټ	
			Trings ago, concernos or major acultimento yilidiga.
AUS/122(17)	MOD	451	(e) Ship stations, wideband telegraphy, facsimile and special transmission systems
			4140 - 4160 kc/s
			6211 - 6240 <u>6239</u> kc/s
			8280 - 8320 kc/s
			12421 - <del>12471</del> <u>12470</u> kc/s
			16562 - 16622 kc/s

22100 - 22148 kc/s

Ref.

AUS/122(18)

MOD

452

(f) Ship stations, telegraphy

4160 - 4238 kc/s

6240 6239 - 6357 kc/s

8320 - 8476 8465.5 kc/s

12471 12470 - 12714 12696 kc/s

16622 - <del>16952</del> 16923 kc/s

22148 - <del>2240</del>0 <u>22375</u> kc/s

25070 - 25110 kc/s<sup>1</sup>

AUS/122(19) MOD 452.1

The frequencies in the band 25070 - 25110 kc/s shall be used as working frequencies in addition to frequencies in the band 22148 - 22400 22375 kc/s

AUS/122(20) MOD 453

(g) Coast stations, telegraphy and facsimile

4238 - 4368 kc/s

6357 - 6525 kc/s

8476 8465.5 - 8745 8735.5 kc/s

12714 12696 - 13130 13113 kc/s

<del>16952</del> <u>16923</u> - <del>17290</del> <u>17262</u> kc/s

22400 <u>22375</u> - 22650 <u>22626</u> kc/s<sup>1</sup>

### Document No. 122-E Page 14

Ref.

AUS/122(21)

MOD

453.1

 $^{1}$ 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 22375 - <del>22650</del> 22626 kc/s.

AUS/122(22)

MOD

454

55550

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

4177.5 - 4187 4186.5 kc/s 4177 6266.5 - 6280.5 6279.5 kc/s 6265.5 8355.5 - 8374 8372.5 kc/s 8354 12533.5 - 12561 12558.5 kc/s 12531 16711.5 - 16748 16744.5 kc/s 16708 22224.5 - 22270 22265.6 kc/s

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110	Τ.	٠
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## Article 9

AUS/122(23) 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

4238 - 4368 kc/s

6357 - 6525 kc/s

8476 8465.5 - 8745 8735.5 kc/s

12714 12696 - 13130 13113 kc/s

16952 16923 - 17290 17262 kc/s

22400 22375 - 22650 22626 kc/s

### Document No. 122-E Page 16

Re	f	
-	-	-

Ar	ti	c]	Le	32

AUS/122(24) 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 four five parts, beginning at the low frequency end.

AUS/122(25)

ADD

1150A

A band of working frequencies for ship stations using direct printing systems

AUS/122(26)

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:

4238 - 4368 kc/s

6357 - 6525 kc/s

8476 8465.5 - 8745 8735.5 kc/s

12714 12696 - 13130 13113 kc/s

<del>16952</del> <u>16923</u> - <del>17290</del> <u>17262</u> kc/s

<del>22400</del> 22375 - <del>22650</del> <u>22626</u> kc/s

(See No. 453.1)

Ref.			
AUS/122(27)	MOD	1174	\$29(1) The calling frequencies assigned to ship stations are included within the following band limits:
			4177 4177.5 - 4187 4186.5 kc/s
			6265.5 <u>6266.5</u> - 6280.5 <u>6279.5</u> kc/s
			<del>8354</del> <u>8355.5</u> - <del>8374</del> <u>8372.5</u> kc/s
			12531 12533.5 - 12561 12558.5 kc/s
			16768 16711.5 - 16748 16744.5 kc/s
			<del>22220</del> <u>22224.5 - 22270</u> <u>22265.5</u> kc/s
AUS/122(28)	MOD	1175	(2) In the band-4177-to-4187-ke/s bands listed in No. 1174 the calling frequencies shall be uniformly distributed. They shall be preferably spaced 1-ke/s 0.5 kc/s apart. The-extreme-frequencies-assignable-ere-4178 and-4186-ke/s-as-indicated-in-Section A-of Appendix-15
AUS/122(29)	SUP	1176	
AUS/122(30)	MOD	1177	530. 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. In the bands-between 4000-and-18000-ke/s, the frequencies-assigned-to-each-ship-station

shall-be-in-harmonie-relationship.

### Document No. 122-E Page 18

### Ref.

AUS/122(30) (cont.) 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 as outlined in No. 1175. The same system of uniform distribution shall be applied in the assignment of calling frequencies in the band 22220 22224.5 to 22270 22265.5 kc/s

AUS/122(31)

ADD

1180A

In all bands the working frequencies for high and low traffic ship stations and for ship stations using direct printing systems are spaced 0.5 kc/s apart. The frequencies assignable are shown in Appendix 15.

AUS/122(32)

SUP

1181 - 1187

AUS/122(33)

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:

4140 - 4160 kc/s

6211 - 6240 6239 kc/s

8280 - 8320 kc/s

12421 - 12471 12470 kc/s

16562 - 16622 kc/s

22100 - 22148 kc/s

R	e	f	
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AUS/122(34) MOD 1192

§39. The working frequencies assigned to high traffic ships are included within the following band limits:

4160	4168.25	_	4177	4177.5 kc/s
6240	6252.25	-	6265.5	6266.5 kc/s
8320	8336.25	-	8354	<u>8355.5</u> kc/s
12471	12504.25		12531	12533.5 kc/s
16622	16672.25	_	16708	16711.5 kc/s
<del>22148</del>	22186.25	_	55550	22224.5 kc/s

AUS/122(35) MOD 1196

\$42. Working frequencies assigned to low traffic ship stations shall be included within the following band limits:

 4187
 4186.5
 4238 kc/s

 6280.5
 6279.5
 6357 kc/s

 8374
 8372.5
 8476 8465.5 kc/s

 12561
 12558.5
 12714 12696 kc/s

 16748
 16744.5
 16952 16923 kc/s

 22270
 22265.5
 22400 22375 kc/s

AUS/122(36) SUP

1197 - 1199

### Document No. 122-E Page 20

F	₹(	9	f	

AUS/122(37) MOD 1200

(4) Each Administration shall assign successively ene-such-pair-of frequencies to each of its ship stations commencing at either end of the band. When all available working frequencies in a band have been assigned in this manner, the process shall be repeated as often as is necessary to satisfy all its requirements and to ensure a uniform distribution of assignments throughout the band.

AUS/122(38) SUP 1201

AUS/122(39) ADD 1201A

(e) Working frequencies for ship stations using direct printing systems

The working frequencies assigned to ship stations using direct printing systems are included within the following band limits:

4160 - 4168.25 kc/s
6239 - 6252.25 kc/s
8320 - 8336.25 kc/s
12470 - 12504.25 kc/s
16622 - 16672.25 kc/s
22148 - 22186.25 kc/s

Ref.

AUS/122(40)

ADD

1201B

Each administration shall assign to each ship under its jurisdiction and employing a direct printing system, one or more series of working frequencies shown in Appendix 15.

The total number of series assigned to each ship shall be determined by traffic

requirements.

AUS/122(41)

SUP

1205 - 1206

. .

Re	ſ	

### Article 33

AUS/122(42)

MOD

1236

89(1) A ship station calling a coast station by radio-telephony 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.

AUS/122(43)

MOD

1249

\$13(1) When a ship station is called by a coast station, it may reply either on the ealling-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.

AUS/122(44)

MOD

1251

(3) In the Tropical Zone of Region 3, when a station is called on 6204 6205.5 (CF 6204) kc/s, it should reply on the same frequency.

Ref.			Article 35
AUS/122(45)	SUP	1352	
AUS/122(46)	MOD	1353	\$15. In the part of the Tropical Zone situated in Region 3, 6204 6205.5 (CF 6204) kc/s using double single 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.
AUS/122(47)	SUP	1354	Control Contro
AUS/122(48)	SUP	1356 - 13	557

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 123-E 4 September 1967 Original : English

PLENARY MEETING

### UNITED STATES OF AMERICA

### Proposals for the work of the Conference

### Agenda Item 3:

Revision of Appendix 15.

### U.S. Proposals

- a) Revise Section A, Appendix 15, in respect of frequencies assignable to high traffic ships; and \_see also Proposal No. USA/18(26) wherein it was indicated that the spacing between assignable frequencies for high traffic ships was under study\_7.
- b) Revise Article 32 as a consequence of changes in channel spacing resulting from the proposals referred to in paragraph a) above.

### APPENDIX 15 - SECTION A

(Revise page 3, Document No. 18, to read as in the attachment hereto.)



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# Frequencies assignable to ship radiotelegraph stations using the Maritime Mobile Service Bands between 4 and 27.5 Mc/s

ATTACHMENT

	Li	mits		•	,	Limi	its
ind lc/s)	-	Assignable frequencies wide-band telegraphy, facsimile and	-	ing frequencies for affic ships	Calling frequencies	Assignable working frequencies for low traffic ships	
•		special transmission systems	teleprinter and manual data transmission transmission			GROUP A GROUP B	
4	4140	41424158 5 Frequencies spaced 4	4160.54167.5 15 Frequencies spaced 0.5	4168.64176.4 14 Frequencies spaced 0.6	4178 4186 9 Frequencies spaced 1	41884212	4238
6	6211	62136237 7 Frequencies spaced 4	6240.56251.5 23 Frequencies spaced 0.5	6252.96264.6 14 Frequencies spaced 0.9	9 Frequencies spaced 1.5	62826318 6318.755354.75 98 Frequencies spaced 0.75	6357
8	8280	82828318 10 Frequencies spaced 4	8320.58335.5 32 Frequencies spaced 0.5	8337.28352.8 14 Frequencies spaced 1.2	8356	83768424 84258473 98 Frequencies spaced 1	8476
12	12421	1242412468 12 Frequencies spaced 4	12471.512504.5 67 Frequencies spaced 0.5	12505.812529.2 14 Frequencies spaced 1.8	12534 12558 9 Frequencies spaced 3	1256412636 12637.512709.5 98 Frequencies spaced 1.5	12714
16	16562	1656416620 15 Frequencies spaced 4		16674.416705.6 14 Frequencies spaced 2.4	16712 16744 9 Frequencies spaced 4	1675216848 1685016946 98 Frequencies spaced 2	16952
<b>2</b> 2	22100	2210222146 12 Frequencies spaced 4	22148.522185.5 75 Frequencies spaced 0.5	22187.122218.3 14 Frequencies spaced 2.4	22225	22272.522332.5 2233522395 50 Frequencies spaced 2.5	22400
			Assignable working frequencies to high or low traffic ships				
<b>2</b> 5	25 070		25 075 25 105   25 110				

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Ar	t	i	c	1	e	32

Use of frequencies for radiotelegraphy in the Maritime Mobile and Aeronautical Mobile Services.

Section V. Bands between 4000 and 27 500 kc/s.

Ref.

USA/123(67)

NOC

1180

2. Working frequencies of Mobile Stations

a) Channel spacing and assignment of frequencies.

USA/123(68) MOD 1181

\$ 33 (1) The working frequencies for high traffic ships in the band 4160 to 4177 ke/s are so spaced as to provide channels 0.5 ke/s wide; the extreme frequencies assignable being 4161 and 4176 ke/s as shown for teleprinter and data transmission in each of the 4, 6, 8, 12, 16 and 22 Mc/s bands and to provide 14 working frequencies for manual transmission in each of the same bands with spacings of 0.6, 0.9, 1.2, 1.8, 2.4 and 2.4 kc/s, respectively, all being in conformity with the assignable frequencies indicated for such use in Section A of Appendix 15.

USA/123(69)

. NOC

1182

### Document No. 123-E Page 6

Ref.			
USA/123(70)	Moc	1183	\$ 34. The working frequencies assigned to each low traffic and manual telegraph high-traffic 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.
USA/123(71)	NOC	1184	watchered to the control of the cont
USA/123(72)	MOD	1185	a) in the high traffic band, the working frequencies are spaced 6 2.4 kc/s apart, the extreme frequencies assignable being 22-151, 22 187.1 and 22 217 22 218.3 kc/s;
USA/123(73)	NOC	1186	
USA/123(74)	NOC	1187	

### Reasons:

To retain the harmonic relationship of crystal controlled ship stations in the low traffic and manual telegraph high-traffic bands while at the same time encouraging the use of frequency synthesis techniques for newer equipment expected to be employed in the high traffic ship bands.

Ref. USA/123(74) (cont.)

### Background:

Frequency synthesizers capable of 0.1 kc/s incremental tuning are adaptable to all foreseen types of operation in the HF maritime mobile bands and should be encouraged in the interest of improved spectrum utilization. In the low traffic ship bands, where a frequency tolerance of 0.02% applies, it is accepted practice for crystal-controlled ship stations to operate on frequencies deployed around their nominally assigned frequencies within the prescribed tolerance. Ship stations employing synthesizers rather than crystal control could observe the existing practice. Frequencies designated for calling and for purposes other than manual transmission are compatible also with the 0.1 kc/s synthesizer technique.

Assuming a frequency tolerance of 50 parts per million for high traffic ships as proposed by the United States, an assignment plan has been developed which is compatible with the 0.1 kc/s incremental tuning. At the same time it will still be possible to provide for harmonically related assignments in the bands 4 through 16 Mc/s for those ship stations using transmitters where this technique is employed. The 22 Mc/s band does not lend itself to the harmonic consideration in any event.

The smallest practicable frequency spacing at 4 Mc/s is roughly 0.6 kc/s if one considers the requirement for harmonic relationship between bands, based on crystal oscillators at 2 Mc/s, the proposed tolerance of 0.005%, the manual telegraph bandwidth of 100 c/s, and an allowance of about 200 c/s to account for receiver stability and selectivity aspects. It would appear that about 0.5 kc/s would be the absolute minimum channel separation under average conditions. However, the use of 0.5 kc/s separation at 4 Mc/s when harmonically related to the next higher band, 6 Mc/s, would provide a separation of 0.75 kc/s which is not compatible with 0.1 kc/s incremental tuning. The spacing in the high traffic band for manual transmission is therefore proposed to be 0.6 kc/s at 4 Mc/s.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 124-E 4 September 1967 Original: English

PLENARY MEETING

#### UNITED STATES OF AMERICA

### Proposals for the work of the Conference

### Agenda Item 3

Consequential revision of Appendix 25.

The United States in USA/18(28), proposed:

- (1) that Appendix 25 be abrogated by the Conference;
- (2) that Article 9 be amended to provide that Nos. 496-540 should, subject to suitable transitional arrangements, thereafter apply to the bands listed in Article 7, No. 448, and, as appropriate, to those listed in No. 447, in lieu of the special procedures contanined in Nos. 541-551 and 577-586, which latter should be deleted.
- (3) that the conference should, by resolution, provide instructions to Administrations and the I.F.R.B. covering the transitional arrangements for the conversion period from double sideband (DSB) to single sideband (SSB).

The factors which led the United States to propose the abrogation, rather than the revision, of Appendix 25 may be asummarized briefly as follows:

- (1) the difficulty of providing allotments for all stated requirements, whether or not they are to be activated during the life of a new Plan;
- (2) the need inherent in an allotment plan to relegate to 2b date status all subsequent assignemts not provided for by allotment;
- (3) the desirability of fulfilling, with respect to the HF maritime mobile radiotelephony service, the intent of the Atlantic City Conference to apply the normal Article 9 procedures to all parts of the spectrum for which engineered plans have been drawn up and brought into use:



- (4) the experience gained as the result of abrogating the HF coast telegraph Plan by the Administrative Radio Conference (Geneva, 1959);
- (5) the lack of time for the Conference to obtain the requirements of all Members and Associate Members of the Union and draw up a Plan:
- (6) the impracticability for Administrations to determine with reasonable accuracy their requirements for a Plan that, based upon the proposals of several Administrations, may not be implemented fully within the next ten years.

Noting that several proposals have been submitted for consideration by the Conference which give detailed draft texts for a Resolution to cover the transitional arrangements during the conversion period, the United States considers it sufficient at this time to set forth below the basic points upon which it considers that those arrangements should be based.

(USA/124(75)

- 1. The foremost objective should be to facilitate the conversion of all DSB operations to SSB, so that the increase in the number of available channels can satisfy
  - (a) the additional needs of Administrations which have allotments in Appendix 25:
  - (b) the needs of Administrations for which no allotments have been included in that Appendix.

USA/124(76)

2. To that end, the procedure to be applied should afford a careful balance between the preservation to the extend practicable of the rights accruing to those converted assignments for which allotments are contained in Appendix 25, and the satisfaction of needs not provided for therein.

Ref.

### Ref.

USA/124(77)

- The procedure should draw a clear distinction among the following three categories of SSB assignments:
  - (a) those which are the conversion to SSB of DSB assignments listed in the Master Register for which there are corresponding allotments in Appendix 25.

    Where two SSB assignments have been derived from one DSB allotment, only one of them should be considered as the converted assignment:
  - (b) those which are the conversion to SSB of DSB assignments listed in the Master Register but for which there are no corresponding allotments in Appendix 25, where the use of the DSB assignments did not give rise to complaints of harmful interference;
  - (c) all others.

### USA/124(78)

Administrations converting their coast stations referred to in 3a above from DSB to SSB should be required, in principle, to convert to the upper halves of their DSB allotments. However, an Administration may choose to convert to the lower half of the DSB allotment where harmful interference was regularly experienced in its DSB operations on that channel from the operations of other countries on their co-channel DSB allotments, provided agreement has been reached by the beginning of the conversion period among the Administrations concerned, with the assistance of the I.F.R.B.

### USA/124(79)

5. It will be necessary to confine SSB operations on the lower halves of the DSB channels, whether converted assignments or new assignments, to the A3A and A3J modes, in order to avoid causing harmful interference during the conversion period to operations in the upper halves of the adjacent lower channels.\*

Except for the interference aspect, the exclusion of A3H on the lower channel would be of no operational significance inasmuch as A3H would be used only for compatibility with DSB ship installations during the conversion period, and the need would occur only on the upper channel.

### Document No. 124-E Page 4

### Ref.

USA/124(80)

- 6. On the date prescribed by the Conference by which all coast stations must be equipped for SSB (and cease DSB) operation, the I.F.R.B. should undertake a re-examination of the SSB listings in the Master Register, disregarding any A3 or A3B listing that may not yet have been deleted, as well as A3H emissions. For each listing
  - (a) the date of 3 December, 1951, should be entered in Column 2a if there was a corresponding allotment in Section I of Appendix 25, notified as having been brought into use, and the assignment was in the upper half of the DSB channel (or in the lower half in a particular instance where the conditions to make that the converted channel were satisfied);
  - (b) the date of 4 December, 1951, should be entered in Column 2a or 2b, depending upon the results of the technical examination, if there was a corresponding DSB allotment in Section II of Appendix 25, notified as having been brought into use, and if the assignment was in the upper half of the DSB channel (or in the lower half in a particular instance where the conditions to make that the converted channel were satisfied);
  - (c) where it is the conversion to SSB of a DSB assignment previously notified to the Board as having been brought into use but for which no corresponding allotment appears in Section I or II of Appendix 25 and the use of the DSB assignment did not give rise to complaints of harmful interference, the date the DSB assignment was received by the Board should be entered in Column 2a or 2b, depending upon the results of the technical examination; the examination should be conducted in the order in which the corresponding DSB notice was received by the Board:
  - (d) for all other SSB assignments, the date the notices thereof were received by the Board should be entered in Column 2a or 2b, depending upon the results of the technical examination; the examination should be conducted for those assignments in the order in which the corresponding notices were received by the Board.

### Ref.

USA/124(81)

7. Independent sideband operation should be permitted in the exceptional case, in addition to SSB operations, where a particular station desiring to communicate with particular ships appropriately equipped has received favorable findings for two adjacent SSB assignments, subject to agreement among the Administration concerned.

The adoption of the above-outlined proposals would also require the consequential deletion of Article 7. No. 457.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 125-E 4 September 1967 Original: English

### PLENARY MEETING

### UNITED STATES OF AMERICA

### Proposals for the work of the conference

### Agenda Item 1

The United States of America has studied carefully all proposals distributed to date by the I.T.U., relative to the W.A.R.C. on maritime mobile matters. In the interest of clarity and completeness, and thereby expediting the work of the Conference, the United States of America wishes to amend its earlier proposals in the following respects:

Ref.

1. Amend USA/16(6), No. 1339BU, (Document No. 16, page 8) to read as follows:

USA/16(6)(Rev.)

ADD 1339BU

(11) Stations using single sideband single channel emissions A3A and A3J in accordance with Nos. 1339BP through 1339BT shall operate in the upper or in the lower channel. Use of emission A3H by these stations shall be limited to the upper channel and shall conform to Nos. 1339BP through 1339BT and to Nos. 1339AA through 1339AE.

2. Amend USA/16(11), No. 1358BS, (Document No. 16, page 16) to read as follows:



### Document No. 125-E Page 2

### Ref.

USA/16(11)(Rev.)

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-frequencies-in-the-Table. Use of emission A3H shall be limited to the upper channel only and shall conform to Nos. 1358AA through 1358AE. The assigned frequencies of these channels shall be at the appropriate values listed in columns 2, 5, 7 or 10 of the Table of Appendix 17.

### Reasons:

During the transition from DSB to SSB, the use of A3H on the lower channel could result in harmful interference to operation on the channel immediately below. The exclusion of A3H on the lower channel will be of no operational significance inasmuch as A3H will be needed only for compatibility with DSB ship installations during the conversion period, and the need will occur only on the upper channel.

3. Amend USA/20(33), (Document No. 20, page 1) to read as follows:

USA/20(33)(Rev.)

MOD 974

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

Ref.

4. Amend USA/16(12), (Document No. 16, page 18) to read as follows:

USA/16(12)(Rev.)

MOD

984

(a) Send class A3 or A3H emissions and receive class A3 and A3H emissions with carrier frequency on 2182 kc/s.

5. Add a new U.S.A. proposal with respect to No. 445, (Article 7) to read as follows:

USA/125(82)

MOD 445

(4) In Regions 2 and 3, the-frequency 2638 frequencies 2636.4 and 2639.4 kc/s is are used as on single sideband intership radiotelephony working frequency 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, this-frequency is these frequencies are protected by a guard-band between 2634 and 2642 kc/s.

6. Amend USA/16(8), with respect to No. 1351, (Document No. 16, page 10), to read as follows:

USA/16(8)(Rev.)

MOD

1351

\$ 13. All stations on ships making international voyages should be able to use the intership frequency 2638 2639.4 kc/s /carrier frequency 2638 kc/s / and, on the condition that only class A3A or A3J emission is used, on the intership frequencies whose carriers are 2170 and 2190.5 kc/s, if required by their service.

1967,

**GENEVA, 1967** 

Document No. 126-E 4 September 1967 Original: English

#### PLENARY MEETING

#### UNITED STATES OF AMERICA

#### Proposals for the work of the Conference

Ref.

USA/126(83)

DRAFT RECOMMENDATION No. ...

Relating to the utilization of space communication techniques in the Maritime Mobile Service

The World Administrative Radio Conference, Geneva,

#### considering

- a) the efforts of the International Telecommunication Union to reduce congestion in the frequency bands available to the maritime mobile service;
- b) the fact that ships at sea are completely dependent upon the use of radio for communication; and
- c) the potential value of adapting satellite relay techniques to the communications requirements of the Maritime Mobile Service.

#### noting

- a) that limited tests have demonstrated the feasibility of effecting communications between ships and coast stations by means of relaying through a stationary satellite;
- b) that there are now no frequency bands allocated to the maritime mobile service wherein provision is made for the use of space communication techniques;
- c) that the frequencies available to the maritime mobile service by virtue of Appendix 18 to the Radio Regulations are technically suitable for the use of space communication techniques, but that the congestion foreseen therein from



### (cont.)

terrestrial maritime mobile usage even after implementation of reduced channel spacing is expected to preclude the accommodation of an operational system employing space communication techniques;

- d) that the Intergovernmental Maritime Consultative Organization (I.M.C.O.) has undertaken a study of the requirements for maritime safety that may be satisfied by utilization of space communication techniques; and
- e) that the C.C.I.R. has a study group on Space Systems and Radioastronomy as well as a study group on mobile service and that close coordination of the work of the C.C.I.R. and I.M.C.O. in this field is desirable,

#### recommends

that administrations determine the foreseeable operational requirements of the maritime mobile service that can be satisfied through the application of space techniques, with a view to their accommodation in a technically suitable frequency band higher in the spectrum than band 8 and of sufficient width to meet the overall needs of the mobile service.

**GENEVA, 1967** 

Document No. 127-E 13 September 1967 Original: English

PLENARY MEETING

#### Memorandum by the Secretary-General

#### CONVENING OF THE CONFERENCE

#### 1. Background

The Radio Regulations, Geneva, 1959, foresaw, in No. 457, that:

"If necessary an extraordinary Administrative Radio Conference to which all the Members and Associate Members of the Union would be invited could be convened ..... for the purpose of revising Appendix 25 and if required, Appendix 17, as well as other relevant provisions of these Regulations."

At its 20th Session in 1965, the Administrative Council resolved to request the Plenipotentiary Conference to provide credits to enable an Extraordinary Administrative Radio Conference to be convened in late 1966 or early 1967 (Resolution No. 564 - see Annex 1). The Secretary-General was instructed to consult administrations in the meantime on the need for such a conference and to ask for their views on a basic agenda.

The Plenipotentiary Conference, Montreux, 1965, having examined the report by the Secretary-General on the result of the consultation carried out in accordance with Administrative Council Resolution No. 564, decided that a World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service should be held in Geneva in the second quarter of 1967, for not more than eight weeks (Resolution No. 20 - see Annex 2). The Council was invited to draw up the detailed agenda for the conference and to fix the opening date and duration.

During its 21st session, the Council consulted the Membership of the Union by circular-telegram on a detailed agenda which it had prepared. It also proposed that, to ensure adequate preparation, the Conference should not be convened until 18 September 1967. The proposals of the Council having been approved by a majority of the Members of the Union which replied to the circular-telegram, the Council adopted Resolution No. 590 (see Annex 3). This Resolution was slightly modified by the Council during its 22nd Session. Paragraph II under "resolves" now reads:



Page 2

"II. ... that agenda items 5, 7.2 and 7.3, which are questions under study by the C.C.I.R., would however be dealt with by the Conference only if answers thereto are provided by the C.C.I.R."

#### 2. Invitations to Members of the Union

Having obtained the agreement of the Government of the Swiss Confederation for the conference to be organized in Geneva, invitations were issued on 26 October 1966 to all Members of the Union with the exception of Rhodesia (cf. Administrative Council Resolution No. 599).

Invitations were subsequently sent to the Maldive Islands, Guyana, Lesotho and Barbados when they became Members of the Union.

A summary of the replies received appears in Annex 4.

#### 3. Invitation to the United Nations

On 3 November 1966 the Secretary-General of the United Nations was invited to send representatives to take part in the Conference in a consultative capacity. On 11 January 1967 the Secretary-General informed us that it would not be possible for a representative of the United Nations to attend.

#### 4. Invitations to Specialized Agencies

On 13 November 1966 the following specialized agencies were invited to send representatives to take part in the Conference in an advisory capacity:

World Meteorological Organization (W.M.O.)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Inter-Governmental Maritime Consultative Organization (I.M.C.O.)

International Civil Aviation Organization (I.C.A.O.)

All except I.C.A.O. accepted the invitation.

#### 5. Notification to international organizations

On 3 November 1966, the following organizations were notified of the convening of the Conference:

International Air Transport Association (I.A.T.A.)

International Radio Maritime Commission (C.I.R.M.)

International Chamber of Shipping

Applications for admission to the Conference have been received from the:

International Radio Maritime Commission and the International Chamber of Shipping

and also from:

the International Federation of Radio Officers
the International Shipping Federation.

Mohamed MILI Secretary-General a.i.

Annexes: 4

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#### ANNEX 1

R No. 564

POSSIBLE NEED FOR AN EXTRAORDINARY ADMINISTRATIVE RADIO CONFERENCE TO DEAL WITH MATTERS RELATING TO THE MARITIME MOBILE SERVICE

The Administrative Council,

#### having examined

the proposal by the representative of the United Kingdom of Great Britain and Northern Ireland contained in Document No. 3392/CA20;

#### considering that

- a) subject to any decisions which might be taken by the Plenipotentiary Conference, there appears at present to be no immediate necessity for convening an Ordinary Administrative Radio Conference;
- b) but that a number of matters relating to the Maritime Mobile Service will require consideration in the near future, particularly in the light of the recommendations of the XIth Plenary Assembly of the C.C.I.R.;

#### noting

the provisions of number 457 of the Radio Regulations, Geneva, 1959;

#### resolves

to request the Plenipotentiary Conference to provide credits to enable an Extraordinary Administrative Radio Conference to be convened in late 1966 or early 1967;

#### instructs the Secretary-General

1. in the meantime, to consult administrations on the need for an Extraordinary Administrative Radio Conference at that time and to ask for their views on the following basic agenda:

- Page 6
- 1.1 to consider recommendations contained in the Final Report of the Panel of Experts and in particular Recommendation No. 3,
- 1.2 to establish the extent to which effect should be given to those recommendations and the means of doing so,
- 1.3 to review and revise as necessary, in the light of Recommendation No. 3 of the Panel of Experts, the Allotment Plan contained in Appendix 25 to the Radio Regulations and, if required, the provisions of Appendix 17 to those Regulations,
- 1.4 to consider other proposals which may be submitted by administrations with a view to minimizing congestion in the high frequency maritime mobile bands, and to determine the action to be taken thereon,
- 1.5 to consider the implications for the Radio Regulations of the revised International Code of Signals,
- 1.6 to make such revision of the Radio Regulations, 1959, as may be necessary to bring into force the decisions of the Conference in respect of the foregoing matters;
- 1.7 in accordance with Nos. 61 and 249 of the International Telecommunication Convention, Geneva, 1959, to adopt such provisions as may be additional to those contained in the Radio Regulations, 1959;
- 2. to ask administrations whether radio frequency requirements for oceanographic communications could also usefully be considered at such a Conference;
- 3. to invite administrations to indicate any further items which they consider would be appropriate for inclusion in the agenda of such a conference;
- 4. to submit a report on the matter to the forthcoming Plenipotentiary Conference;
- 5. to send a copy of this Resolution to the Secretary-General of the Intergovernmental Maritime Consultative Organization.

See also Resolution No. 566.

Ref.: Docs. 3392, 3402, 3431 and 3439/CA20 - April/May 1965

#### ANNEX 2

#### RESOLUTION No. 20

### WORLD ADMINISTRATIVE RADIO CONFERENCE TO DEAL WITH MATTERS RELATING TO THE MARITIME MOBILE SERVICE

The Plenipotentiary Conference of the International Telecommunication Union (Montreux, 1965),

#### in view of

the Report by the Administrative Council (Part VI, section 1.2);

#### having examined

the report by the Secretary-General on the result of the consultation carried out in accordance with Administrative Council Resolution No. 564;

#### decides

- that a World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service shall be held in Geneva in the second quarter of 1967, for not more than eight weeks;
- 2. that the purposes of such a conference shall be to consider the provisions of the Radio Regulations pertaining to the maritime mobile service and in particular to consider:
  - 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 radio-telephone bands;
  - the adoption of the pertinent portions of the revised International Code of Signals;
  - the necessary revisions to Appendices 15, 17, 18 and 25 to the Radio Regulations and consequential amendments to the Radio Regulations related thereto;
  - the desirability of accommodating the HF requirements for oceanographic communication in the HF maritime mobile bands;

### Annex 2 to Document No. 127-E Page 8

#### invites the Administrative Council

- to draw up the detailed agenda for the Conference at its 1966 annual session;
- 2. to fix the opening date and the duration of the Conference.

#### ANNEX 3

R No. 590

WORLD ADMINISTRATIVE RADIO CONFERENCE TO DEAL WITH MATTERS RELATING TO THE MARTITIME MOBILE SERVICE

The Administrative Council,

#### in view of

Resolution No. 20 of the Plenipotentiary Conference (Montreux, 1965);

#### having\_examined

the Report by the Secretary-General contained in Document No. 3469/CA21;

#### considering

that the proposals of the Administrative Council contained in Circular-telegram No. 43/14 of 14 May 1966 were approved by a majority of the Members of the Union which replied thereto (cf. Document No. 3569);

#### resolves

I. that the World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service will meet in Geneva on 18 September 1967 for a maximum duration of seven weeks with the following agenda:

To consider, and revise as necessary, the provisions of the Radio Regulations and of the Additional Radio Regulations pertaining to the Maritime Mobile Service including:

- 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.
- 2. Questions concerning the exclusive HF Maritime Mobile bands:
  - 2.1 frequency bands for coast and ship radiotelephone stations in the 6 Mc/s band,
  - 2.2 frequencies for intership radiotelephone traffic,
  - 2.3 the possible use of the high traffic bands by tankers of 12,500 tons gross,

- 2.4 the desirability of accommodating requirements for oceanographic communications.
- 2.5 frequencies to be used by coast stations for wide band telegraphy, facsimile and special transmission systems.
- 3. Consequential revision of Appendices 15, 17 and 25 to the Radio Regulations.
- 4. Possible revision of Appendix 18 to the Radio Regulations.
- 5. Classes of emission to be used on the international distress and calling frequencies 500 kc/s and 2182 kc/s.
- 6. Examination of the pertinent portions of the revised International Code of Signals.
- 7. Other matters relating to the Maritime Mobile Service:
  - 7.1 Data transmission from ship stations,
  - 7.2 conditions for the use of emergency position-indicating beacons,
  - 7.3 conditions for the use of selective calling devices,
  - 7.4 hours of service for ship stations,
  - 7.5 frequencies to be assigned for the transmission by television of port radar images,
  - 7.6 the establishment of a separate category for mobile radiotelephone traffic on inland waterways.
- II. that agenda items 5, 7.2 and 7.3, which are questions under study by the C.C.I.R., would however be dealt with by the Conference only if answers thereto are provided by the XIth Plenary Assembly of the C.C.I.R. (0slo, 1966);

#### instructs the Secretary-General

to take all necessary steps for convening the Conference and to submit a report on the matter to the Council at its 1967 annual session.

Ref.: Docs. 3469, 3543, 3545, 3551, 3569, 3601, 3602 and 3608/CA21 - May/June 1966

#### ANNEX 4

Member	Invitation accepted	Invitation declined
Afghanistan		
Albania (People's Republic of)		
Algeria (Algerian Democratic and Popular Republic)	x	·
Saudi Arabia (Kingdom of)	x	
Argentine Republic	x	
Australia (Commonwealth of)	x	
Austria	x	·
Barbados		
Belgium	x	
Bielorussian Soviet Socialist Republic		
Burma (Union of)		x
Bolivia		
Brazil	x	
Bulgaria (People's Republic of)	x	
Burundi (Republic of)		
Cambodia (Kingdom of)		
Cameroon (Federal Republic of)		
Canada	x	
Central African Republic		<b>X</b>

Member	Invitation accepted	Invitation declined	
Ceylon	x		
Chile			
China	x		
Cyprus (Republic of)	x		
Vatican City State		х	
Colombia (Republic of)	X .		
Congo (Democratic Republic of the)	x		
Congo (Republic of the) (Brazzaville)	х		
Korea (Republic of)	x		
Costa Rica			
Ivory Coast (Republic of the)	x		
Cuba	x		
Dahomey (Republic of)		. x	
Denmark	X		
Dominican Republic			
El Salvador (Republic of)			
Group of Territories represented by the French Overseas Post and Telecommunica- tion Agency	x		
Ecuador	<b>X</b> .		
Spain	х	·	
United States of America	x		
Ethiopia	X		

Member	Invitation accepted	Invitation declined
Finland	x	
France	x	
Gabon Republic		
Ghana	x	
Greece	. x	
Guatemala		
Guinea (Republic of)	<b>x</b>	
Guyana	х	,
Haiti (Republic of)		
Upper Volta (Republic of)		x
Honduras (Republic of)		
Hungarian People's Republic	x	:
India (Republic of)	x	
Indonesia (Republic of)	х	
Iran		
Iraq (Republic of)		
Ireland	<b>X</b> (* 1 *	
Iceland		
Israel (State of)	х	
Italy	х	
Jamaica	х	
Japan	х	

Member	Invitation accepted	Invitation declined
Jordan (Hashemite Kingdom of)		. <b>.</b> . <b>x</b>
Kenya		х
Kuwait (State of)	х	·
Laos (Kingdom of)		х
Lesotho (Kingdom of)		х
Lebanon		х
Liberia (Republic of)		
Libya (Kingdom of)		
Liechtenstein (Principality of)		
Luxembourg		х
Malaysia	x	
Malawi		×
Maldive Islands		
Malagasy Republic		х
Mali (Republic of)		
Malta	х	
Morocco (Kingdom of)		
Mauritania (Islamic Republic of)		х
Mexico	х	
Monaco	х	4
Mongolian People's Republic		
Nepal		х
Nicaragua		

Member	Invitation accepted	Invitation declined
Niger (Republic of the)	acceptod	x
		***************************************
Nigeria (Federal Republic of)		X
Norway	x	
New Zealand	х	
Uganda		х
Pakistan	x	
Panama		
Paraguay		
Netherlands (Kingdom of the)	х	
Peru		
Philippines (Republic of the)		
Poland (People's Republic of)	x	
Portugal and Portuguese Overseas Provinces	X	7.7
Spanish Provinces in Africa		
Syrian Arab Republic		
United Arab Republic		x
Federal Republic of Germany	x	
Ukrainian Soviet Socialist Republic		
Somali Republic		Alan x
Roumania (Socialist Republic of)		
United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man	x	
Rwanda (Republic of)		

Member	Invitation accepted	Invitation declined
Senegal (Republic of the)		x
Sierra Leone		x
Singapore (Republic of)	x	
Sudan (Republic of the)		
South Africa (Republic of)*	x	
Sweden	х	
Switzerland (Confederation of)	x	
Tanzania (United Republic of)		x
Chad (Republic of the)		
Czechoslovak Socialist Republic	x	
Territories of the United States of America	х	
Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible		x
Thailand		, y
Togolese Republic	x	
Trinidad and Tobago	X	
Tunisia	x	
Turkey		
Union of Soviet Socialist Republics		
Uruguay (Oriental Republic of)		
Venezuela (Républic of)	x	

<sup>\*</sup> See Administrative Council Resolution No. 619

#### Annex 4 to Document No. 127-E Page 17

Member	Invitation accepted	Invitation declined	
Viet-Nam (Republic of)	x		
Yemen			
Yugoslavia (Federal Socialist Republic of	x		
Zambia (Republic of)		x	

**GENEVA, 1967** 

Document No. 128-E 6 September 1967 Original: French

PLENARY MEETING

#### FRANCE

#### Proposals for the work of the Conference

#### Agenda item 2.4

### The desirability of accommodating requirements for oceanographic communications

#### Ref.

#### Comments

F/128(188)

Some Administrations wish to set up links for oceanographic requirements, and it is desirable that the necessary frequencies be made available to them as far as practicable.

Links with oceanographic buoys, especially long-distance ones, involve difficulties due to limitations on the power on which they can operate.

The measurement of oceanographic parameters is akin to that of meteorological parameters, and oceanography does in fact offer several analogies with meteorology.

However, the bands allocated to the latter service are too few to meet these requirements. Meteorology already uses frequencies assigned to fixed stations for its own requirements. It would therefore seem logical to permit frequency requirements for oceanography to be accommodated in other bands. Oceanographic stations are usually fixed, and their frequency requirements should therefore be met from the bands allocated to the fixed service.

Oceanographic buoys are situated on the high seas, i.e. in areas where emissions are made exclusively by mobile, maritime or aeronautical stations. It may, therefore, be thought easier to set up links with ships or aircraft than with the land; this being so, those concerned may consider accommodating the frequency requirements for such links in the bands allocated to the aeronautical and maritime mobile services.



#### Ref.

F/128(188) (cont.) Moreover, owing to the low power of emissions from oceanographic buoys, their reception must be protected against harmful interference by seeking to avoid any powerful emissions on the same frequency.

The French Administration therefore proposes, in the attached draft recommendation, a procedure whereby Administrations which need to set up links with buoys may use the necessary frequencies.

#### Proposal

#### Draft recommendation

### on the accommodation of radio requirements for oceanography

The Maritime Conference (Geneva 1967),

#### considering

- (a) that, whereas Administrations do not all have the same frequency requirements for setting up links with oceanographic buoys and do not attach the same degree of urgency to those requirements, some countries nevertheless already feel the need for such frequencies;
- (b) that it is desirable for the Administrations concerned to be able in the immediate future to set up the links they require;
- (c) that setting up links with oceanographic buoys will permit the collection, inter alia, of meteorological information;
- (d) that the transmission of oceanographic information is effected by land stations, but also by buoys on the high seas;
- (e) that such buoys are moored in areas where exclusive use is made of frequency bands allocated to the aeronautical and maritime mobile services;
- (f) that the information collected by such buoys may be of interest for purposes other than maritime navigation;

#### Ref.

F/128(188) (cont.)

(g) that emissions from oceanographic buoys are made with low powers, and that their co-existence with powerful emissions raises special difficulties;

#### recommends

- that countries which have requirements in this field be able to meet them by notifying the I.F.R.B., in accordance with Article 9 of the RR, of frequency assignments in the bands reserved either for the fixed service, or for the maritime and aeronautical mobile service, or for the meteorological aids service, according to the service to which the links in question belong;
- 2. that, when necessary, the I.F.R.B. and the Administrations concerned facilitate as far as possible the use of frequencies for the links in question, by applying the provisions of Nos. 629 et seq. of the Radio Regulations.

**GENEVA, 1967** 

Document No. 129-E

6 September 1967

Original: English

#### PLENARY MEETING

#### STATE OF ISRAEL

#### Proposals for the Work of the Conference

Ref.

Agenda Item 7.4: Hours of Service for Ship Stations

#### Comments:

ISR/129(2)

A serious peak loading on calling bands exists especially during single operator watch periods, leading to prolonged calling and excessive waiting by ships, as pointed out in Recommendation No. 27.

The solution by introduction of staggered watches may involve certain disadvantages.

It is suggested that the adoption of a comprehensive calling system by ships with an appropriate watch keeping method at coast stations, allowing for a drastic reduction of necessary calls, could solve the problem to a great extent witout necessitating the introduction of staggered watch keeping hours by single operator ship stations.

A proposal to this effect - "Proposal relating to a special calling and watch keeping system in the HF bands" - is submitted under the introduction clause of the Agenda (Document No. 170, ISR/130(3)).



**GENEVA, 1967** 

Corrigendum to

Document No. 130-E

20 September 1967

#### PLENARY MEETING

**PROPOSALS** 

BY THE

STATE OF ISRAEL

In Document No. 130, page 3, replace Proposal Ref. No. ISR/130(4) by the following:

ISR/130(4)

MOD 454

(2) Within the bands listed in No. 452, the following <u>frequencies</u> and <u>bands</u> are reserved exclusively for calling:

4 176, 4 177 - 4 187 kc/s 6 264.5, 6 265.5 - 6 280.5 kc/s 8 352, 8 354 - 8 374 kc/s 12 528, 12 531 - 12 561 kc/s 16 704, 16 708 - 16 748 kc/s 22 217, 22 220 - 22 270 kc/s

#### Reasons:

To provide for the addition of special calling frequencies, as stipulated by our proposal.



**GENEVA, 1967** 

Document No. 130-E 6 September 1967 Original : English

#### PLENARY MEETING

#### STATE OF ISRAEL

#### Proposals for the work of the Conference

#### Additional Agenda Item ISR\*

Relating to special calling and watch keeping system in the HF bands.

#### ISR/130(3)

Ref.

#### 1. <u>General</u>

A heavy load of calls with ensuing critical interference exists in the HF calling bands, especially during single operator periods.

It appears that this heavy load with its ensuing delays in the establishment of communication is caused by the overlap of the plurality of calls from several ships, starting at different times; however, the number of ship stations <u>starting</u> to call during a given short period is limited, of course.

The relatively high number of calls is necessitated by the receiver scanning method at coast stations on the hand and the ensuing uncertainty by the calling station as to the receiver frequency setting in the called coast station at any given moment, on the other hand. Of course, the receiver scanning method is a result of the necessity to cover successive frequencies in the general ship calling bands.

The human factor in watch keeping, resulting in the occasional uneven and/or interrupted scanning of the calling band at coast stations, aggravates additionally the problem of contact establishing and mutual interference.



<sup>\*</sup> Under the introductory clause of the Agenda

Ref.

ISR/130(3) (cont.) Therefore it seems that effecting the call on an international predetermined special calling frequency, watched permanently by the called station would drastically decrease the necessary number of calls by individual ships. The number of ship stations starting their call within the period necessary to effect a short call being very limited, no critical interference load would result as a rule.

At this stage it is not proposed to supersede the present system in the calling bands, but only to provide an additional and optional calling facility which should reduce congestion in these bands.

Coast stations will be able to effect watch keeping on the general ships calling bands and/or the special calling frequencies, according to the need of their service. The possibility will also exist for alternate watch, by a given coast station, on the general ships calling band and the special calling frequencies according to a predetermined schedule or, temporarily should the need arise, by transmission of an appropriate announcement.

The flexibility of the system, i.e. adoption to momentary load conditions would thus be assured.

Ship stations will call specific coast stations on such frequencies which are in accordance to the watch keeping method maintained by the called station at a given moment, subject to their frequency use facilities.

For the purpose of above predetermined special calling frequencies the use of the highest frequency in each high traffic working band is proposed. However the adoption of another set of appropriate frequencies for the above purpose is not precluded.

It is pointed out that the proposed calling system while solving problems related to present difficulties, may also provide common calling frequencies for a ship to shore selective calling system in the future.

2. <u>Main alterations in existent radio regulations in consequence to our proposal</u>

#### Ref.

ISR/130(4)

MOD 454

(2) Within the bands listed in No. 452, the following <u>frequencies and bands</u> are reserved exclusively for calling:

4176,	4177	- 4187	kc/s
6264.5,	6265.	56280 .:	5 kc/s
8352,	<u>8356</u>	<del>-</del> <u>8372</u>	kc/s
12 528,	12 531	-12 561	kc/s
16 704	16 708	-16 748	kc/s
22 217,	22 225	-22 265	kc/s

#### Reasons:

To provide for the addition of special calling frequencies, as stipulated by our proposal.

ISR/130(5) Note: App.15 Section A will have to be adapted accordingly, by inclusion of a column "Special calling frequencies" (ISR/130(4)).

ISR/130**(**6)

MOD

980

a) .......... in addition to one in the calling band and one special calling frequency if provided (see Nos. 1193 and 1198)

#### Reasons:

To provide for the additional and optional fitting of special calling frequencies.

#### Document No. 130-E Page 4

#### Ref.

ISR/130(7)

MOD .

1013

(2) However, in the bands between 4000 and 27 500 kc/s (except on special calling frequencies, where 1013A applies) when the conditions of establishing contact are difficult, etc. ....

ISR/130(8)

ADD

1013A

- (3) On the special calling frequencies 4176, 6264.5, 8352, 12 528, 16 704 and 22 217 kc/s, the call consists of:
  - the call sign of the coast station called, not more than once;
- the word DE;
  - the call sign of the calling ship station, not more than once.

This call may be sent three times at intervals of 1 minute; thereafter it shall not be repeated until an interval of three minutes has elapsed.

#### Reasons:

- 1. The special calling frequencies being permanently watched in accordance with our proposal, a plurality of call sign repetitions in a given call is unnecessary.
- 2. To reduce mutual interference by unnecessary calls.
- 3. The repetition of the call itself at relative short intervals, should the need arise, avoids delays and is compatible considering the proposed shortened calling formula and No. 1080.

#### Ref.

ISR/130(9) MOD

1015

(2) A ship station calling a coast station in any of the frequency bands allocated to the maritime mobile service between 4000 and 27 500 kc/s (except on the special calling frequencies, where No. 1014 applies) shall use etc.

#### Reasons:

The special calling frequencies being permanently watched by certain coast stations at predetermined times - as proposed the preceding No. 1014 is completely compatible with the proposed calling system.

ISR/130(10)

ADD

1077A (1) For rules of calling on special frequencies see No. 1013A.

ISR/130(11)

MOD

1168

\$26. ..... administrations shall indicate on which of the ship calling bands and special calling frequencies the station keeps watch, etc. .....

#### Reasons:

To provide ship stations with information if and when to call a given coast station on a general ships calling band or on a special calling frequency.

#### Document No. 130-E

Page 6

Ref.

ISR/130(12)

ADD

1174A

(la) The special calling frequencies assigned to ship stations are the following:

4176, 6264.5, 8352, 12 528, 16 704 and 22 217 kc/s.

#### Reasons:

- 1. To provide ship stations with frequency facilities for calling coast stations keeping a special watch on these frequencies.
- 2. These frequencies are proposed, as they involve frequency dislocation for only a minimal number of ship stations (some high traffic ships) and are provided with suitable guard bands also under the present frequency assignment table (see App. 15 Section A).

ISR/130(13)

ADD

1177A

In addition an administration may assign to a ship station the series of special calling frequencies, in accordance with service needs.

ISR/130(14)

MOD

1192

§39 The working frequencies assigned to high traffic ships are included within the following limits:

4160	tο	4177	4175.5	kc/s
6240		6265-5	6263.25	
				•
8320		<del>8354</del>	8351	-
12 471	to	<del>12-531</del>	12 526.5	kc/s
16 622	to	<del>16-708</del>	16 702	kc/s
22 148	to	<del>22-220</del>	22 213	kc/s

Ref.

ISR/130(14) (cont.)

Reasons:

Considering the relatively low load on the present high traffic ships working band, the benefits derived from the use of special calling frequencies should by far outweigh the limitation of the high traffic bands by one frequency.

ISR/130(15)

Note: App. 15 Section A will have to be adapted accordingly. (ISR/130(14)).

**GENEVA, 1967** 

Document No. 131-E 8 September 1967 Original: English

PLENARY MEETING

#### NEW ZEALAND

#### Proposals for the work of the conference

Ref.	Additiona	l Agenda I	tem NZ	<u>L-1</u>	
			Artic	le 7	
NZL/131(25)	ADD	457A	mobil	e ser	pands allocated to the maritime vice between 156 and 174 Mc/s (see Article 35):
				(a)	ship stations, telephony
					156.025 - 157.425 Mc/s
				<b>(</b> b)	coast stations, duplex telephony
					160.625 - 160.975 Mc/s 161.475 - 162.025 Mc/s
					simplex telephony
					156.475 - 156.875 Mc/s
				<del>-</del> i	dengt-pathingly states

#### Article 27

NZL/131(29) MOD 953

(3) However the frequency 156.80 Mc/s may be used by aircraft stations for distress, urgency and safety purposes. The frequency 156.30 Mc/s may be used by aircraft stations for safety purposes only.



#### Document No. 131-E Page 2

Ref.

#### Article 28

NZL/131(26) ADD 998A

In the bands between 156 and 174 Mc/s be able to transmit on 156.8 Mc/s using F3 modulated emissions. If a receiver is provided it shall be capable of receiving class F3 emissions on 156.8 Mc/s.

#### Article 33

NZL/131(27) MOD 1256

In the third line delete "a two frequency calling" and substitute "any other".

In line 4 delete "pairs".

In line 5 delete "of".

#### Article 35

#### Section IV. Bands between 156 and 174 Mc/s

A. Distress urgency and safety

NZL/131(28) MOD 1359

\$ 18. (1) The frequency 156.8 Mc/s is designated the world-wide VHF distress frequency for radiotelephony; it shall be used by mobile stations in the maritime mobile and the aeronautical services (see No. 953) for this purpose using frequencies in the authorized bands when requesting assistance. It is to be 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 port operations frequency after a preliminary announcement on 156.8 Mc/s.

(4) Ship and coast stations in

the public correspondence service may use a working frequency, for calling purposes,

as provided in Article 33.

			rage J
Ref.			
NZL/131(28) (cont.)	ADD	1359A	(2) Mobile stations in the maritime mobile service which cannot transmit on 156.8 Mc/s should use any other available frequency on which attention might be attracted. (See No. 1240).
	ADD	1359B	(3) Except for transmissions authorized on 156.8 Mc/s all transmissions on frequencies between 156.725 and 156.875 are forbidden.
	ADD		B. Call and reply
	MOD	1360	\$ 18 bis; (1) The frequency 156.8 Mc/s may also be used:
			(a) for call and reply in accordance with the provisions of Article 33;
			(b) by coast stations to announce the transmission, on another frequency, of traffic lists (see Nos. 1301 to 1304) and important maritime infor- mation.
	MOD	1361	(2) Any one of the channels designated in Appendix 18 for public correspondence may be used as a calling channel if an administration so desires. In addition an administration may assign to its stations other frequencies for call and reply. All such use shall be indicated in the List of Coast Stations.
	ADD	1361A	(3) To facilitate the reception of distress calls, all transmissions on 156.8 Mc/s shall be kept to a minimum.

NOC

1362

### Document No. 131-E Page 4

Ref.

NZL/131(28) (cont.)

SUP

1363

MOD

After No. 1363

-B- C Watch

MOD

After No. 1368

-G- D Traffic

#### Reasons:

To emphasize the distress and safety aspects of 156.8 Mc/s and bring it into line with 2182 kc/s.

#### Comment:

The world wide use of VHF in the maritime mobile service is rapidly increasing. Propagation and noise conditions at these frequencies make their use more desirable than the lower frequencies for the shorter distances. In consequence VHF will gain in popularity and it will fill a gap in the provision of reliable communication. Therefore the time is now opportune to strengthen the position of the frequency of 156.8 Mc/s in the sphere of distress and safety.

**GENEVA, 1967** 

Document No. 132-E 8 September 1967 Original : English

PLENARY MEETING

#### NEW ZEALAND

#### Proposals for the work of the Conference

#### Ref.

#### Agenda Item 2.1

Frequency bands for coast and ship radiotelephone stations in the 6 Mc/s band.

#### NZL/132(24)

#### Proposal

Bearing in mind that one 3.5 kc/s channel is to be allocated to oceanographic communications from the high frequency end of the 6 Mc/s band currently included in Appendix 15B to the Radio Regulations, Geneva (1959) (see New Zealand proposal relating to Agenda Item 2.4, NZL/132(6) and NZL/132(7)); that the two remaining channels be allocated for ships operating in the SSB mode and corresponding coast station allocations be created at the high frequency end of the coast radiotelegraph band by reducing the band available to ships low traffic radiotelegraph and moving the coast radiotelegraph band downward.

#### Reasons:

To meet the incresing requirements of the maritime mobile radiotelephone service.

#### Comments :

The Radio Regulations, Geneva (1959), do not provide for duplex radiotelephone communication between ship and coast stations in the 6 Mc/s band. New Zealand is of the opinion that channels in this band should be available and will prove particularly useful for coastal shipping activities.

(See New Zealand proposals relating to Agenda Item 3 (Document No. 133) for detailed channelling arrangements).



## Document No. 132-E

Page 2

#### Ref. Agenda Item 2.4

The desirability of accommodating requirements for oceanographic communications.

#### Proposal

NZL/132(6)

That one 3.5 kc/s band be allocated to oceanographic communications from the top of each of the five bands currently included in Appendix 15B to the Radio Regulations, Geneva 1959.

#### Reasons:

New Zealand supports the need for provision of communication facilities for the service within the Maritime Mobile SSB bands.

#### Proposal

NZL/132(7)

That the  $3.5~\rm kc/s$  band be divided into ten  $0.3~\rm kc/s$  channels for telemetry and telecontrol purposes.

#### Reasons:

To meet the proposed needs of oceanographic communications.

## INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 133-E 8 September 1967 Original: English

#### PLENARY MEETING

#### NEW ZEALAND

#### Proposals for the work of the Conference

#### Agenda Item 3

Consequential revision of Appendices 15 and 17.

#### Ref.

#### Proposal

NZL/133(8)

That the radiotelegraphy coast station bands be displaced to permit accommodation of duplex channel frequencies for coast radiotelephone stations consequent upon abrogation of part of Appendix 15 B (see NZL/133(10) below). The consequential frequency reduction would apply to the low traffic ships band, the number of channels being adjusted by reduction of channel spacing in this band. Details are shown in Annex 1.

#### Reasons:

Consequential on proposal to increase duplex channelling for radiotelephone. In addition there is room in the low traffic bands to accommodate some reduction.

#### NZL/133(9)

#### Proposal

That the ships calling frequencies provided in Appendix 15B be abrogated.

#### Reasons:

Alternative provisions are already made on 500 kg/s 2182 kg/s and the ships radiotelegraphy bands for calling. These provisions are adequate for the establishment of contact with coast stations without setting aside special calling frequencies for radiotelephony.



Document No. 133-E

Page 2

Ref.

NZL/133(10)

#### Proposal

That those channels remaining in Appendix 15 B after provision has been made for oceonographic communications (Document No. 132) be included in a revision of Appendix 17 for SSB use only.

#### Reasons:

With the introduction into Appendix 17 of full SSB channelling the need for retention of a separate band of frequencies for this type of emission is no longer required.

NZL/133(11)

#### Proposal

That a resolution be prepared by the Conference to determine a changeover period for those radiotelegraph ccast stations requiring to change frequency and to ensure satisfactory recording of entries in the Master International Frequency Record.

#### Reasons:

Consequent upon the formation of duplex channels for radiotelephone coast stations (NZL/133(8)) the radiotelegraph coast stations at the topend of the bands will require to be shifted into the space made available to them at the top end of the ships low traffic radiotelegraphy bands. (See Annex 1).

NZL/133(12)

#### Proposal

That the oceanographic communication channels form a new Appendix 15 B as follows:

Frequencies assignable to oceanographic communications using the maritime mobile bands between 4 and 27.5 Mc/s.

	•				1	
NZL/133(12)	<b>Band</b>	<u>Limits</u>	<u>Assignable</u>	frequencies	$\frac{1}{\sin kc/s}$	Limits
(cont.)	4	4136.5	4136.9		4139.6	4140
	6	6207.5	6207.9	-	<b>6</b> 210.6	6211
	- 8	8276.5	8276.9		8279.6	8280
	12	12 417.5	12 417.9		12 420.6	12 421
	16	16 558.5	16 558.9		16 561.6	16 562
	22	22 096.5	22 096.9	-	22 099.6	22 100

<sup>1</sup> Each band contains 10 channels spaced 0.3 kc/s.

#### Reasons:

To provide orderly accommodation for oceanographic communications.

#### NZL/133(13)

#### Article 33

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 Section B of Appendix 15 or) the working frequency associated with that of the coast station in accordance with Appendix 17.

#### Reasons:

Consequential on abrogation of radiotelephone calling frequencies.

#### NZL/133(14)

#### Article 34

MOD 1302

(3) They may, however, amounce this transmission by the following brief preamble sent on a calling frequency.

#### Document No. 133-E

Page 4

Ref.

NZL/133(14) (cont.)

On the calling frequencies of  $2182 \, \mathrm{kc/s}$  and and  $156.8 \, \mathrm{Mc/s}$  the following preamble is obligatory when announcing the transmission of traffic lists.

Hullo all stations ...... (as existing 1302).

SUP

1303

#### Reasons:

Consequential on abrogation of radiotelephone calling frequencies.

NZL/133(15)

Article 35

SUP

1352 and 1354

#### Reasons:

Consequential on abrogation of radiotelephone calling frequencies.

MOD

1356

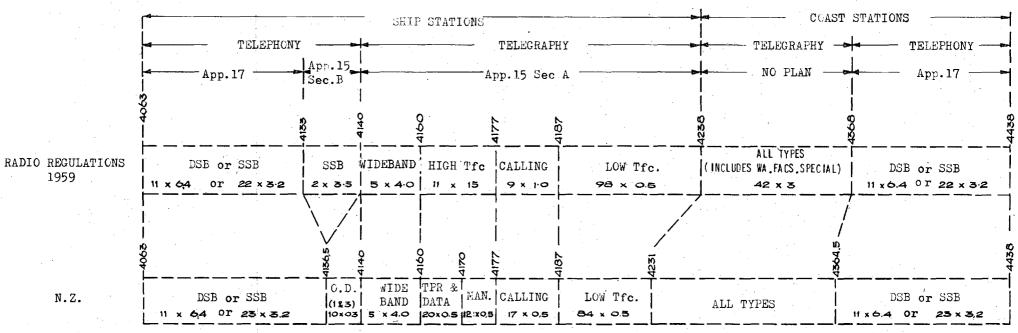
(2) The single sideband working frequencies given in Section-B-of-Appendix 15 Appendix 17 are intended to encourage the use of single sideband operation are to be used in duplex operation for coast and ship stations.

#### Reasons:

Consequential on abrogation of Appendix 15 B and modification of Appendix 17.

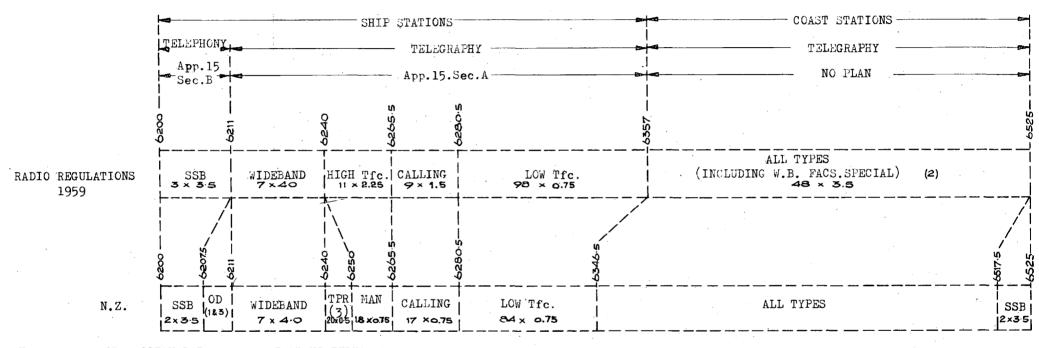
Annex: 1

ANNEX



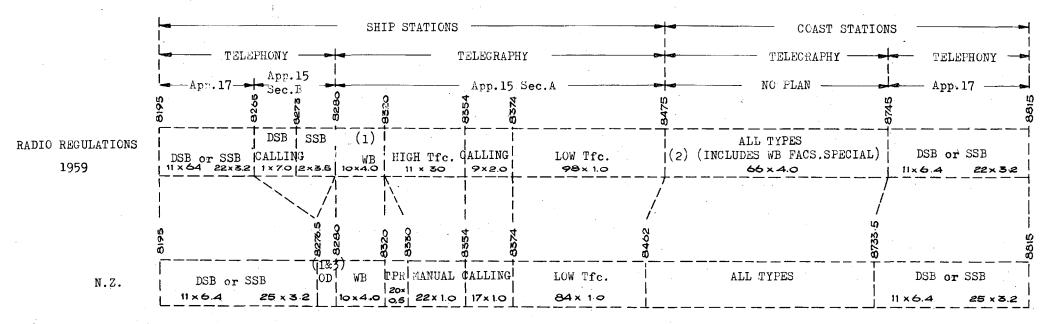
- NOTES : 1. OD = OCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELLING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. OCEAN DATA CHANNELLING 10 x 0.3 kc/s
  - 4. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

Annex to Document No. 133-E Page 7



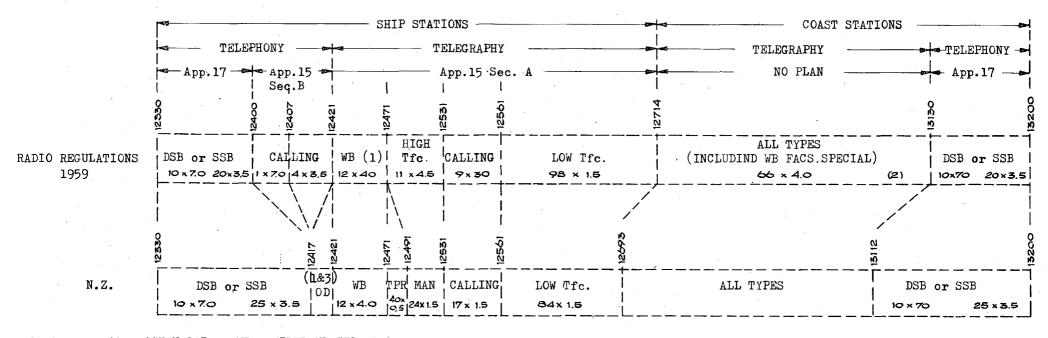
- Notes: 1. OD = CCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. CCEAN DATA CHANNELLING 10 x 0.3 kc/s
  - 4. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

Annex to Document No. 133-E Page 9



- NOTES: 1. OD = OCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. OCEAN DATA CHANNELLING 10 x 0.3 kc/s
  - 4. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

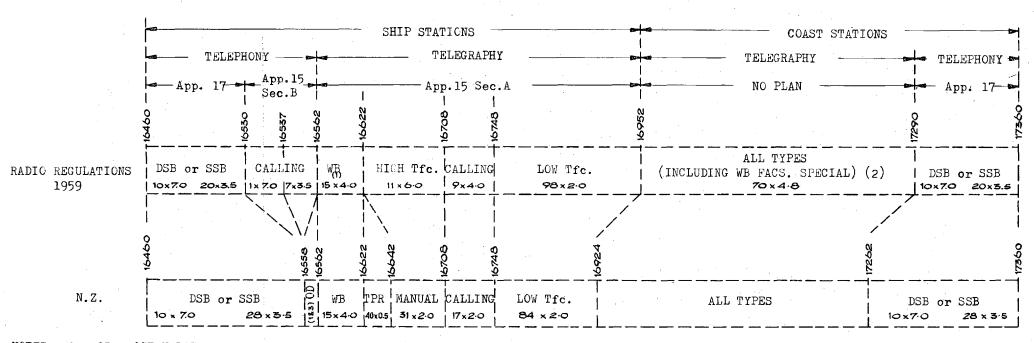
Annex to Document No. 133-E Page 11



- NOTES: 1. OD = OCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELLING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. OCEAN DATA CHANNELLING 10 x 0.3 kc/s
  - 4. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

PROPOSED FREQUENCY ALLOTMENT 12 Mc/s BAND

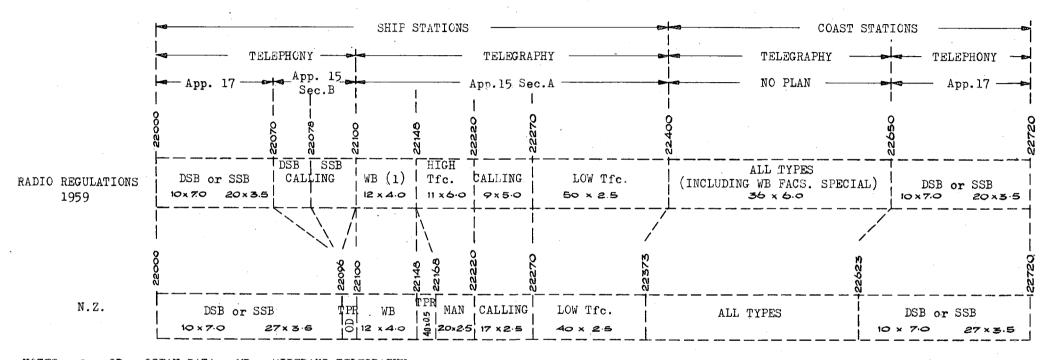
Annex to Document No. 133-E Page 13



- NOTES: 1. OD = OCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELLING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. OCEAN DATA CHANNELLING 10 x 0.3 kc/s
  - A. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

PROPOSED FREQUENCY ALLOTMENT 16 Mc/s BAND

Annex to Document No. 133-E
Page 15



- NOTES: 1. OD = OCEAN DATA WB = WIDEBAND TELEGRAPHY
  - 2. CHANNELLING GVA 1951 STILL BASICALLY APPLICABLE
  - 3. OCEAN DATA CHANNELLING 10 x C.3 kc/s
  - 4. BANDS NOT CHANNELLED ARE STILL UNDER STUDY

PROPOSED FREQUENCY ALLOTMENT 22 Mc/s BAND

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 134-E 8 September 1967 Original: English

PLENARY MEETING

#### NEW ZEALAND

## Proposals for the work of the Conference

### Ref. Agenda Item 3

Consequential revision of Appendix 25.

#### Proposals

NZL/134(16).

It is proposed that Appendix 25 be abrogated in favour of utilisation of normal machinery for the assignment of frequencies to services in accordance with Article 9 of Radio Regulations, Geneva, 1959. This will require the consequential amendment of Article 9 and a Resolution covering the procedure to be applied during the transitional period.

#### Reasons:

To utilise existing provisions for the assignment of frequencies to stations as required on a continuing basis.

#### Comment:

The existing Plan for Maritime Mobile Radiotelephone stations does not include channelling for single sideband operation nor does it cover the possible requirements for all members of the Union. Therefore a revision would seem desirable. Such a revision would require considerable research and analysis, time for which would not be available at the conference.

The abrogation of the Maritime Mobile Radiotelegraph Plan in 1959 in favour of normal machinery has proved satisfactory in that there are now no frequencies in the bands concerned not in use and full advantage can be taken of the continuing advances in technology to permit the accommodation of those stations subsequently requiring frequency assignments.



#### Document No. 134-E Page 2

#### Ref.

NZL/134(16) (contd.) It is therefore considered that the growing needs of the service can be adequately met and the rights of existing services adequately safeguarded by the abrogation of Appendix 25.

#### Article 7

NZL/134(17)

SUP

457

#### Reasons:

Consequent upon completion of conference and abrogation of Appendix 25.

#### Article 9

NZL/134(18)

MOD

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

NZL/134(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 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.

NZL/134(20)

SUP

541 to 551

#### Reasons:

Consequential deletions.

NZL/134(21) MOD 573 \$26.(1) Frequency bands: kc/s 10 2850 3155 3400 kc/s kc/s in Region 1 3500 3900 3500 kc/s in Region 2 4000 kc/s in Region 3 3500 3950 4136.5 kc/s 4238 4364.5 kc/s kc/s 4438 6207.5 kc/s 6518.5 kc/s 6357 6525 kc/s 8276.5 kc/s 8476 8733.5 kc/s 8815 kc/s 12417.5 kc/s 8745 12714 13130 13112.5 kc/s 13220 kc/s <u>5</u> kc/s 16952 16924 17290 kc/s 17360 kc/s 22096.5 kc/s 22623.5 22650 kc/s kc/s

#### Document No. 134-E Page 4

Ref.

NZL/134(22)

SUP

577 to

586

Reasons:

Consequential deletions.

NZL/134(23)

MOD

635\*

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 part of Appendix 15B and Appendix 25. Since the special provisions of Article 9 applicable to the maritime mobile 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 Master International Frequency Register. Such provisions should also be applied to those additions to Appendix 17 consequent upon abrogation of Appendix 15B.

<sup>\*</sup> As amended by the E.A.R.C. Aeronautical Mobile (R) 1966:

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 135-E 8 September 1967 Original: English

#### PLENARY MEETING

#### NEW ZEALAND

#### Proposal for the work of the Conference

Ref. Agenda Item 7.2

Condition for the use of emergency position-indicating beacons.

Article 1

NZI/135(2) ADD 68A

Emergency position-indicating beacon station: A station in the maritime mobile service the emissions of which are intended to facilitate search and rescue operations.

#### Reasons:

To provide a definition for the emergency position-indicating beacon.

#### Article 19

NZL/135(3)

MOD 736

- (2) However, the requirements of identification need not apply to:
- survival craft stations when transmitting distress signals automatically, or
- emergency position-indicating beacons.

#### Reasons:

To cover the introduction of emergency position-indicating beacons.



Re	ſ.	

#### Article 28

#### Section VI

NZL/135(4)	ADD	999A	Emergency position-indicating beacon stations used in the maritime mobile service and intended primarily as beacons for indicating the position of a distress situation or of survivors shall be capable of Class A2 emission on 2182 kc/s using the following types of signal:
	ADD	999B	For beacons producing a field strength equal to or less than 10 microvolts per meter at a distance of 30 nautical miles at sea level. (Type L). The signal specified in 1476B *.
	ADD	999C	For beacons producing a field strength greater than 10 microvolts per meter at a distance of 30 nautical miles at sea level. (Type H). The signal specified in 1476C *.

#### Reasons:

To make provision in the Regulations for the use of emergency position-indicating beacons.

\* See Proposal No. NZL/135(5).

#### Article 36

NZL/135(5)

ADD

1388A

(3) The characteristics of the emergency position-indicating beacon signal are given in 1476B \* and 1476C \*.

ADD

Section VIIIA

Emergency position-indicating beacon signals.

T) - 0			
Ref.			
NZL/135(5) (cont.)	ADD	1476A	§44 bis (1) The emergency position-indicating beacon signal consists of:
	ADD	1476B	(a) a keyed emission modulated by a tone of 1300 c/s (± 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 transmitted continuously. (See 999B);
	ADD	1476C	(b) a keyed emission modulated by a tone of 1300 c/s (± 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 keying cycle to 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. (See 999C);
	ADD	1476D	(c) the position-indicating beacon signal shall be generated auto- matically and the keying cycle shall be repeated continuously;
·	ADD	1476E	(d) this signal shall indicate that a person is in a distress situation, may no longer be aboard a ship or

#### Reasons:

To make provision in the regulations for the introduction of Emergency Position-Indicating Beacons.

aircraft and that receiving facilities may not be available.

#### Document No. 135-E Page 4

Ref.

NZL/135(5) (cont.)

Comment:

The distinction between the two types of beacons results from C.C.I.R. Recommendation 439. The New Zealand Administration considers it essential that to ensure uniformity of interpretation of the meaning of the beacon signal and to achieve the greatest reliability and simplicity in a survival device intended to operate automatically in a hostile environment, only one type of signal be emitted. The positionindicating beacon signal characteristics specified above are in accordance with C.C.I.R. Recommendation 439. Provision for transmitting the radiotelephone alarm signal is considered unnecessary as under the conditions laid down in Regulation 7, Chapter IV, Safety of Life at Sea Convention, London, 1960 radiotelephone ships keep continuous watch on 2182 kc/s while at sea. Provision of A3 additionally, may jeopardize the technical and operational simplicity so essential in an emergency beacon of this type.

Ref. Agenda Item 7.4

Hours of service for ship stations.

NZL/135(1) ADD 937A

However ship stations of the third category operating within Zone D 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:

To reduce uncertainties and delays in the transmission of traffic to ships of the third category known to be bound for New Zealand ports and to be within range of New Zealand coast stations. It has been noted over a considerable period that ships of the third category frequently fail to respond promptly to repeated calls, including calls made at the times specified in Regulation 937.

#### Comment:

The New Zealand Administration has made a careful study of the matters raised in Recommendation 27 of the Radio Regulations, Geneva 1959 and considers that any changes beyond that contained in additional Regulation 937A are undesirable.

## INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 136-E 8 September 1967 Original: English

PLENARY MEETING

#### BRAZIL

#### Proposals for the work of the Conference

#### Agenda Item 1:

Use of single sideband technique in the bands allocated to the maritime mobile service between 1605 and 4000 kc/s and in the HF bands exclusively allocated to the maritime mobile radiotelephone service.

#### Introduction

Brazilian Administration considered very carefully the adoption of single sideband technique in the maritime radiotelephone service. It is a necessary step in order to achieve better conditions in the service. However, this improvement means more rigid technical requirements in transmitters and receivers with consequent alteration in the line of production of our industry.

Another factor to be taken into consideration is the amortization of equipments already installed that should occur in a reasonable term.

In consequence, the following alterations in Radio Regulations, as well as some interim provisions are submitted to the W.A.R.C.'s consideration.

Ref.

Article 35

Section II

Bands between 1605 and 4000 kc/s

B/136(1)

ADD

1**32**2A

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



#### Document No. 136-E Page 2

#### Ref.

B/136(1) (cont.)

2.7 kc/s; the normal method of operation for each coast station shall be indicated in the List of Coast Stations.

#### Section III

#### Bands between 4000 and 23 000 kc/s

B/136(2) ADD 1351A

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.

B/136(3) ADD

#### APPENDIX 17A

Technical characteristics for single sideband used in the maritime mobile radiotelephony service in the bands 1605 to 3000 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 + 6 db below peak envelope power, and class of emission A3J 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:

B/136(3) (cont.)

- a) for coast stations: + 20 c/s;
- o) for ship stations : short-term limits (of the order of 15 min) + 40 c/s;
- c) for ship stations : within + 100 c/s of the reference value
- 3. Coast and ship stations shall use upper sideband emissions.
- 4. The channel arrangements should be such, that two SSB channels are accommodated within each existing SSB channel and the bandwidth of the SSB emissions should be kept within such limits as will permit this to be done.
- 5. The transmitter audio-frequency band should be 350 to 2700 kc/s with a permitted amplitude variation of 6 db. (Note 1)
- 6. The unwanted frequency modulation of the SSB carrier should be sufficiently low to prevent harmful distortion.
- 7. In the medium frequency maritime mobile radiotelephony 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.
- Note 1: These limits may need to be modified when selective calling is introduced.

APPENDIX 3

B/136(4)

MOD

Amend the table of frequency tolerances as

follows:

Band 1605 to 4000 kc/s

- 2. Land stations :
   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 (h);
- 3. Mobile stations:
  - (a) ship stations, after 2, emissions other than class Al, add the reference (i).

At the end of Appendix 3 add the following footnotes:

- (h) For coast radiotelephone station transmitters installed after1 January 1973, the tolerance is+ 20 c/s.
- (i) For ship radiotelephone station transmitters (other than those referred to in No. 987) installed after 1 January 1973 the tolerance is ± 100 c/s.

#### DRAFT RESOLUTION

B/136(5) ADD

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 maritime mobile service in the 1605 - 23 000 kc/s bands

The Maritime Conference (Geneva, 1967)

#### decides

- (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 emissions must be capable of using class A3H on their working frequencies. This provision will cease to be compulsory on 1 January 1980.

### INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

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PLENARY MEETING

#### BRAZIL

## Proposals for the work of the Conference

#### Agenda Item 2.1

Frequency bands for coast and ship radiotelephone stations in the 6 Mc/s band.

Ref.			Article 35
B/137(6)	SUP	1356	
B/137(7)	MOD	1 <i>3</i> 57	(2) Administrations may assign the frequencies of Section C of Appendix 17 to ships of any category, according to traffic requirements, and to coast station for single sideband single channel simplex operation. Such stations shall not use power in excess of 1 Kw Pp.
B/137(8)	MOD	1358	(3) Equipment intended for use on radio- telephony in these bands should conform to the technical standards in Appendix 17A.
	Doogono		

#### Reasons:

To provide for the simplex use by coast stations of the frequencies of Section B of Appendix 15. The 6 Mc/s SSB frequencies referred to in No. 449 and in Section B of Appendix 15 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. (See Proposal in response to Agenda Items 2.4 (Document No. 137) and 3 (Document No. 138)).



#### Document No. 137-E Page 2

## Agenda Item 2.2

Frequencies for intership radiotelephone traffic.

No proposal is submitted.

#### Reasons:

The existing arrangements provided by No. 1355 of the Radio Regulations are adequate. The single sideband ship frequencies contained in Appendix 15 Section B, may be used for intership radiotelephony (See proposal in response to Agenda Item 3, Document No. 138).

#### Agenda Item 2.3

The possible use of the high traffic bands by tankers of 12 500 tons gross.

Ref.

Article 32

B/137(9)

MOD 1156

§ 20. (1) Stations installed on passenger ships and on whaling factory ships shall use the high traffic band. Any other stations installed on ships handling a large volume of traffic may also be authorized to use this band at the discretion of the Administration controlling the ship concerned.

B/137(10)

SUP

1157

#### Reasons:

To permit Administrations to decide for themselves the ship stations that shall use the high traffic bands. It is considered that the criterion adopted up to now to assume ship tonnage as an index of traffic volume does not correspond to reality. Therefore it does not allow a rational traffic distribution between the high traffic and the low traffic bands. On the other hand, stations of passenger ships and whaling factory ships should be kept on the high traffic band for protection of ships utilizing the low traffic band.

## Agenda Item 2.4

The desirability of accommodating requirements for oceanographic communications.

Ref.			Article 1
B/137(11)	MOD	36	Maritime mobile service: A mobile service between coast stations and ship stations, or between ship stations, in which survival craft may also participate, and exceptionally between ocean data stations and ocean data telecommand stations.
			·
B/137(12)	ADD	84A	Ocean data telecommand station: A station in the maritime mobile service intended to telecommand ocean data stations.
B/137(13)	ADD	84B	Ocean data station: A station in the maritime mobile service intended for the transmission of data collected at the site of the station.
			Article 7
B/137(14)	ADD	450A	(d bis) Ocean data and ocean data tele- command stations, telegraphy:
			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

#### Article 32

(After No. 1206)

Ref.

B/137(15) ADD 1206A

(g) Frequencies for ocean data stations.

§ 45. (bis) Frequencies assigned to ocean data and ocean data telecommand station 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 12 417.5 - 12 421 kc/s 16 558.5 - 16 562 kc/s 22 096.5 - 22 100 kc/s

B/137(16) ADD 1206B

§ 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 Appendix 15.

B/137(17) 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 Appendix 15.

Nevertheless, Administrations shall take into account, as far as possible, the provisions of Appendix 15 concerning channeling and 300 c/s spacing.

#### Document No. 137-E Page 6

Ref. APPENDIX 10
B/137(18) ADD OD Ocean data station.

B/137(19) ADD OE Ocean data telecommand station.

Reasons:

To accommodate requirements for oceanographic communications in the exclusive HF maritime mobile bands.

#### Ref. Agenda Item 2.5

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

B/137(20)

MOD 453

(g) Coast stations, wideband radiotelegraph systems, facsimile, special transmission systems, teleprinters, data transmission and manual telegraphy:

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

#### Reasons:

To make it clear that the bands concerned can be used for wideband telegraphy, facsimile, special transmission systems, teleprinters, data transmission and manual telegraphy.

#### INTERNATIONAL TELECOMMUNICATION UNION

## MARITIME CONFERENCE

**GENEVA, 1967** 

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#### PLENARY MEETING

#### BRAZIL

Proposals for the work of the Conference

#### Agenda Item 3:

#### Consequential revision of Appendices 15. 17 and 25

Ref.

to the Radio Regulations

B/138(21)

MOD

#### APPENDIX 15

Table of frequencies to be used by ship stations, ocean data stations and ocean data telecommand stations in the bands between 4 and 27.5 Mc/s allocated exclusively to the maritime mobile service.

- MOD 1 For use of frequencies in the band 4 to 27.5 Mc/s for radiotelegraphy see also Nos. 1174 to 1201 and 1206 A to 1206 C of Article 32.
- MOD 2 a) The assignable frequencies ..... etc.
  - indicated .... etc.
  - regularly .... etc.
  - b) The vertical arrows ..... etc.

SUP 3



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#### APPENDIX 15

Ref. B/138(22)

MOD

Frequencies assignable to ship radiotelegraph stations, ocean data and ocean data telecommand stations using the maritime mobile service bands between 4 and 27.5 Mc/s

		Limits				•	Limit	s
Band				ko	c/s			
(Mc/s)		Frequencies assign- able to ocean data and ocean data tele-	Assignable frequen- cies wide band tele- graphy, facsimile		king frequencies raffic ships	Calling	Assignable working frequencies for low traffic ships	
	7	•	and special trans- mission systems	Teleprinter and data transmission	manual transm1ssion	frequencies	GROUP A GROUP B	
4 4136	6.5	4136.9 4139.6	4142 4158	4161 4167.75	4168.5 4176	4178 4186	4188 4212 4212.5 4236.5	4238
		10 frequencies spaced 0.3	5 frequencies spaced 4		11 frequencies spaced 0.75	9 frequencies spaced l	98 frequencies spaced 0.5	
6 5207	7.5	6207.96210.6	6213 6237	6241.5 6251.625	6252.75 6264	6267 6279	62826318 631 <b>8.756354.</b> 75	6357
		10 frequencies spaced 0.3	7 frequencies spaced 4	<del>-</del>	ll frequencies spaced 1.125	9 frequencies spaced 1.5	98 frequencies spaced 0.75	
8 8276	6.5	8276.9 8279.6 10 frequencies spaced 0.3	8282 8318 10 frequencies spaced 4	8322 8335.5 -	8337 8352 11 frequencies spaced 1.5	8356 8372* 9 frequencies spaced 2	* 83768424 8425 <del>84</del> 73 98 frequencies spaced 1	8476
12 1241	17.5	12417.9 12420.6	12424 12468	12474 12503.25	12505.5 12528	1253412558	1256412636 12637.512709.5	12714
		10 frequencies spaced 0.3	12 frequencies spaced 4	·	ll frequencies spaced 2.25	9 frequencies spaced 3	98 frequencies spaced 1.5	
16 1655	58.5	16558.916561.6	16564 16620	16626 16671	16674 16704	1671216744	1675216848 1685016946	16952
		10 frequencies spaced 0.3	15 frequencies spaced 4	-	11 frequencies spaced 3	9 frequencies spaced 4	98 frequencies spaced 2	
22 2209	96.5	22096.922099.6	22102 22146	22151 22184	22187 22217	2222522265	22272.522332.5 2233522395	22400
		10 frequencies spaced 0.3	12 frequencies spaced 4	-	ll frequencies spaced 3	9 frequencies spaced 5	50 frequencies spaced 2.5	
	Ì							
				Assig	nable working frequencies	to ships of all catego	ories	
25 250	70		!	25075			25105	25110
						ll frequencies spa	aced 3	

<sup>\*</sup> For particular conditions concerning the use of 8364 kc/s see No. 1179

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#### APPENDIX 17

B/138(23)

MOD

Channelling of the maritime mobile radiotelephone bands between 4000 and 23 000 kc/s.

(see Article 35)

MOD

1. The following Tables (pages ...) indicate the frequencies to ..... etc.

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) For simplex operation between ship stations and between ship and coast stations, frequencies listed in Section C shall be assigned.

SUP

4.

#### Reasons:

To provide the introduction of single sideband operation.

Document No. 138-E Page 6

#### APPENDIX 17

#### Section A

Ref. B/138(24)

### Table of double-sideband transmitting frequencies (in k:/s) - Duplex

Series	4 Mc,	Mc/s band 8 Mc/s band 12		12 Mc	12 Mc/s band 16		16 Mc/s band		22 Mc/s band	
No.	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 2 3 4 5 6 7 8 9 10 11	4371.1 4377.4 4383.8 4390.2 4396.6 4403.0 4409.4 4415.8 4422.2 4428.6 4434.9	4066.1 4072.4 4078.8 4085.2 4091.6 4098.0 4104.4 4110.8 4117.2 4123.6 4129.9	8748.1 8754.4 8760.8 8767.2 8773.6 8786.0 8786.4 8792.8 8799.2 8805.6	8198.1 8204.4 8210.8 8217.2 8223.6 8230.0 8236.4 8242.8 8249.2 8255.6 8261.9	13 133.5 13 140.5 13 147.5 13 154.5 13 161.5 13 175.5 13 182.5 13 189.5 13 196.5	12 333.5 12 340.5 12 347.5 12 354.5 12 361.5 12 368.5 12 375.5 12 382.5 12 389.5 12 396.5	17 293.5 17 300.5 17 307.5 17 314.5 17 321.5 17 328.5 17 335.5 17 342.5 17 356.5	16 463.5 16 470.5 16 477.5 16 484.5 16 491.5 16 505.5 16 512.5 16 519.5 16 526.5	22 653.5 22 660.5 22 667.5 22 674.5 22 681.5 22 683.5 22 695.5 22 702.5 22 709.5 22 716.5	22 003.5 22 010.5 22 017.5 22 024.5 22 031.5 22 045.5 22 045.5 22 059.5 22 066.5

Document No. 138-E Page 7

Ref. B/138(25) APPENDIX 17

Section B

### Table of single sideband - transmitting frequencies (in kc/s) - duplex Nominal Carrier Frequencies

	4 Mc/s	Band	8 Mc/	s Band	12 Mc/	s Band	16 Mc/s	s Band	22 Mc/	s Band
Series No.	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 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	4368.0 4371.1 4374.3 4377.4 4380.7 4383.8 4387.1 4390.2 4393.5 4396.6 4399.9 4406.3 4406.3 4409.4 4412.7 4415.8 4419.1 4422.2 4425.5 4428.6 4431.8 4434.9	4063.0 4066.1 4069.3 4072.4 4075.7 4078.8 4082.1 4085.2 4088.5 4091.6 4094.9 4098.0 4101.3 4104.4 4107.7 4110.8 4114.1 4117.2 4120.5 4123.6 4126.8 4129.9	8745.0 8748.1 8751.3 8754.4 8757.7 8760.8 8764.1 8767.2 8770.5 8773.6 8776.9 8780.0 8783.3 8786.4 8789.7 8792.8 8792.8 8796.1 8799.2 8802.5 8808.8 8811.9	8195.0 8198.1 8201.3 8204.4 8207.7 8210.8 8214.1 8217.2 8220.5 8223.6 8226.9 8230.0 8233.3 8236.4 8239.7 8242.8 8246.1 8249.2 8255.6 8258.8 8261.9	13 130.2 13 137.2 13 140.5 13 147.5 13 151.2 13 151.2 13 151.2 13 161.5 13 161.5 13 162.2 13 172.2 13 179.2 13 182.5 13 189.5 13 196.5	12 330.2 12 333.5 12 337.2 12 344.2 12 344.2 12 351.2 12 351.2 12 358.2 12 361.5 12 365.2 12 365.2 12 375.5 12 379.2 12 382.5 12 386.2 12 389.5 12 396.5	17 290.2 17 293.5 17 297.2 17 300.5 17 304.2 17 304.5 17 311.2 17 314.5 17 321.5 17 325.2 17 328.5 17 339.2 17 342.5 17 349.5 17 353.2 17 353.2	16 460.2 16 463.5 16 467.2 16 470.5 16 474.2 16 477.5 16 481.2 16 484.5 16 491.5 16 495.2 16 505.5 16 509.2 16 512.5 16 512.5 16 512.5 16 512.5 16 523.2 16 523.2	22 650.2 22 653.5 22 657.2 22 660.5 22 664.2 22 667.5 22 671.2 22 678.2 22 681.5 22 685.2 22 689.2 22 699.2 22 700.5 22 700.5 22 716.5	22 007.2 22 010.5 22 014.2 22 017.5 22 021.2 22 024.5 22 031.5 22 035.2 22 035.2 22 045.5 22 049.2 22 052.5 22 056.2

APPENDIX 17

B/138(26)

Section C

Bands (4 Mc/s)	Limits	Calling frequencies	Upper sideband carrier frequencies	Limits
4	4133	4133 *		4136.5
6	6200		6200.5	6207.5
8	8265	8266	8269.5 8273 2 frequencies spaced 3.5	8276.5
12	12 400	12 400	12 403.5 12 414 4 frequencies spaced 3.5	12 417.5
16	16 530	16 530	16 533.5 16 554.5 7 frequencies spaced 3.5	16 558.5
22	22 070	22 070	22 073.5 22 091.5 6 frequencies spaced 3.5	22 096.5

<sup>\*</sup>For particular conditions concerning the use of 4133 kc/s see No. 1352A

B/138(27)

SUP

APPENDIX 25

<sup>\*\*</sup> For particular conditions concerning the use of 6204 kc/s see No. 1353

-			
B/138(28)	MOD	449	(c) Ship stations and coast stations operating in accordance with No. 1357, telephony (single sideband only)
			6200 - 6207.5 kc/s 8269.5 - 8276.5 kc/s 12 403.5 - 12 417.5 kc/s 16 533.5 - 16 558.5 kc/s 22 073.5 - 22 096.5 kc/s
B/138 <b>(</b> 29)	MOD	450	(d) Ship stations, telephony (calling channels)
			4133 - 4136.5 kc/s 8265 - 8269.5 kc/s 12 400 - 12 403.5 kc/s 16 530 - 16 533.5 kc/s 22 070 - 22 073.5 kc/s
			· · · · · · · · · · · · · · · · · · ·
B/138(30)	MOD	456	\$13.(1) Appendix 17 shows the radiotelephone channels of the maritime mobile service in the frequency bands listed in Nos. 447, 448 and 449.
B/138(31)	SUP	457	

Article 7

Ref.

Ref.		•	Article 9
B/138(32)	MOD	500	89.(1) Except for notices referred to in Nos. 552, 561 and 568, the Board shall examine each notice with respect to
B/138(33)	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 Beard.
B/138(34)	SCP	541 to 55	1
B/138(35)	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 4063 - 4133 kc/s 4238 - 4368 kc/s 4238 - 4368 kc/s 4368 - 4438 kc/s 6357 - 6525 kc/s 8195 - 8265 kc/s 8195 - 8265 kc/s 8195 - 8265 kc/s 8195 - 815 kc/s 8745 - 8815 kc/s 12 330 - 12 400 kc/s 12 714 - 13 130 kc/s

Ref	

B/138(35) (cont.)	16 460		13 200 kc/s 16 530 kc/s
	16 952		17 290 kc/s
			17 360 kc/s
	22 000	-	22 070 kc/s
	22.400	-	22 650 kc/s
	22 650		22 <b>7</b> 20 kc/s

B/138(36) SUP 577 to 586

B/138(37) MOD 635 \$47. The provisions ..... contained in Appendix 26 and 27 to these Regulations.

#### Article 12

B/138(38) MOD 677 §8. The use of class B emissions is forbidden in all stations.

#### Article 28

B/138(39) SUP 956

Ref.	·		Article 32
B/138(40)	MOD	1146	Suppress "Section A of"
		•	**************************************
B/138(41)	MOD	1158	Suppress "Section A of"
		·	
B/138(42)	MOD	1175	Suppress "Section A of"
·	•	·	
B/138(43)	MOD	1180	Suppress "Section A of"
			**
B/138(44)	MOD	1181	The working frequencies for high traffic ships in the band 4160 to 4177 kc/s are so spaced as to
		en en en en en en en en en en en en en e	provide channels 0.75 kc/s wide, the extreme frequencies assignable being 4161 and 4176 kc/s as shown in Appendix 15.
B/138(45)	MOD	1182	Suppress "Section A of"
			#Plinationsportboundstratification
B/138(46)	MOD	1184	Suppress "Section A of"

Ref.			
B/138(47)	MOD	1187	Suppress "Section A of"
B/138(48)	MOD	1189	Suppress "Section A of"
B/138(49)	MOD	1191	Suppress "Section A of"
			*** **********************************
B/138(50)	MOD	1193	Suppress "Section A of"
			and the state of t
B/138(51)	MOD	1197	Suppress "Section A of"
			et retar our destruction destruction des retarions
			Article 33
B/138(52)	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 Section C of Appendix 17, or the working frequency associated with that of the coast station in accordance with Section A or B of Appendix 17.

Document Page 14	No. 138	-E		
Ref.				
B/138(53)	MOD		1249	
B/138(54)	MOD		1352	

\$13.(1) When a ship is called by a coast station it may reply either on the calling frequency given in Section C of Appendix 17, or on the working frequency associated with that of the coast station in accordance with Sections A or B of Appendix 17.

#### Article 35

1352 \$14. In the bands authorized for radiotelephony, ship stations may use, for calling,

one of the following frequencies:

4133 kc/s 8266 kc/s 12 400 kc/s 16 530 kc/s 22 070 kc/s

B/138(55) NOC 1354

B/138(56) SUP 1356

B/138(57) MOD 1357

(2) Administrations may assign frequencies of Section C of Appendix 17 to ships of any category according to traffic requirements, and to coast stations, for single sideband channel simplex operation. Such stations shall not use power in excess of 1 kw Pp.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 139-E 8 September 1967 Original: English

#### PLENARY MEETING

#### BRAZIL

#### Proposals for the work of the Conference

#### Agenda Item 4:

Possible revision of Appendix 18 of the Radio Regulations.

Ref.			Article 1
B/139(58)	ADD	37A	Navigation Communications: Safety communications in the maritime mobile service pertaining to the manoeuvering 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.
			Bridding September 2011 September 2011 September 2011 September 2011 September 2011 September 2011 September 2
			Article 35
B/139(59)	ADD	1 <i>3</i> 63A	(6) The frequency 156.65 Mc/s is designated as the navigational communication channel (see Nos. 37A, 1363B).
			**************************************
B/139(60)	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.



#### Document No. 139-E Page 2

Ref.

B/139(61)

#### APPENDIX 3

 $\label{eq:Amend} \mbox{ Amend the table of frequency tolerances to read as follows:}$ 

Band: 100 to 470 Mc/s

#### 3. Mobile stations:

after - in the band 156 - 174 Mc/s - insert a reference.

At the end of Appendix 3, insert the following footnote:

The tolerance is 10 parts in 10<sup>6</sup> for ship station transmitters brought into service after 1 January 1970.

B/139(62) MOD

#### APPENDIX 18

# <u>Table of transmitting frequencies for the band 156-174 Mc/s</u> <u>for radiotelephony in the International Maritime Mobile Service</u> (See Article 35)

Channel	Transmitting frequencies (Mc/s)		Inter-	Port operations		Public	Navi-
designatērs	Ship Stations	Coast Stations	ship	Single Frequency	Two Freque <b>nc</b> y	Corres- pondence	gatio- nal
1	156.05**	160,65			10	8	
2	153,10	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	150,95	COME TO SECURITION OF SECURITI		7	11	
8	156.40	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	②				
9	156.45	156.45	5	5	A		
10	156,50		3	***			
11	156.55	156,55	And the second s	3			
12	155.60	156,50	**************************************	0			,
13	156,65	158,65					1
14	156,70	155.70		2			
15		Guard band	156,725 -	156.775 Mc/s			
16	156,80	156.80	territoria de la compania de la comp	CALLI	G AND SAFETY		
17	2 m 1 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	Guard band	156.825 Ma	/s - 156.875	Mc/s		<del></del>
18	156.90	161,50			3		
19	156,95	161,55			4	,	
20	157.00	161.60			0		
21	157.05	156.05** or 161.65			5		
22	157.10	161.70	e energy sur produceration and producerate even by		2		
23	157.15	150°15** or 161°75	ter tredenktur veder ausbestandelle			5	
24	15 <b>7</b> .20	16! .80			V6***	4	
25	157.25	167.85	na var av av medicinimi "C'es entre na esta e esta e esta e esta e esta e esta e esta e esta e esta e esta e e			3	
26	157.30	161,90	er Welste stilleten "Constitutioni ausmanne			0	
27	157.35	161.95		·		0	
28	157.40	162,00	and a state of the			6	

<sup>\*</sup> For assistance in understanding the Table, see notes a) to h) below.

<sup>\*\*</sup> See note e)

<sup>\*\*\*</sup> See note f)

B/139(62) (cont.)

#### APPENDIX 18

#### Notes referring to the Table

- MOD g) In the United States of America, the frequencies ... 156.35, 156.90, 156.95, 157.05, 157.10 and 157.15 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.

#### APPENDIX 19

B/139(63)

Amplify paragraph 2 by the following: All trans-mitters 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 kc/s.

#### Reasons:

To designate 156.65 Mc/s for use on a world wide basis for navigational communications and to provide for a frequency tolerance such that ship station transmitters will be able to operate with a separation of 25 kc/s between adjacent channels (see draft Resolution below).

B/139(64)

#### DRAFT RESOLUTION

RELATIVE TO THE SEPARATION BETWEEN ADJACENT
CHANNELS ASSIGNED IN THE VHF BAND (156 - 174 Mc/s)
FOR THE MARITIME MOBILE SERVICE
(See Appendix 18)

The Maritime Conference,

#### considering

that it will be desirable to envisage a separation of 25 kc/s instead of 50 kc/s between adjacent channels assigned in the 156-174 Mc/s 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 kc/s to a separation of 25 kc/s between adjacent assigned channels:

#### resolves

that equipment operating in the VHF band (156-174 Mc/s) brought into service on board ships after 1 January 1970 must be capable, after simple conversion, of operating with a separation of 25 kc/s 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:

Although the VHF 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 kc/s instead of 50 kc/s.

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 kc/s between adjacent channels.

## INTERNATIONAL TELECOMMUNICATION UNION

## MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 140-E 8 September 1967 Original: English

#### PLENARY MEETING

#### BRAZIL

#### Proposals for the work of the Conference

•	Age	nda	Item	5

Ref.	Classes of emission to be used on the international distress and calling frequencies 500 kc/s and 2182 kc/s					
*		· .	Article 28			
B/140(65)	MOD	974	a) Send class A2 or A2H emissions with carrier frequency on 500 kc/s, and receive class A2 and A2H emissions on 500 kc/s;			
B/140(66)	MOD	975	b) Send, in addition, class Al and A2 or A2H emissions on at least two working frequencies			
B/140(67)	MOD	976	c) Receive, in addition, class Al, A2 and A2H emissions on all the other frequencies necessary for their service;			
B/140(68)	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;			



## Document No. 140-E Page 2

Ref.	•		
в/140(69)	MOD	985	b) Send, in addition, on at least two working frequencies;
<b>B/</b> 140(70)	MOD	986	c) Receive in addition, on all the other frequencies necessary for their service.
			<del>na mana a gam</del>
в/140(71)	ADD	986A	\$ 19 bis. The class of emissions employed by ship stations shall be consistent with the provisions of Appendix 17 A.
			· .
B/140(72)	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;
B/140(73)	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;

D	_	£	
π	u	1	•
_	-	-	_

B/140(74)

MÓD

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.

#### Article 32

(After 1106)

B/140(75) 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 on-off keying of the modulated audio frequencies only.

B/140(76) SUP

1113

B/140(77) 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.

## Document No. 140-E Page 4

#### Ref.

B/140(78)

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:

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

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 141-E 8 September 1967 Original: English

PLENARY MEETING

#### BRAZIL

#### Proposals for the work of the Conference

#### Agenda Item 6:

Examination of the pertinent portions of the revised international code of signals

#### Comments:

Concerning Appendix 13, the series of Q code groups contained in Section I are for use by all services, therefore, it is beyond the competence of this W.A.R.C. to propose any amendments or deletions thereto. Generally speaking, Brasilian Administration recognizes 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, while I.T.U. retains general responsibility for signals and abbreviations relating to radiocommunication procedures. However, minor amendments must be introduced in Radio Regulations in order to up date it to the new international code of signals proposed by I.M.C.O.

Ref.			Article 19
B/141(79)	SUP	760	

Article 29

B/141(80) MOD 1005 (2) In the maritime mobile service only the service abbreviations given in Appendix 13 are to be used for the exchange of communications. If, in addition, brief communications relating

to navigational operations have to be transmitted



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Page 2

Ref.

B/141(80) (cont.) code group of international code of signals may be used in order to shorten the transmission of these communications; such transmissions should be introduced by the abbreviations "QTQ".

#### Article 33

B/141(81) ADD 1216A

Stations of the maritime mobile service equipped for radiotelephony are to use in the case of language difficulties abbreviations and signals according to Appendix 13 for the exchange of correspondence. If, in addition, short communications relating to navigational operations have to be transmitted, they may also use groups of the international code of signals in order to shorten the transmission of such communications, a sequence of such groups being introduced by the word "INTERCO".

B/141(82) ADD 1216B

The abbreviations and signals according to Appendix 13 and the groups of the international code of signals shall be spelled in accordance with the tables given in Appendix 16.

B/141(83) MOD 1222

- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);

ReI.
------

B/141(84)

*		
		<del>- •••••••</del>
		- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);

B/141(85) MOD 1273

MOD 1241

- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);

B/141(86) MOD 1287

- the words THIS IS (or DE spoken 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);

	Document Page 4	No. 141-E	į	
<u>Ref</u> .				
B/141(	87)	MOD	1289	the word "Out" (or VA spoken as VICTOR ALFA in case of language difficulties).
			. '	
	•			Article 34
B/141(	<b>8</b> 8)	MOD	1302	*****
				- CQ (CHARLIE QUEBEC) not more than three times;
				- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties;
				~
				- In no case
				······································
				Article 36
B/141(	89)	MOD	1386	of language difficulties see Nos. 1216A and 1216B.
				**************************************
B/141(9	90)	MOD	1393	•••••
,				— •••••• — — — — — — — — — — — — — — —
				- the words THIS IS (or DE spoken DELTA ECHO
				in case of language difficulties);
				- •••••••

Ref.			
B/141(91)	MOD	1430	••••••
			- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);
			, , <del>-</del> *******
			- the word RECEIVED (or RRR spoken ROMEO ROMEO ROMEO in case of language difficulties);
			<del>-</del>
			**************************************
B/141(92)	MOD	1451	••••••
			- the call CQ (CHARLIE QUEBEC);
			- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);
B/141(93)	MOD	1460	••••••
			<del>- •••••••</del>
			- the words THIS IS (or DE spoken DELTA ECHO in case of language difficulties);

#### Document No. 141-E

Page 6

Ref.

B/141(94)

#### 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*
А	Alfa	<u>AL</u> FAH
В	Bravo	BRAH VOH
C	Charlie	CHAR LEE or
		SHAR LEE
D	Delta	DELL TAH
E	Echo	ECK OH
F	Foxtrot	FOKS TROT
G	Golf	GOLF
· H	Hotel	HOH TELL
ı	India	IN DEE AH
J	Juliett	JEW LEE ETT
K	Kilo	KEY LOH
L	Lima	LEE MAH
M	Mike	MIKE
N	November	NO <u>VEM</u> BER
: <b>O</b>	Oscar	OSS CAH
P	Papa	<u>РАН</u> РАН
Q	Quebec	KEH BECK
R	Romeo	ROW ME OH
S	Sierra	SEE <u>AIR</u> RAH
${f T}$	Tango	TANG GO

<sup>\*</sup> The syllables to be emphasized are underlined.

B/141(94) (cont.)	Letter to be cransmitted	Word to be used	Spoken as*
	U	Uniform	YOU NEE FORM or
			OO NEE FORM
•	V	Victor	<u>VIK</u> TAH
	W	Whiskey	WISS KEY
•	X	X-ray	ECKS RAY
	Y	Yankee	YANG KEY
	Z	Zulu	<u>200</u> L00

<sup>\*</sup> The syllables to be emphasized are underlined.

ADD .

2. When it is necessary to use figure spelling, the following table shall be used:

Figure to be transmitted	Code word	Spoken as
0	NADAZERO	NAH-DAH-ZAY ROH
1	UNAONE	OO-NAH-WUN
2	BISSOTWO	BEES-SOH-TOO
3	TERRATHREE	TAY-RAY-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-MALL

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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Ref.

B/141(94) (cont.)

3. However, stations of the same country may use, when communicating between themselves, any other table recognized by their administration.

B/141(95) SUP

Delete Recommendation No. 22 of the Radio

Regulations.

B/141(96) SUP

Delete Recommendation No. 30 of the Radio

Regulations.

B/141(97)

#### 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 radiotelephone 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 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;

#### Document No. 141-E Page 10

Ref.

B/141(97) (cont.) (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 radiotelegraphy 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.

# Annex I 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".

B/141(97) (cont.)

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".

#### 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
CI	I am closing my station	Assistance refused
CP	Call to two 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	New	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?

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Page 12

Ref.

B/141(97) (cont.)

→ 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 MPH MSG	Minute (or minutes) Statute miles per hour Message	Very dark stools  Is no longer suffering  Slight movements and  massage every day

## 3. <u>Comparison between the revised International Code of Signals and the "Q" code</u> (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 Radio Regulations (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.

**GENEVA, 1967** 

Document No. 142-E 8 September 1967 Original: English

# PLENARY MEETING

## BRAZIL

## Proposals for the work of the Conference

## Agenda Item 7.1

Data transmission for ship stations.

Ref.			Article 32
		Section V.	Bands between 4000 and 27 500 kc/s
			A. General Provisions
B/142 <b>(</b> 98 <b>)</b>	MOD	1145	§ 17. (1) Mobile radiotelegraph stations equipped to operate in the bands specified in Nos. 1174, 1192 and 1196 shall employ only class Al emission. Survival craft stations may use class A2 emissions in these bands (see Nos. 994 and 997).
B/142 <b>(</b> 99 <b>)</b>	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.
_B/142(100)	ADD	1149A	(a) a band of working frequencies for ocean data and ocean data telecommand stations;



# Document No. 142-E Page 2

Ref.			
B/142(101)	MOD	1150	(b) a band
B/142(102)	'MOD'	1151.	(c) a band of working frequencies for the
			use of high traffic ship stations for teleprinter and data transmission;
B/142(103).	.ADD	,1151A	(d) a band of working frequencies for the use of high traffic ship stations for class Al emissions manual telegraphy;
			and the second of the second o
B/142(104)	MOD	1152	(e) a band
			Laborate delication of the second contraction
B/142(105)	MOD	1153	(f) a band
			, <del></del>
		C. Working	g frequencies for high traffic ships
B/142(106)	MOD	1192	§ 39. The working frequencies assigned to high traffic ships for teleprinter and data transmission are included within the following band limits:

## Ref.

B/142(106) (cont.)

4160 - 4168.125 kc/s 6240 - 6252.1875 kc/s 8320 - 8336.25 kc/s 12 471 - 12 504.375 kc/s 16 622 - 16 672.5 kc/s 22 148 - 22 185.5 kc/s

B/142(107)

ADD

1192A

§ 39 (bis); The working frequencies assigned to high traffic ships for manual telegraphy are included within the following band limits:

4168.125 -4177 kc/s 6252.1875 -6265.5 kc/s 8336.25 8354 kc/s 12 504.375 - 12 531 kc/s 16 672.5 - 16 708 kc/s 22 185.5 - 22 220 kc/s

B/142(108)

MOD

APPENDIX 3

Change table of frequency tolerances \* applicable to high traffic ship stations using Class Al emission from 200 parts per million to 50 parts per million, as indicated hereinafter:

<sup>\*</sup> As amended by the E.A.R.C. Space (1963)

Ref.
B/142(108)
(cont.)

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1 January 1966 to transmitters in use and to those to be installed before 1 January 1964  1 January 1970 if tolerances marke	Tolerances applicable to new transmitters installed after 1 January 1964 and to all transmitters after 1 January 1966 1	
Band: 4 to 29.7 Mc/s			
		·	
(b) Aeronautical stations:		·	
- power 500W or less	100	100	
- power above 500W	50	50	
(c) Base stations:			
- power 500W or less	100	100	
- power above 500W	50	50	
3. Mobile stations:			
(a) Ship stations:			
(1) Class Al emission			
Low traffic ship	1 <u>s 200</u>	200	
<u>High traffic shi</u>	ps	50 **	
(2) Emission other than Class Al:		,	
- power 50W or less	50 (c)	50 (c)	
- power above 50W	50	50	
(b) Survival craft stations	200	200	
(c) Aircraft stations	200 *	100 *	
(d) Land mobile stations	200	200	
4. Broadcasting stations	30	15	

<sup>\*</sup> As amended by the E.A.R.C. Space (1963).

#### Reasons:

To provide additional frequencies in sufficient quantity to accommodate the increasing number of ships eligible to use high traffic frequencies and to permit a separation of manual and automatic operations within the overall band.

<sup>\*\*</sup> Effective upon the entry into force of the revised Regulations.

Conditions for the use of emergency position indicating beacons.

# Ref. Article 1

B/142(109) MOD 41

Survival Craft Station: A mobile station in the maritime or aeronautical mobile service intended solely for survival purpose and located on any lifeboat or other survival equipment 1.

B/142(110) 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.

# Article 28

#### Conditions to be observed by mobile stations

#### Section VI. Survival craft stations

B/142(111) ADD

999A

§ 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:

## Document No. 142-E Page 6

Re	f	
_		_

B/142(112) ADD 999B

(a) with the carrier on 2182 kc/s using the emission specified in 1476B. 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

B/142(113) ADD 999C

(b) with carriers on 121.5 and/or 243 Mc/s using the emission specified in 1476C. Class A3 emission may also be transmitted. If a receiver is provided it shall be able to receive class A3 emissions.

### Article 36

#### Section VIII A. Survival craft beacon signals

B/142(114) ADD 1476A § 44 (bis).(1) The position indicating beacon signals employed by survival craft stations consist of:

B/142(115) ADD 1476B

(a) keyed emission modulated by a tone of 1300 cycles per second (± 20 c/s) 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

Ref.			
B/142(116)	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.
B/142(117)	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.
B/142(118)	ADE	1476E	§ 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.
B/142(119)	ADD	1476F	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.

#### APPENDIX 10

### Service Document Symbols

Ref. (See Article 20 and Appendix 9)

B/142(120) 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. 1476 B.
- B. The equipment is intended for operation on 121.5 Mc/s in accordance with No. 1476 C.
- C. The equipment is intended for operation on 243 Mc/s in accordance with No. 1476 C.

The number following the letter (s) shows the number of apparatus of the various types on board the ship.

#### Example:

WXYZ Union A8 CD3 (AL) CP H16
40 ABC xyz t

## Meaning:

8 units of type L on 2182 kc/s 3 units of equipment on 121.5 and 243 Mc/s.

#### Reasons:

Insertion in the Radio Regulations of provisions relating to emergency position indicating beacons.

Conditions for use of selective calling devices. No proposals are submitted.

# Agenda Item 7.4

Hours of service for ship stations. No proposal is submitted.

ships.

Frequencies to be assigned for the transmission by television of port radar images.

#### Ref.

#### Recommendation

B/142(121)

Transmission by television of port radar images to

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 allocation 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 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.

Establishment of a separate category for mobile radiotelephone traffic on inland waterways.

Ref:			Article 5
B/142(122)	MOD	287	The frequency 156.80 Mc/s
			In the bands 156.025 Mc/s
			Any use of frequencies in

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

#### APPENDIX 18

B/142(123)	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.

**GENEVA, 1967** 

Document No. 143-E 8 September 1967 Original: English

### PLENARY MEETING

#### BRAZIL

# Proposals for the work of the Conference

Ref.

Additional point BRAZIL/A

Article 5

B/143(124)

SUP

200

Reasons:

To provide more frequencies for radiotelephony in the band 1605 to 4000 kc/s, necessary to traffic in small boats.

# Additional point BRAZIL/B

Article 35

B/143(125)

ADD

1352A

8 14 bis. In Region 2, frequency 4133 kc/s is designated for distress purposes. It may also be used for call, reply and safety purposes.

#### Reasons:

Most countries in Region 2 have a large extension of coast; the international distress frequency of band 6 (2182 kc/s) provides a short range possibility in permanent watch. It would be most convenient if a frequency in the 4 Mc/s band were provided for distress purposes, thus propitiating a more efficient service.



# Ref. Additional point BRAZIL/C

### Article 23

B/143(126) ADD 874A

c) bis. Practical knowledge necessary to repair during a voyage, with the means available on board of ships, damage which may occur to the radiotelegraph, radiotelephone radio-direction finder and other electronic apparatus generally used aboard of ships for radio navigation.

B/143(127) ADD 883A

c) bis. Practical knowledge sufficient for effecting repairs during a voyage, in case of minor damage which may occur to the radiotelegraph, radiotelephone, radio-direction finder and other electronic apparatus generally used aboard of ships for radio navigation.

#### Reasons:

The increasing number of electronic equipments on board of ships used for communications as well as for navigation aids and the introduction of more elaborated equipments as single side band, direction finders and radar, require a higher level of training of the operators than it has been required to date.

Although No. 868 of Radio Regulations state that each administration is free to fix the number of examinations necessary to obtain each certificate, it has been desirable that the Radio Regulations be more realistic with regard to the level of instruction required from the operators on board of ships, that is, of the Maritime Mobile Services, and their ability to carry on certain repairs on the equipment which they operate and must be familiar with.

**GENEVA, 1967** 

Document No. 144-E 12 September 1967 Original: French

BUDGET CONTROL COMMITTEE

### Note by the Secretary-General a.i.

#### BUDGET OF THE CONFERENCE

At its third meeting, the Finance Committee of the Administrative Council (21st Session 1966) set an overall limit of 1,050,000 Swiss francs on the budget of the Maritime Conference and instructed the Coordination Committee to see that this amount was used in the most effective way possible.

To facilitate control of the use made of this total credit, it has been broken down into the customary budget items. A table showing this breakdown is annexed hereto.

Mohamed MILI Secretary-General a.i.

Annex: 1



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# A N N E X

# DETAILS OF EXPENSES IN SECTION 7. CONFERENCES OF THE UNION IN ACCORDANCE WITH No. 208 OF THE CONVENTION

# 7.7 World Administrative Maritime Radio Conference

Place of the Conference : Geneva Duration : 7 weeks

	•	
		BUDGET 1967
		Swiss francs
Staff		
<del></del>		
7.701	Administration	71,500
	Languages	587,000
7.703	Document reproduction	69,000
7.704	Insurance	5,000
		· · · · · · · · · · · · · · · · · · ·
		732,500
Premis	es and equipment	
7.705	Premises, furniture, machines	70,000
7.706	Document production	115,000
7.707	Office supplies and overheads	27,000
7.708	Simultaneous interpretation and other	-
	technical installations	1,000
7.709	Unforeseen	2 <b>,</b> 50 <b>0</b>
		215,500
i		
Prepar	atory work	
7 710	I.F.R.B. preparatory work	45,000
	Book of proposals	57,000
1.177	noor of brohosers	000 والا
		102,000
		1,050,000
		_,0,0,000

**GENEVA, 1967** 

Document No. 145-E 12 September 1967 Original: English

#### PLENARY MEETING

#### CANADA

## Proposals for the work of the conference

#### Agenda 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.

Ref.

Article 5

CAN/145(40)

MQD 200

In Region 2, coast stations and ship stations using radiotelephony are limited to upper sideband A3J emissions and a maximum power (Pp) of 1 kw, with suppressed carrier frequencies of 2065.0, 2079.0, 2082.5, 2086.0, 2089.5, 2093.0, 2096.5, 2100.0, 2103.5 kc/s.

#### Reasons:

There is a need in Canada for additional 2 Mc/s radiotelephone frequencies. In view of the limited use being made of the exclusive maritime mobile band 2065 - 2107 kc/s in Region 2, and recognizing the need for spectrum conservation, the proposed use of SSB in this band would satisfy the requirement, while permitting the continued use of emissions authorized under existing regulations.



# Document No. 145-E

Page 2

Ref.

Article 7

Section IV

CAN/145(41)

MOD

455

In Region 3, the band 2088.5 - 2093.5 kc/s is reserved exclusively for calling (telegraphy only).

### Reasons:

As a consequence of the proposed amendment of footnote No. 200 the use of radiotelephony in this band would be permitted in Region 2.

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 146-E 13 September 1967 Original: English

PLENARY MEETING

## Memorandum by the Secretary-General ad interim

SITUATION OF CERTAIN COUNTRIES WITH RESPECT TO THE CONVENTION

The attention of the Conference is drawn to the fact that the following countries, which are listed in Annex 1 to the Montreux Convention, but which did not sign that Convention, have not yet acceded thereto:

Albania (People's Republic of)
Burundi (Republic of)
Cambodia (Kingdom of)
Dominican Republic
El Salvador (Republic of)
Honduras (Republic of)
Libya (Kingdom of)
Uruguay (Oriental Republic of)
Viet-Nam (Republic of)
Yemen

Mohamed MILI Secretary-General a.i.



**GENEVA, 1967** 

Document No. 147-E 13 September 1967 Original: English

PLENARY MEETING

NOTE BY THE SECRETARY-GENERAL AD INTERIM

At the request of the Administration of Jordan the attached letter is brought to the notice of the Conference.

A copy of the letter has been transmitted to the I.F.R.B. to be dealt with according to the relevant provisions of the Radio Regulations. The General Secretariat will make the necessary amendments to the List of Coast Stations.

Mohamed MILI Secretary-General a.i.

Annex: 1



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# ANNEX

The Hashemite Kingdom of Jordan Ministry of Posts, Telegraphs & Telephones Amman

3 September 1967

Secretary-General I.T.U., Geneva, Switzerland.

Dear Sir,

Proposed frequencies for the coast station at Aqaba Port are given in the attached sheet. These frequencies may kindly be considered by the World Administrative Radio Conference for Maritime Mobile Service which is going to be held shortly in Geneva.

Yours faithfully,

Sign. : (illegible)

Assistant Under Secretary (Technical Division)
Ministry of Communications
P.T. & T.

Annex to Document No. 147-E Fage 4

			Emissi	on		Servi	ce	Charge	Geographical	
Name of the Call Frequency station sign kc/s	Frequencies	Class po	power   _	Nature service	Hours service	cen-	co-ordinates of the			
	kc/s	Mc/s		kW	261.410.6	G.M.T.	(gold) francs	transmitting antenna		
Aqaba	JYO	477		Al A2	<b>3∙</b> 5	CP	24		34 <sup>0</sup> 59 48"E	Keeps watch, calls and answers on 500,
Port Radio		500		A1 A2	3.5	CP	24	_	29 <sup>0</sup> 30!36"N	changing to 477 kc/s after contact has been established. The operation at pre-
										sent is from 0500-1800 and power output 0.5 kW. Power would be increased and working extended to 24 hours
		2182		<b>A</b> 3	3.5	CP	24	_		Keeps watch, calls and answers on 2182.
		2612.3		A1 A3	<b>3.</b> 5	CP	24	_		changing to 2612.5 kc/s after contact has been established. Further remarks as above.
		4371.7		<b>A</b> 3	3.5	CP	24	-		New frequency not yet assigned
	en al-dudo (cui	6479		Al A2	3.5	CP	24	-		New frequency not yet assigned
		8255.6		Al A2	3.5	CP	24	-		New frequency not yet assigned
		8760.8	·	A3	3.5	CP	24	-		New frequency not yet assigned
		12 389.5		Al A2	3.5	CP	24	_		New frequency not yet assigned
		13 140.8		A3	3.5	CP	24	-		New frequency not yet assigned
	,	16 519.5		Al A2	3.5	CP	24	-		New frequency not yet assigned
		17 293.5	ĺ	Δ3	3.5	CP	24	_		New frequency not yet assigned
		22 545		Al A2	3.5	CP	24	_		New frequency not yet assigned
		22 695.5		A3 .	3.5	CP	24	_		New frequency not yet assigned
			156.80	F3	0.05	CP	24	-		New frequency not yet assigned
				E .						

**GENEVA, 1967** 

Document No. 148-E 15 September 1967 Original: English

#### PLENARY MEETING

#### FRANCE

#### Proposal for the organization of the Conference

Committee 1 : Steering

Committee 2 : Credentials

Committee 3: Budget control

Committee 4: Technical and frequency usage

Terms of reference: to examine in particular Articles 7, 28 (Sections III, IV and VI), 32 and 35 and Appendices 3 and 19 of the Radio Regulations, and agenda items 2, 5,

7.1, 7.2, 7.3, 7.5 and 7.6.

<u>Committee 5</u>: Frequency assignment

Terms of reference: to examine in particular Articles 7 (Nos. 443, 444, 456 and 457) and 9, and Appendices 15, 17, 18 and 25 of the Radio Regulations, and agenda items

1, 3 and 4.

<u>Committee 6</u>: Operation

Terms of reference: to examine in particular Articles 20, 22 - 25, 28 (Sections I and II), 29 - 31, 33, 34, 36 - 40, and Appendices 9 - 13, 16, 20 - 22 of the Radio Regulations, and items 6, 7.4 and other points under item 7 of the agenda which concern operation.



Document No. 148-E Page 2

Committee 7 : Editorial

#### Reasons:

The Conference must be organized principally with a view to keeping the duration of Committee work as short as possible and the reference of questions from one committee to another to the strict minimum, and to facilitating the task of the Editorial Committee during the last days of the Conference.

The decisions of principle to be taken concerning the adoption of single sideband operation (agenda item 1) directly affect the study of questions concerning Appendices 15, 17 and 25, which it seems to be moreover impossible to dissociate from each other owing to the proposals made to amalgamate some parts of Appendix 15 with Appendix 17. It is highly important that the same committee should examine all the problems and be alone to take decisions.

This committee should also be given the task of considering the amendments to be made to Article 9 as a consequence of its decisions.

The conclusions transmitted to the Editorial Committee on these important matters will thus be more consistent than if they emanate from different committees.

The committee entrusted with the above questions (Committee 5) would therefore be called upon to deal mainly with frequency tables and might also study Appendix 18.

Apart from operational questions, which would come within the terms of reference of Committee 6, the bulk of the other questions to be studied would be entrusted to Committee 4. The latter would therefore have to consider, on the one hand, technical characteristics (Appendices 3 and 19 to the Regulations) and, on the other, conditions for the use of frequencies (Articles 7, 28, 32 and 35 of the Regulations) and agenda items 7.1, 7.2, 7.3, 7.5 and 7.6.

**GENEVA, 1967** 

Document No. 149-E 18 September 1967 Original : French

#### PLENARY MEETING

#### FRANCE - UNITED KINGDOM

### Proposal for the Organization of the Conference

Having considered Documents Nos. 116 and 148, the Delegations of France and the United Kingdom propose the following organization for the work of the Conference:

Committee 1 : Steering

Committee 2 : Credentials

Committee 3: Budget control

Committee 4 : Radiotelegraphy

Terms of to examine, inter alia, Articles 7, 28 (Sections III, IV and VI),

reference: 32 and Appendices 3, 15A and 19 of the Radio Regulations,

together with agenda items 2.3, 2.4 and 2.5, 5 (frequency 500 kc/s), 7.1, 7.2 (after consideration by Committee 6), 7.3 (after

consideration by Committee 6), and 7.5.

Committee 5 : Radiotelephony

Terms of to examine, inter alia, Articles 7 (Nos. 443, 444, 456 and 457),

reference: 9 and 35 and Appendices 15 B, 17, 18 and 25 of the Radio

Regulations together with agenda items 1, 2.1, 2.2, 3, 4, 5

(frequency 2182 kc/s) and 7.6.

Committee 6 : Operation

to examine, inter alia, Articles 20, 22 to 25, 28 (Sections I and Terms of reference: II), 29 to 31, 33, 34, 36 to 40 and Appendices 9 to 13, 16, 20 to

22 of the Radio Regulations, together with agenda items 6, 7.2,

7.3, 7.4 and other questions under item 7 which relate to

operation.

Committee 7 : Editorial



## INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 150-E 18 September 1967

Original: French/English/

Spanish

PLENARY MEETING

### Memorandum by the International Frequency Registration Board

IMPLEMENTATION OF RESOLUTION No. 15

ADOPTED BY THE ADMINISTRATIVE RADIO CONFERENCE (GENEVA 1959),
WITH RESPECT TO INTER-SHIP FREQUENCIES IN THE BANDS
BETWEEN 1605 AND 3600 kc/s IN REGION 1

Resolution No. 15, the text of which is attached hereto, was adopted by the Administrative Radio Conference (Geneva 1959) for the essential purpose of permitting the notification and recording in the Master Register of frequencies used for inter-ship communications by the Administrations of countries in Region 1 to which no frequency had been assigned for this same type of service in the bands between 1605 and 3600 kc/s, in the Plans prepared during the years 1948 - 1951.

At 1 May 1961, the date of entry into force of the Radio Regulations (Geneva 1959), the Administrations of three countries had notified, in accordance with Resolution No. 15, 40 entries relating to the use of 27 frequencies for inter-ship communications. These notifications have been inserted in the Master Register. No further notification of this kind has since been received by the I.F.R.B.

Annex: 1



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# ANNEX

#### RESOLUTION No. 15

# relating to inter-ship frequencies in the bands between 1605 and 3600 kc/s in Region 1

The Administrative Radio Conference, Geneva, 1959,

#### considering

- a) that the Master International Frequency Register will contain among the initial entries the frequency assignments adopted by the Extraordinary Administrative Radio Conference, Geneva, 1951, made to specific countries for inter-ship communications in the bands between 1605 and 3600 kc/s in Region 1;
- b) that provisions should be made for the notification and recording of the use of these frequencies for inter-ship communications by administrations of other countries in Region 1;

#### resolves

- that the use of the frequencies referred to in a) above by other administrations should be coordinated with the administrations concerned, and subsequently notified to the International Frequency Registration Board;
- 2. that upon such notification the Board shall record these new assignments in the Master International Frequency Register, without any date in Columns 2a or 2b, but with an appropriate note in the Remarks Column followed by the date of receipt of the notice by the Board;

#### invites administrations

to review the recorded areas of operation of the frequency assignments concerned, with a view to improving sharing possibilities; and

#### requests the International Frequency Registration Board

to make, where necessary, such suggestions to the administrations concerned as it may be able to offer with a view to achieving the purpose referred to in the immediately preceding paragraph.

**GENEVA, 1967** 

Document No. 151-E 18 September 1967

Original: French, English

Spanish

### PLENARY MEETING

## Memorandum by the International Frequency Registration Board

SOME COMMENTS ON SECTION B OF APPENDIX 15

TO THE RADIO REGULATIONS, ENTITLED

"CARRIER FREQUENCIES IN ke/s FOR SHIP RADIOTELEPHONE

STATIONS USING THE MARITIME MOBILE SERVICE

BANDS BETWEEN 4 AND 23 Me/s"

In Section B of Appendix 15 to the Radio Regulations, the Administrative Radio Conference, Geneva 1959, specified within the frequency bands listed under number 449 of these Regulations, on one hand "calling frequencies" to be used by ship radiotelephone stations using the double sideband technique in the 8, 12, 16 and 22 Mc/s bands and, on the other hand, "upper sideband carrier frequencies" to be used as working frequencies by ship radiotelephone stations using the single sideband technique in the 4, 6, 8, 12, 16 and 22 Mc/s bands.

The Board considered that frequencies specified in Section B of Appendix 15 belonged to the common frequencies category as specified in number 488 of the Radic Regulations and thus did not call for notification, and the administrations which had submitted frequency assignment notices accepted this viewpoint and have withdrawn their notices.

However, when, according to the provisions of Resolution No.1, paragraph 2b) of the Administrative Radio Conference, Geneva, 1959, the Board had to enter in the Master International Frequency Register the "upper sideband carrier frequencies" specified in Section B of Appendix 15, the Board recorded the "assigned frequency" (number 85 of the Radio Regulations), that is to say the centre channel frequency was inserted in column 1. The Board took the initiative of specifying this frequency on the basis of the carrier frequency by applying the provisions of paragraph 3.2.1 of Appendix 17. The carrier frequency has been inserted in the "Remarks" column within the spirit of the provisions of Appendix 1 (page 337, paragraph 3).



In exchanging correspondence with Administrations on the "upper sideband carrier frequencies" of Section B of Appendix 15 to the Radio Regulations, the Board noticed that the lack of specification of the channels in this Appendix had caused some misunderstandings. Consequently, it considers that if, after revision of Appendix 15 to the Radio Regulations, the conference leaves the provisions of Section B in a form comparable to the present one, the channels to be used by single sideband ship radiotelephone stations should be clearly specified, as is being done in Appendix 17. The radiotelephone equipment of ship stations operates according to the same characteristics, whether it uses frequencies of Appendix 15 or those of Appendix 17.

Moreover, in accordance with the provisions of number 1353 of the Radio Regulations, in that part of the tropical zone situated in Region 3, frequency 6204 kc/s using double sideband emissions is designated for call, reply and safety purposes. The use by coast stations of this frequency for such purposes is not excluded. Now, in Section B of Appendix 15, frequencies 6200.5 kc/s and 6204 kc/s are listed among the carrier frequencies to be used on a worldwide basis by ship stations as "upper sideband carrier frequencies" for single sideband radiotelephone transmissions. It, therefore, seems that these provisions as a whole are not entirely consistent.

If the Conference does not envisage to amend substantially the provisions of Section B of Appendix 15 and those of number 1353, it may wish to consider whether, in view of the extending use of the single sideband technique in the Maritime Mobile Service, it would not be appropriate to include in the Radio Regulations, with respect to frequencies 6200.5 kc/s and 6204 kc/s, provisions aiming at avoiding difficulties which may arise in that part of the tropical zone situated in Region 3 or in its neighbourhood.

**GENEVA, 1967** 

Document No. 152-E 18 September 1967

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### PLENARY MEETING

## Memorandum by the International Frequency Registration Board

WORKING FREQUENCIES FOR SHIP STATIONS

EMPLOYING CLASS A1 OR A2 EMISSIONS IN

THE AUTHORIZED BANDS BETWEEN 405 AND 535 kc/s

(Nos. 1123 and 1124 of the Radio Regulations)

#### SUMMARY

In this memorandum, the Board draws the attention of the World Administrative Maritime Radio Conference to the question of the use, by coast stations, of frequencies in the neighbourhood of working frequencies allocated for ship radiotelegraph stations (425, 454, 468 and 480 kc/s throughout the world, 512 kc/s in Regions 1 and 3, and 448 kc/s in Region 2).

#### REPORT

By virtue of No. 1123 of the Radio Regulations, ship stations employing class Al or A2 emissions in the authorized bands between 405 and 535 kc/s must use the working frequencies 425, 454, 468 and 480 kc/s throughout the world, and may use frequency 512 kc/s in Regions 1 and 3 and frequency 448 kc/s in Region 2. No. 1124 states that:

"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."

If No. 1124 of the Radio Regulations is interpreted literally, a coast station making class A2 emissions can use frequency 452 kc/s, for example, whereas the frequency 454 kc/s is used by ship stations making class A2 emissions. Harmful interference is therefore certain to occur when the ship station is not too distant from the coast station, and instances of interference occurring in similar circumstances have been



brought to the Board's attention. But in applying the provisions of Article 9 of the Radio Regulations, the Board may be at a loss to issue a finding for a frequency notice concerning the assignment of the frequency 452 kc/s to a coast station, since 454 kc/s is a frequency which - under No. 488 of the Regulations - is not to be notified to the I.F.R.B.

The Board feels that this difficulty could be overcome to some extent if the provisions of No. 1124 were to be made clearer, for example by extending the provisions of No. 441 (which are applicable "in the African area of Region 1") to the whole world. These specify that:

"the separation between adjacent frequencies used respectively by coast stations and by ship stations is 4 kc/s."

These provisions are substantially the same as those prescribed for the European Maritime Zone in Article 2 of the European Maritime Regional Radio Convention (Copenhagen, 1948).

A provision of this nature should afford greater protection to the frequencies reserved for ship radiotelegraph stations, and the Conference may perhaps wish to consider whether it is desirable to clarify No. 1124 of the Radio Regulations with this in view.

**GENEVA, 1967** 

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## PLENARY MEETING

### Memorandum by the International Frequency Registration Board

APPLICATION OF THE PROVISIONS OF ARTICLE 9 OF THE RADIO
REGULATIONS IN THE FREQUENCY BANDS ALLOCATED EXCLUSIVELY TO
COAST RADIOTELEGRAPH STATIONS BETWEEN 4000 kc/s AND 28 000 kc/s

(No. 453 of the Radio Regulations)

#### SUMMARY

In this memorandum, the International Frequency Registration Board submits to the World Maritime Administrative Radio Conference a report on the way the Board has applied the provisions of Article 9 of the Radio Regulations to notices received from administrations concerning frequency assignments to high frequency coast radiotelegraph stations.

#### REPORT

During the years 1948-1951, a Frequency Assignment Plan for high frequency coast radiotelegraph stations operating in frequency bands allocated exclusively to such stations has been prepared and adopted. The frequency assignments contained therein were entered in the Master Radio Frequency Record established as from 1 March 1952, with the date of 3 December 1951 in Column 2a, and this Plan has been implemented progressively during the years 1952-1958. Each time an administration put into use an assignment contained in the Plan, it notified the Board of the date of putting into use, which was entered in Column 2c of the Record. According to a special interim procedure, the frequency assignments not in accordance with the Plan were entered in the Master Record with a date in Column 2b.

In its Resolution No. 1, the Administrative Radio Conference (Geneva, 1959) decided the creation, as from 1 May 1961, of a new Master International Frequency Register and agreed that, when transferring the assignments contained in the Plan into this new Register, those of these



assignments which had not been put into use by 1 May 1961 (and which would consequently not bear a date in Column 2c) would be eliminated (page 506 of the Final Acts of the Administrative Radio Conference, Geneva, 1959). As a result, the Plan previously adopted no longer exists as such since 1 May 1961. In addition, the Geneva Conference (1959) decided that all frequency assignments not in accordance with the Plan, which had been entered in the Master Record according to the interim procedure, should be re-examined by the Board on 1 May 1961.

Since 1 May 1961, the portion of the Master International Frequency Register relating to the frequency bands allocated exclusively to coast radiotelegraph stations is kept up to date by the Board according to those provisions of Article 9 of the Radio Regulations (in particular those of Nos. 573 to 575) applicable to the parts of the radio frequency spectrum other than those for which world—wide Plans have been prepared and adopted in 1959 or subsequently (these Plans are contained in Appendices 25, 26 and 27 to the Radio Regulations).

When, in applying the provisions of Article 9 of the Radio Regulations, the Board examines frequency assignment notices with respect to the probabilities of harmful interference, it uses its Technical Standards and follows the methods specified in Chapter G of its Rules of Procedure\*. In brief, the result of the technical examination, which serves as a basis for the finding reached, depends upon the extent to which the service areas of the coast stations already recorded in the Master Register are reduced, as a result of the frequency utilization newly notified.

In conformity with the provisions of Article 9 of the Radio Regulations, any frequency assignment recorded in the Master Register consequent upon favourable findings by the Board with respect to the provisions of No. 502 (probabilities of harmful interference) and other provisions of the Radio Regulations, bears a date in Column 2a and has the right to international protection from harmful interference, according to No. 607 of the Radio Regulations. Any frequency assignment recorded in the Master Register in accordance with No. 515 of the Radio Regulations (that is to say, after the notice has been returned to the notifying Administration consequent upon an unfavourable finding and this Administration has resubmitted it under the conditions specified in No. 515 of the Radio Regulations) bears a date in Column 2b: the limits of the right of such an assignment to international protection are specified in No. 608 of the Radio Regulations, should harmful interference occur.

<sup>\*</sup> The Rules of Procedure of the I.F.R.B. (3rd edition) were distributed to administrations with I.F.R.B. Circular-letter No. 139 dated 1 October 1965.

As at 15 August 1967, the situation of the Master Register in the frequency bands specified in No. 453 of the Radio Regulations may broadly be summarized by the following data, which relate to radiotelegraph coast stations:

- a) Number of frequency assignments recorded in the Master Register as at 15 August 1967: 7904 (for 95 countries designated by 145 symbols).
- b) Number of frequency assignments recorded in the Master Register, as at 15 August 1967, with the date of 3 December 1951, in Column 2a: 3320 (for 85 countries designated by 121 symbols).
- c) Number of frequency assignment notices (new assignments or modifications to existing assignments) examined by the Board from 1 May 1961 to 15 August 1967: 5719

  (for 83 countries designated by 127 symbols).
- d) Number of frequency assignment notices recorded in the Master Register consequent upon favourable findings with respect to probabilities of harmful interference (No. 502 of the Radio Regulations): 3607 (for 82 countries designated by 125 symbols).
- e) Number of frequency assignment notices returned to administrations with unfavourable findings (No. 513 of the Radio Regulations): 954 (for 50 countries designated by 71 symbols).
- f) Number of frequency assignment notices recorded in the Master Register in accordance with the provisions of No. 515 of the Radio Regulations: 1188, including 375 assignments recorded after 1 May 1961.

  (for 53 countries designated by 69 symbols).

It should be noted that a certain number of administrations have notified the use by their coast radiotelegraph stations, in addition to classes of emission Al and Fl, of wideband classes of emission such as A4, A7J, F4 and F6, which are similar to "facsimile" referred to in No. 453 of the Radio Regulations. As at 15 August 1967, 825 frequency assignments (for 15 countries designated by 34 symbols) comprising classes of emission of this kind appeared in the Master Register.

Under item 2.5 of its agenda, the Conference may wish to consider whether it is appropriate that the wording of No. 453 of the Radio Regulations be amended to clarify the situation in this respect. Along the same lines, it may also wish to review the provisions of No. 1148 of the

Radio Regulations, which confirmed in 1959, limits imposed, when preparing the Plan, on the mean power of coast radiotelegraph stations operating between 4000 kc/s and 28 000 kc/s. The Conference may consider that the present development in the use of wideband telegraph transmissions and in particular of multi-channel telegraph transmissions, is not compatible with these limits which were intended for classes of emission Al and Fl more or less exclusively used by coast stations until 1959.

A certain number (15) of cases of harmful interference between coast radiotelegraph stations have been brought to the notice of the Board in accordance with Nos. 716 and 717 of the Radio Regulations. In some of these cases, the station interfered was recorded in the Master Register with a date in Column 2a, whereas the interfering stations bore a date in Column 2b: the interference case was then settled in accordance with the provisions of No. 607 of the Radio Regulations.

However, in cases when two stations were bearing dates in the same Column 2a or 2b, the Board endeavoured, for narrow-band transmissions (class Al), to suggest to the administrations concerned to slightly adjust in the opposite direction the frequencies of the two stations: the purpose was to leave a space of a few hundred c/s between them to enable the receiver on board and the operator's ear to make the necessary discrimination. The Board has then always tried to suggest frequency adjustments not exceeeding the limits set up in No. 534 of the Radio Regulations for keeping the date entered in the Master Register, when the technical examination with respect to harmful interference which might be caused to a third Administration, leads to a favourable finding (No. 502 of the Radio Regulations). This purpose has been reached in most of the cases. However, in cases where the limits set up in No. 534 of the Radio Regulations were exceeded, the Board has offered to refer to the provisions of Nos. 629 to 633 of the Radio Regulations, that is to say, to secure the agreement of all administrations concerned for keeping the original dates.

Obviously, when classes of emission F1, F4, F6, A4, A7J, etc. are more generally used in the radiotelegraph maritime mobile service, the possibilities of frequency adjustments allowing avoidance of harmful interference between radiotelegraph coast stations will be apparently reduced. However, as an increase in the overall traffic may be expected in the future, this extension of automatic telegraphy will probably be done at the expense of the manual class Al telegraphy and the high-speed transmission of traffic by automatic processes will perhaps enable many administrations to consider releasing a certain number of the frequencies which they presently use for manual class Al telegraphy.

Since 1 May 1961, 9 administrations have requested the I.F.R.B.'s assistance, in accordance with Section VII of Article 9 of the Radio Regulations, to determine frequencies to be used by their coast radiotelegraph stations. In each case, the Board studied all available information on the frequency utilization and it has recommended to the administration concerned to do its utmost, before notifying the frequency assignments suggested by the Board, to make sure through monitoring and even by tests, that there would be little risk of mutual harmful interference with coast stations already recorded in the Master Register. All appropriate details may be found for each case in I.F.R.B. files.

It generally appears that the 35 frequency assignments so suggested by the Board have reasonably satisfied the requirements expressed.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 154-E 18 September 1967 Original: French, English, Spanish

#### PLENARY MEETING

#### Memorandum by the International Frequency Registration Board

IMPLEMENTATION OF THE PANEL OF EXPERTS' RECOMMENDATIONS ON REPLACEMENT OF DOUBLE-SIDEBAND SYSTEMS BY SINGLE SIDEBAND SYSTEMS IN THE RADIOTELEPHONE MARITIME MOBILE SERVICE

In Resolution No. 3, the Administrative Radio Conference (Geneva, 1959) decided that a Panel of Experts should be established for the purpose of devising ways and means of relieving the pressure on the radio spectrum between 4 and 27.5 Mc/s. A Panel of Experts was set up which, after holding two meetings in Geneva in 1961 and 1963, unanimously adopted a final report with recommendations. This report was sent to Members of the Union under cover of I.F.R.B. Circular-letter No. 73 of 24 July 1963.

In its final report, the Panel of Experts recommended the replacement of double-sideband systems by single-sideband systems as one of the most important and rewarding methods of achieving economy in the use of the HF spectrum. It also drew the attention of Administrations to the fact that the use of single-sideband systems conferred many technical and economic advantages. Finally the Panel took note of Recommendation No. 28, in which the Administrative Radio Conference (Geneva, 1959) recommended that, for the maritime mobile service, single-sideband operation should be introduced as far as operationally required for radiotelephony in Bands 6 and 7 and expressed the view that this recommendation should be strengthened for the frequency bands between 4 and 23 Mc/s. This the Panel did by recommending specific dates for the introduction of the single-sideband system in coast and ship radiotelephone stations using frequencies between 4 and 23 Mc/s. The recommendation in Question (No. 3) is given in Annex I. The Administrative Council took note of the final report of the Panel of Experts at its 19th Session (April - May 1964) and invited Administrations to apply the Panel's recommendations as early as practicable and to the extent possible. One of the recommendations to which the Administrative Council drew the attention of the competent administrative conferences was Recommendation No. 3.



Since 1964, whenever the Board received notices of assignment to radiotelephone coast stations using double-sideband, the Board, while considering the notices in accordance with the provisions of Article 9 of the Radio Regulations, invited the attention of the notifying Administrations to Recommendation No. 3 of the Panel of Experts.

The Administrative Council also invited the I.F.R.B. to implement Recommendation No. 37 of the Panel of Experts. Paragraphs 2 and 3 of this recommendation are as follows:

- "2. The I.F.R.B. shall request Administrations to implement, progressively and to the extent possible, the recommendations of the Panel of Experts, and shall request them to inform the Board periodically of the progress made in this respect;
- 3. The I.F.R.B. shall request periodically from the Administrations data on the number of radio transmitters and receivers remaining to be converted from DSB to SSB in the fixed, aeronautical and maritime mobile services in the HF spectrum."

In accordance with this recommendation, the Board issued Circular-letters No. 107 of 18 August 1964, No. 144 of 16 December 1965 and No. 166 of 6 March 1967, asking Administrations to submit, on special forms, information on progress made or anticipated by the end of 1964, 1965 and 1966, respectively, in implementing the recommendations of the Panel of Experts and, in particular, in replacing double-sideband transmitting and receiving systems by single-sideband systems for HF radiotelephone links in the maritime mobile service. The information received from Administrations for 1964 and 1965 was communicated to Administrations in analytical summaries under cover of Circular-letters No. 140 of 18 October 1965, and No. 164 of 2 February 1967.

The analytical tables in Annex II give information, for each country which has submitted data, on the number of HF radiotelephone transmitters and receivers in coast and ship stations which have been equipped for single-sideband operations and the number of such transmitters and receivers still to be so equipped at the end of 1964, 1965 and 1966. Although the statistical data received by the I.F.R.B. come from less than half the Administrations and thus do not reflect completely the situation obtaining in all the Member States of the Union, it is never—theless interesting to note that, according to available information, the number of transmitters equipped for single-sideband operations increased

about seven times in coast stations and about three times in ship stations between 1 January 1965 and 31 December 1966. During the same period, the number of single-sideband receivers increased sixfold in coast stations and fivefold in ship stations.

The Board wishes to thank those Administrations which have submitted regular reports on the progress made in introducing single—sideband systems. It hopes that the information contained in Annex II, although incomplete, will help the Conference to evaluate the trend over the last three years in the use of the single-sideband system in the HF radiotelephone maritime mobile service, to assess the prospects for the application of this system over the next few years, and to agree on a timetable for the introduction of this system on a world-wide scale.

Annexes: 2

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#### ANNEXI

#### EXTRACT

#### FROM THE FINAL REPORT OF PANEL OF EXPERTS

(Geneva, 1963)

#### RECOMMENDATION No. 3

- 1. By 1 January 1967 coast radio-telephone stations using the bands 4 23 Mc/s shall be equipped for single-sideband operation in addition to the present double-sideband facilities. Double-sideband operation shall cease by 1 January 1973, except in the case of coast stations communicating with the ship stations referred to in paragraph 3 below.
- 2. The conversion from double-sideband to single-sideband operation of ship radio-telephone stations which use the bands 4 23 Mc/s, shall commence by 1 January 1967 and shall be completed by 1 January 1973.
- 3. An exception to the provisions of paragraph 2 above shall be made for ship stations whose transmitters are referred to in Note c) of Appendix No. 3 to the Radio Regulations (ship stations of power 50 W or less, using only frequencies below 13 Mc/s in tropical regions). These stations may be treated, from the point of view of the date of conversion to single-sideband technique, like ship radiotelephone stations operating between 1605 and 4000 kc/s.

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### ANNEXII

#### STATISTICAL INFORMATION

The conversion of DSB systems into SSB or ISB in the <u>High Frequency Radio-telephone Maritime Mobile Service</u> derived from answers received from Administrations to I.F.R.B. Circular letters Nos. 107, 144 and 166.

#### A. COAST STATIONS

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Country Symbols	19	64	196	55	19	66	1	964	19	65	19	66
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AFI *	0	1	0	1	0	2	0	1	0	1	0	2
AFS	0	3	0	3	0	3	0	3	0	3	0	3
AGL	0	0	0	0	0 .	0	0	0	0	0	0	1
ALG	0	3					0	5				
ARG *	·											
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BER *	0	1		-				0	1			
BRM *					0,	0					0.	0

<sup>(1)</sup> The signification of the symbols is given in Appendix 1 to this Annex.

An asterisk in this column indicates particular comments of the

Administration concerned (see Appendix 2 to this Annex).

<sup>(2)</sup> Number of transmitters or receivers which have been equipped for SSB (possibly ISB) operations.

<sup>(3)</sup> Number of DSB transmitters or receivers remaining to be equipped for SSB (possibly ISB) operations.

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	1		TRANSM	ITTERS		# W			RECE	[VERS	· · · · · · · · · · · · · · · · · · ·	·
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ego					. 0	2					0	2
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D .	6	0-	10	0	14	0	12	0 .	10	0	14	0
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FNL	0	1	0	1	0	1	5	0	5	0	5	0
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GMB *	0	1					0	1				
GNP	0	1	0	1	0	1	0	0	0	2	0	2
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Country		Ţ	RANSMITI	ERS					RECEIV	ERS		
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HOL *					9	11		:		_	10	14
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IND *			2	1	0	0			2	1	2.	1
IOB *	0	0	Ö	0			0,	0	0	0		
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MLT *	0	0	0	0			0	0	0	0		
MOZ	0	3	0	3	0	3	0	3	0	3	0	3

Country		ſ	[RANSM]	TTERS					RECE	(VERS		
Symbols	190	64	196	5	<b>1</b> 96	66	196	64	19	965	19	966
(1)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
MTN *												
MWI *	4	2	4	0	0	0	4	2	4	0	0	0
NCL *	0	0 -	0	0	0	0	. 0	0	0	0		
NGR		·			0	0			*		0	0
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NZL *	1	1	2	0	1	0	2	· 2	2	0	1	0
. OCE			. 0	0	0	0			-0	0	0	0
PAP			0	7	0	5			0	12	. 0	10
PNR *		:	0	0					0	0		
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ROD *	0	0					0	0				
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S	, 0	0	0	5	0	5	5	0	8	20	11	20
SEN *			0	1	1	0			0	4	1	3
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		·					<del></del>					
Country			TRANSM:	ITTERS					RECE	VERS		
Symbols	19	64	190	65	19	66	196	54	19	65	1	966
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SPM	0	0					0	0				
SRL *			0	0	1	2			0	0	1	2
STP	0	2	0	2	0	2	0	2	0	2	0	2
TGK	0	0	]				4	3		·		
TGO	0	1			1	2	1	2			0	2
TMP					0	0					0	0
TRD			0	0	0	2	<b>/</b>	-	0	0	1	0
UGA	0	0	3 -			·	4	3	·			
URG					2	<b>1</b> 5	٠.				3	20
USA *	25	49	26	-50	603	63.	5 <b>3</b>	43	54	50	901	<b>5</b> 9
VTN	0	0		·.	·		0	· 0				
WAL	0	0		:			0	1				
ZWB			0	0			;		0	0		

### B. SHIP STATIONS

Country			[RANSM]	TTERS				:	RECEI	VERS		
Symbols	196	54	196	5	196	56	196	54	. 196	5	19	)66
(1)	(2)	(3)	:(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
ADN *	0	0					0	0			• • •	
AFI *	0	0	0	0	0	0	0	0	0	0	0	0
AFS	0	0	0	0	0	0	0	O	0	0	0	0
AGL	0	0	0	0	0	0	0	0	0	0	. 0	0
ALG	O	1		. :			0	1				
ARG *			,									
ARS			0	0	2	0			0	0	0	0
ASC *	0	0	,				0	i. 0				
AUS *	0	132	0	166	Ó	140	0	132	0	166	0	140
AUT	0	20	0	24	0	25	0	20	0	24	- 0	25
AZR					0	0					0	0
BER *	0	0					0	0				
BRM *	·				0	. 0					0	Ö
BUL *												
									-	_		
CAF	0	0	0.	0			0	0	0	0		
CAN *			40	577	163	5366			40	0	163	5366
CBG *		٠.	0	0					0	0		

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Country		T	RANSMI	TTERS				· · · · · · · · · · · · · · · · · · ·	RECE]	IVERS		
Symbols	196	54	196	5	196	6	196	54	196	55	196	6
(1)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
CGO					O.	0					0	0
CKH *	0	0	0	0			0	Q.	: 0	0		: .
CLN					20	2					20	. 2
COM *	0	0	0	4	0	-0	0	. 0	. Q	4.	0	0
CPV *			0	0	· 0	0			0	. 0	0	0
CTI			0	0	0	0			0	0	0	0
CYP			0	3			•		0	3		
D	6	420	11	460	17	464	6.	420	11	460	17	464
DNK	0	170			0	400	)  }.	165			÷ 0	400
E *			5	28	14	70			5	28	14	. 170
F *	79	834	85	832	91	829	79	834	85	832	91	829
FJI *	0	0					0	0	. '			
FNL	4	140	7	142	7	142	4	140	7	142	7	142
G *	26	428			104	415	26	428			104	415
GLP *	0	o					0	0	- ,			
GMB *	0	0					0	0				20 mg
GNP	ಂ	:0	0	0	. 0	0	0	0	0.	0	0	2. <b>0</b>

Country			TRANSM	LITTERS					RECEI	VERS		
Symbols	19	64	19	65	19	66	19	64	19	65	19	66
(1)	(2)	(3)	(2)	(3)	(5)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
<b>G</b> RC					0	656					0	656
CRL	3	.0			3	0	3	0			3	0
GTM	0	6					0	6				
GUI *			2	0	0	0			2	0	0	0
ITZO X	0	Ó					0	0				
HKG *	0	0					0	0				
HNG		O .	; • 0	63	0	100			0	75	Ö	100
HOL *					14	2049				ا ا	14	2049
					± 1	2019						
I *			16	120		-			26	165		
IND *			0	0	·	:			0	0		
IOB *												
IRL *	0	0	0	0			0	0	0	0		
ISR					1	125			ı		2	135
J	2014	0	2551	0	2849	0	2018	: - 0	2611	0	2868	0
	0	0	ارزدے	0	2019		0	. 0	0	0	2000	
JMC			U	O			0	0				
JOR *	0	0					, O					
KEN *	0	0	. 0	0			. 0	0	0	0		
KOR		·	0	0	0	0			0	0	0	0

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Country			TRANSM	ITTERS					RECEI	VERS		
Symbols	19	64	190	65	19	66	19	64	19	65	19	56
(1)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
KWT			,		0	20					0	20
LAO *			0	0					0	0		
MAC *	0	0	0	. 0	0	0	0	0	0	0	0	0
MAU *	0	0				;	0	0			. ,	
MDG *	0	1	. 0	1	0	1	0	1	0	1	0	1
MDR			0	0	0 :	0			0	0	0	. 0
MLA *			. 0	0	0	17		,	. 0 .	0	0	17
MLT *	0	0	0	0	:	*	0	0	. 0	0	†; •,	
MOZ	0	0	0	0	0 -	0	0	0	0	0	0	0
MTN *			1.7					:				
MWI *	1	2	1	2	0	0	1	2	1	2	0	0
NCL *	0	0	0	0	0	0	0	0	0	0	. 7	
NGR					. 0	0		-			0	0
NGU	o	0	0	0	0	0	o o	. 0	0	0	· 0 :	. 0
NIG	: :	,			0	0					0	. 0
NOR					190	1068		*,		· .	190	1068
NZL *	0	0	0	0	0	0	0	0	0	. 0	0	0

Country		T	RANSMI	TTERS					RECEIV	ERS	18 - X	
Symbols	19	64	196	5	196	66	196	4	196	5	196	6
(1)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
OCE			0	0	0	0			0	0	0	0
PAP			0	0	0	0			0	0	0	0
PNR *			0	0					0	0		·
POL *					2	0					2	0
POR			0	0	4	6.			0	0	4	6
ROD *	0	0					0	0				
ROU	0	0					0	0				
S	35	<b>3</b> 93	57	350	85	320	80	350	165	250	240	160
SEN *			0	0	0	0			0	0	0	0
SEY *	0	0					0	0			, f.	
SHN *	0	0					0	0			·	
SMO *	0	0	.0	0		-	0	0	0	0		
SNG *					0	. 0					0 ,	, 0
SPM	0	0					0	0				
SRL *			0	0	. 0	6			0	0	0	6
STP	. 0	0	0	0	0	0	0	0	0	0	0	0

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		· ·			·						<del></del>	
Country		(	<b>T</b> RANSM	ITTERS					RECEI	VERS		
Symbols	19	64	19	65	19	66	19	64	19	65	19	66
(1)	(2)	(3).	(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)	<b>(</b> 2)	(3)
TGK	0	0				·	0	0		·		
TGO	ō	· · · o .			0	0	0	0			0	. 0
<b>T</b> MP					0	. 0					0	0
TRD			Q	0	0	0			0	0,	0	0
				-								
UGA	0	0	:				0	0			,	
URG					0	40					0	<b>5</b> 5
USA	49	1285	111	1335	3245	1260	49	1285	111	1 <b>33</b> 5	7864	1260
TION	0	0										
VTN							0	0				
WAL	0	0	0	0								
ZMB			0	0		.š.,			0	0	!	

#### Appendix 1 to Annex II

## Country symbols

The following symbols have a geographical significance only:

Symbol	Name of the country	Symból	Name of the country
ADN	Aden	CBG	Kingdom of Cambodia
AFI	French Territory of the Afars and Issas	CGO	Democratic Republic of the Congo
AFS	Republic of South Africa	C <b>K</b> H	Cock Islands
AGL	Angola	CLM	Republic of Colombia
ALG	Algeria (Algerian Democratic and Popular Republic)	CIN	Ceylon
ARG	Argentine Republic	CNR	Canaries
ARS	*	COM	Comoro Islands
	Kingdom of Saudi Arabia	CPV	Cape Verde Islands
ASC	Ascension	CTI	Republic of the Ivory Coast
AUS	Commonwealth of Australia	CYP	Republic of Cyprus
AUT	Austria	-	
AZR	Azores	D	Germany
BER	Bermuda	DNK	Denmark
BRM	Union of Burma	E	Spain
BUL	People's Republic of Bulgaria		
,		ৰ	France
CAF	Central African Republic	FJI	Fiji <b>I</b> slands
CAN	Canada	FNL	Finland
		: :	

Symbol	Name of the country	Signal	Name of the country
G	United Kingdom of Great Britain and Northern Ireland, the Channel	KEN	Kenya
	Islands and the Isle of Man	KOR	Republic of Korea
GLP	Persian Gulf	KWT	State of Kuwait
CM3	Gambia (Bathurst)		
GNP	Portuguese Guinea	LAÓ	Kingdom of Laos
GRC	Greece	MAC	Macao
GRL	Greenland	MAU	Mauritius
GTM	Cuatemala	MDG	Malagasy Republic
GUI	Republic of Guinea	MDR	Madeira
THE	Them who are as	MLA	Malaysia
HKG	Hongkong	MLT	Malta
HNB	British Honduras	MOZ	Mozambique
HNG	Hungarian People's Republic	MTN	Islamic Republic of Mauritani
HOL	Kingdom of the Netherlands	MWI	Malawi
I	Italy		
IND	Republic of India	NCL	New Caledonia and Dependencie
IOB	British West Indies	NGR	Republic of the Niger
IRL	Ireland	NGU	Territory of New Guinea
ISR	State of Israel	NIG	Federal Republic of Nigeria
		NOR	Norway
J	Japan	NZL	New Zealand
JMC	Jamaica	CCE	French Polynesia
JOR	Hashemite Kingdom of Jordan		

Symbol	Name of the country	Symbol	Name of the country
PA P	Territory of Papua	STP	S. Thome and Principe
PNR	Panama	TGK	United Republic of Tanzania
POL	People's Republic of Poland	1017	(Tanganyika)
POR	Portugal	TGO	Togolese Republic
		TMP	Portuguese Timor
ROD	Rodriguez	TRD	Trinidad and Tobago
ROU	Socialist Republic of Roumania		
_		UGA	Uganda
S	Sweden	URG	Oriental Republic of Uraguay
SEN	Republic of Senegal	USA	The 48 contiguous States of
SEY	Seychelles	JOOA	the United States of America
SHN	S. Helena		(excludes the States of Alaska and Hawaii)
SMO	Western Samoa		
CNTC.	Danish I da and Odanisa nasa	VTN	Republic of Viet-Nam
SNG	Republic of Singapore		
SPM	S. Pierre and Miquelon	WAL	Wallis and Futuna Islands
SRL	Sierra Leone	CANALD .	Demuklia of Tombio
		ZMB	Republic of Zambia

#### Appendix 2 to Annex II

#### Statistical Information

#### Remarks

- ADN (1964) The coast station will be equipped to transmit and receive on SSB or ISB by 1 January 1967.
- AFI (1965) At present no R/T traffic in these bands.
- ARG (1966) With respect to the application of the Panel of Experts'
  Recommendation No. 3 on the use of SSB techniques in the
  bands allocated to the maritime mobile service, the Argentine
  Administration is conducting far-reaching studies through
  the competent technical organs with a view to the progressive
  introduction, as soon as possible, of the alterations envisaged
  for the emissions in question. The World Administrative Radio
  Conference to deal with matters relating to the maritime mobile
  service will undoubtedly adopt provisions in this connexion
  to render the relevant measures more effective.
- ASC (1964) No maritime mobile HF R/T service operated by Cable & Wireless, Ascension.
- AUS (1964) Seven transmitters and eight receivers for coast stations are on order.
  - (1965) Awaiting installation of coast station transmitters.
- BER (1964) From 1 January 1967 the coast station will be equipped for SSB or ISB operation.
- BRM (1966) No maritime mobile radiotelephone service at present.
- BUL (1966) The question of introducing SSB systems in the maritime mobile service is being studied.
- CAN (1966) Regarding the maritime mobile radiotelephone bands between 4 and 23 Mc/s, a number of Canadian coast stations provide a short-distance service to ships in the 4 Mc/s band, using 6A3 emissions, but relatively few are equipped to provide a long-distance service in the 8, 13, 17 and 22 Mc/s bands. I would confirm that all of our coast stations operating

between 4 and 23 Mc/s will eventually be equipped for single sideband operation, in addition to their double sideband facilities. Those coast stations operating at 8 Mc/s and above will be equipped with SSB probably by 1 January, 1967, but conversion of those operating at 4 Mc/s and below may not occur by that date.

With regard to Canadian ship-stations, we are presently developing a type-approval specification for ship-station SSB equipment taking into account the assignment principles contained in Appendix 17 of the Radio Regulations. When this Specification becomes effective, probably by 1 January 1967, any ship-station SSB equipment to which the Specification applies will be required to be type-approved prior to licensing.

On and after the effective date of the SSB Specification new Canadian ship-station installations intended for operation in the maritime mobile radiotelephone bands between approximately 4 and 23 Mc/s will be required to be type-approved under that Specification, prior to licensing. However, because of the economic impact on a large number of Canadian ships having equipment operating on frequencies between 2 and 4.5 Mc/s, it may be necessary to limit initial application of the SSB Specification to frequencies between 4.5 and 23 Mc/s. Ultimately, the SSB Specification will apply to all Canadian maritime mobile frequencies between 1605 kc/s and 23.0 Mc/s. Following the effective date of the SSB Specification existing 6A3 equipment operating in the relevant bands will continue to be licensed for an amortization period of about six years, after which the Specification will become fully effective. It would appear, therefore, that 1 January, 1973 is a reasonable target date for full implementation of SSB in the high frequency maritime mobile bands.

- CBG (1965) Is being planned.
- CKH (1965) DSB service only for ship stations of power less than 50W and not using frequencies above 13 Mc/s.
- COM (1965) The power of coast and ship station transmitters is less than 50W. Negligible traffic.
- CPV (1966) The 3rd Development Plan provides for replacement of DSB equipment by SSB and ISB.

- E (1965) The transmitter of the coast station equipped with SSB can also work in DSB.
- F (1965) The coast station transmitter is equipped to work in ISB (20 kw).
- FJI (1964) No maritime mobile R/T operated at Suva by Cable & Wireless Ltd.
- G (1964) The introduction of SSB generally is dependent on an internationally agreed method of implementing C.C.I.R. Recommendation 258 (either in its present or a revised form) and upon an agreed answer to question 282. It is unlikely that cessation of DSB operation could occur earlier than about 10 years after the date of such agreement.
- GLP (1964) Stations Bahrain and Muscat will be equipped for SSB or ISB operations by 1 January 1967.
- GMB (1964) Station will be equipped to operate either SSB or ISB by 1 January 1967.
  - (1966) Bathurst Radio is equipped to operate on both SSB and DSB in the maritime mobile radio telephone service on assigned frequencies between 4 and 23 Mc/s.
- GUI (1966) The existing coast stations are equipped for DSB operation.
- HKG (1964) Station will be equipped to operate on SSB or ISB by 1 January 1967.
- HNB (1964) No maritime mobile R/T operated by Cable & Wireless at Belize.
- HOL (1964) All transmitters at coast stations in the Netherlands are now equipped both for double sideband operation and single sideband (independent channels) operation. The single sideband system is used whenever the ship station in communication with the coast station is also equipped with single sideband equipment.

With regard to the conversion from double sideband to single sideband operation on board ship stations, I can inform you that by 1 January 1967 new installations installed on cargo ships of 1600 tons gross tonnage and upwards and passenger ships shall be equipped for single sideband operation in addition to double sideband facilities.

- I (1965) ... and various other ship stations, the number of which is not to be foreseen.
- IND (1965) The necessary changeover in the coast stations is being effected shortly.
- IOB (1964) The one station (Barbados) operating HF Maritime Mobile R/T, will be equipped to operate on SSB by 1 January 1967.
- IRL (1965) No maritime mobile radiotelephone service in the bands 4 23 Mc/s is operated by this Administration.
  - (1966) This Administration's coast stations do not operate in the 4-23 Mc/s band. The ship stations of this Administration have not yet been equipped for SSB or ISB operation.
- JOR (1964) No maritime mobile service operated by Cable & Wireless Ltd.
- KEN (1964) SSB projected before 1 January 1967 for coast stations.
  - (1966) No changeover from DSB to SSB before the middle of 1968.
- LAO (1965) No Maritime Radioservice in Laos.
- MAC (1965) No radio-maritime service in Macao.
- MAU (1964) No maritime R/T service operated by Cable & Wireless Ltd.
- MDG (1965) Ship station: Ville de Manakara (5RFJ).

  Coast station: Tamatave Radio
- MLA (1965) The Recommendations are being followed wherever possible. Excluding coast station transmitters in Sabah and Sarawak.
- MLT (1965) No maritime mobile HF R/T service operated by Cable & Wireless Ltd. at Malta.
- MTN (1966) The only coast station in Mauritania is Port Etienne and it has no SSB equipment. It is planned to install an SSB transmitter and receiver in 1968 if traffic warrants.

- MWI (1964) To be converted in the ship and coast stations in 1966.
  - (1965) DSB service only for ship stations of power less than 50 W and not using frequencies above 13 Mc/s.
- NCL (1965) Noumea-Radio only serves ship stations of power less than 50 W and does not use frequencies above 13 Mo/s.
- NZL (1966) DSB service being retained meantime in addition to SSB service.
- PNR (1966) Although DSB systems are still mainly used, SSB equipment is now being used in certain cases. It is hoped that, in the near future, SSB equipment will be used throughout.
- POL (1966) For technical and economic reasons, it is unlikely that DSB operation can cease in this country as early as required by the Recommendations. The matter should be more thoroughly discussed by the forthcoming Administrative Radio Conference in Geneva.
- ROD (1964) No Maritime Mobile HF R/T service operated by Cable & Wireless Ltd. at Rodrigues.
- SEN (1965) Two SSB receivers will be put into service during the second half of 1966.
- SEY (1964) No HF maritime mobile service operated by Cable & Wireless Ltd. at Seychelles.
- SHN (1964) Only MF operation at St. Helena.
- SMO (1965) DSB service only for ship stations of power less than 50 W and not using frequencies above 13 Mc/s.
- SNG (1966) For the Coast stations, two SSB/ISB transmitters and seven SSB/ISB receivers are on order.
- SRL (1966) The coast station Freetown Radio is now able to establish SSB links with ship stations equipped with SSB.

- USA (1964) Of the total number of ship stations still to be equipped with SSB, some 1250 transmitters and receivers are used only on the Great Lakes and inland waterways. The data supplied covers all circuits for which the United States has submitted notifications to the I.F.R.B.
  - (1966) Of the total number of ship stations still to be equipped with SSB, some 1200 transmitters and receivers are used only on the Great Lakes and inland waterways.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 155-E 18 September 1967

Original: French English,

Spanish

#### PLENARY MEETING

### Memorandum by the International Frequency Registration Board

IMPLEMENTATION OF THE FREQUENCY ALLOTMENT PLAN IN APPENDIX 25 TO THE GENEVA RADIO REGULATIONS (1959)

(USE OF THE FREQUENCY BANDS ALLOCATED EXCLUSIVELY TO THE RADIOTELEPHONE MARITIME MOBILE SERVICE BETWEEN 4000 kc/s AND 23 000 kc/s)

#### SUMMARY

In the present memorandum, the International Frequency Registration Board submits to the World Administrative Maritime Radio Conference a report on the implementation of the Frequency Allotment Plan contained in Appendix 25 to the Radio Regulations, in particular from the viewpoint of the implementation of the provisions of Note 2, which appears at the beginning of this Plan, and on the use of frequency bands allocated exclusively to the radiotelephone maritime mobile service between 4000 kc/s and 23 000 kc/s, as reflected in the Master International Frequency Register at 15 August 1967. It also gives some information on the introduction of the single sideband technique, in accordance with Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959, as reflected in notices which the Board has received from administrations.

#### REPORT

1. Implementation of the Frequency Allotment Blan for HF coast radiotelephone stations contained in Appendix 25 to the Radio Regulations

On 15 August 1967, the position with regard to the implementation of the Frequency Allotment Flan which was revised and adopted by the Administrative Radio Conference, Geneva 1959, and came into force on 1 May 1961 (with the other parts of the Radio Regulations revised in 1959), may be broadly summarized by the following data, which relate both to Sections I and II of the Plan:



- a) number of allotments in the Plan: 507 (to 76 countries designated by 108 symbols);
- b) number of allotments in the Plan not yet brought into use: 61 (to 28 countries designated by 29 symbols);
- c) number of frequency assignments in accordance with the Plan, notified by countries which have allotments in the Plan: 1362, (for 65 countries designated by 94 symbols);
- d) number of frequency assignments not in accordance with the Plan, notified by countries which have allotments in the Plan: 535 (for 27 countries designated by 39 symbols);
- e) number of frequency assignments notifed by countries which have no allotments in the Plan: 77 (for 15 countries designated by 15 symbols);

The preceding data include assignments involving the use of single sideband technique by coast radiotelephone stations (see section 3 below).

From these data, the following can be deduced in general:

- about 88% of the Plan has been implemented, that is to say, to a very large extent;
- countries which have allotments in the Plan have had additional requirements which total approximately 39% of the requirements satisfied in the Plan:
- countries which have no allotment in the Plan have had requirements which total approximately 6% of the requirements satisfied in the Plan.

As regards notices for frequency assignments not in accordance with allotments in the Plan, the Board endeavoured, before applying the relevant provisions of Article 9 of the Radio Regulations (Nos. 541 to 546 and 577 to 580), to obtain from administrations, when appropriate, that the notified frequencies be in accordance with the provisions of Appendix 17 to the Radio Regulations. The attention of the administrations concerned was drawn to the fact that this was in their own interest and reference was made to this effect to the provisions of paragraph 4 of Appendix 17, as well as to those of No. 545 of the Radio Regulations. The only assignments recorded in the

Master Register which relate to frequencies not in accordance with Appendix 17 to the Radio Regulations are assignments which have been transferred, on 1 May 1961, from the former Record into the new Register in accordance with Resolution No. 1 of the Administrative Radio Conference, Geneva 1959 (see Annexes 3 and 4 to this Resolution). None of these 79 assignments carries in Column 2b a later date than 13 July 1959.

According to Article 9 of the Radio Regulations, frequency assignments which are in accordance with allotments in Section I of the Allotment Plan in Appendix 25 bear a date (3 December, 1951) in Column 2a of the Master International Frequency Register (Nos. 578 and 579 of the Radio Regulations) and have the right to international protection from harmful interference, according to No. 607 of these Regulations.

Frequency assignments in accordance with allotments in Section II of the Plan bear the date 4 December 1951 in Column 2b. Frequency assignments not in accordance with allotments in the Plan carry in Column 2b the date of receipt of the notice by the Board. When notified on channel frequencies specified in Appendix 17, the limits of their right to international protection are specified in No. 608 of the Radio Regulations, should harmful interference be caused.

The Board examines each of such notices with respect to the probabilities of harmful interference according to No. 545 of the Radio Regulations, using I.F.R.B. Technical Standards and following the methods specified in Chapter G of the I.F.R.B. Rules of Procedure\*. In brief, the result of the technical examination, which serves as a basis for the finding reached, depends on the extent to which the service areas of the coast stations already recorded in the Master Register are reduced as a result of the frequency utilization newly notified.

Among the 535 + 77 = 612 frequency assignments not in accordance with the Plan which have been notified to the Board, 399 favourable findings were reached with respect to No. 545 of the Radio Regulations.

It has to be noted that no harmful interference between coast radiotelephone stations using frequencies in accordance with Appendix 17 to the Radio Regulations have been reported to the Board. Interference has been reported in the maritime radiotelephone HF exclusive bands, but it has been caused by out-of-band stations or, in one instance, by a station using a frequency situated between frequencies specified in Appendix 17.

<sup>\*</sup> The Rules of Procedure of the I.F.R.B. (3rd Edition) were circulated to administrations with I.F.R.B. circular letter No. 139 dated 1 October 1965.

## 2. Implementation by administrations and by the I.F.R.B. of the provisions in Note 2 of Appendix 25 to the Radio Regulations

In Note 2 of Appendix 25 to the Radio Regulations, the Administrative Radio Conference, Geneva, 1959, recommended that when countries bring additional frequencies into use, the assistance of the I.F.R.B. should be sought so as to avoid harmful interference to assignments in conformity with the Plan. In fact, these provisions were already included in the regulatory provisions which preceded those adopted in 1959 and, between 1 January 1956 (date of implementation of the original Plan) and 1 May, 1961, 8 countries consulted the Board, which suggested the use of 27 additional frequency assignments.

Since 1 May, 1961 (date of entry into force of the revised Plan), 14 countries requested I.F.R.B.'s assistance, which suggested the use of 56 additional frequencies corresponding to 81 assignments.

Each time an administration requested its assistance, the Board studied all available information on the use of frequencies. Referring in particular to the narrowness of each of the available frequency bands (70 kc/s), the Board had sometimes to discuss with the requesting administrations the magnitude of their projected frequency assignments and a reduction in the original projects was then generally obtained. When presenting its suggestions, the Board recommended in all cases the administration concerned to take the necessary precautions in cases where probabilities of harmful interference were found. In addition, the administration was recommended to do its utmost, before notifying the suggested assignments, to make sure through monitoring and even by tests, that there would be very little risk of mutual harmful interference with coast stations already recorded in the Master Register. All appropriate details may be found for each case, in I.F.R.B. files.

The 81 additional frequency assignments mentioned above can be sub-divided as follows:

- a) 68 frequency assignments (for 10 countries designated by 10 symbols) have been suggested by the I.F.R.B. to countries which have allotments in the Plan:
- b) 13 frequency assignments (for 4 countries designated by 4 symbols) have been suggested by the I.F.R.B. to countries which have no allotment in the Plan.

It generally appears that frequency assignments suggested by the Board have reasonably satisfied the requirements expressed.

#### 3. Introduction of the single sideband technique in HF coast radiotelephone stations

Under item 1 of its agenda, the Maritime Conference will have to decide on a calendar to be observed for the introduction of the single side-band technique in the maritime mobile service, in accordance with Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959. The Conference may consider interesting to know, in this respect, how many of the frequency assignments notified to the Board (see paragraph 1 above) involve the use of the single sideband technique by HF coast radiotelephone stations. The relevant data, as at 15 August, 1967, are as follows:

- a) number of frequency assignments involving the use of the single sideband technique, notified in accordance with the allotments in the Plan: 391 in a total of 1362 (for 16 countries designated by 24 symbols):
- b) number of frequency assignments involving the use of the single sideband technique, notified without being in accordance with the allotments in the Plan: 311 in a total of 612 (for 12 countries designated by 20 symbols).

From this information, it can be inferred that a certain number of countries applied Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959, as well as the Recommendation drawn up by the Panel of Experts convened pursuant to Resolution No. 3 of the 1959 Administrative Radio Conference to devise ways and means of reducing congestion in the frequency bands between 4 and 27.5 Mc/s. According to Recommendation No. 3 of this Panel of Experts all HF coast radiotelephone stations should have been equipped for single sideband operation as from 1 January, 1967, to be used side-by-side with double sideband operation during a six-year transitional period. As regards ship radiotelephone stations, the Panel of Experts recommended that a start be made on equipping them for single sideband operation on 1 January, 1967 and be completed by 1 January, 1973. However, an exception has been made for ship radiotelephone stations with a power of 50 watts or less using only frequencies below 13 Mc/s in tropical areas, and for the coast stations serving them (see Appendix 3, footnote 3.c) to the Radio Regulations.

The preceding figures confirm the tendency which appears towards implementing the single sideband technique in the maritime mobile service between 4000 kc/s and 23 000 kc/s, as can be deduced from statistical information provided by administrations in accordance with the recommendations adopted by the above-mentioned Panel of Experts (see Document No. 154).

In dealing with frequency assignment notices involving the use of the single sideband technique, the Board took always care to ensure, by consulting the administrations concerned if necessary, that the centre frequencies of the channels notified were in accordance with paragraph 3 of Appendix 17 to the Radio Regulations. Where the channels were those allotted in Appendix 25, to the notifying country, the Board, on the basis of C.C.I.R. Recommendation 326-1, considered that an assignment relating to a single sideband transmission with reduced (A3A) or suppressed (A3J) carrier was in accordance with the Plan if the notifed power (peak power) was not more than four times the power recorded in the Plan (mean power).

The Board feels it appropriate to point out that, according to paragraph 3 of Appendix 17 to the Radio Regulations, the spacing between single sideband transmission carrier frequencies is not uniform in any of the bands concerned: in fact, this spacing is either 3.2 kc/s or 3.1 (or 3.3) kc/s (4 Mc/s and 8 Mc/s bands) and 3.3 kc/s or 3.7 kc/s (13, 17 and 22 Mc/s bands). In deciding upon the ways and means of introducing the single sideband technique in accordance with the provisions of C.C.I.R. Recommendations 258-1 and in particular its sub-paragraph 1.3.5, the Conference may wish to consider whether it would be appropriate to ensure that in the regulatory provisions it will adopt, the spacing between single sideband transmission carrier frequencies be uniform in each frequency band. The Board believes that this would facilitate the future use of the frequency bands concerned.

#### 4. Notification of coast HF radiotelephone station receiving frequencies

According to No. 1355 of the Radio Regulations, the transmitting frequencies of coast and ship stations are, as far as possible, associated in pairs, for the conduct of duplex telephony, according to Appendix 17 to the Radio Regulations. A number of administrations have notified the transmitting frequencies of their ship radiotelephone stations as receiving frequencies of coast stations, according to the provisions of No. 487 of the Radio Regulations and they have generally applied the principle laid down in No. 1355 of the Radio Regulations.

The number of receiving frequency assignments notified to the Board is as follows:

- a) number of frequency assignments notified, corresponding to allotments in the Plan: 493 of which 252 involve the use of the single sideband technique (for 19 countries designated by 26 symbols);
- b) number of frequency assignments notified, not corresponding to allotments in the Plan: 598 of which 525 involve the use of the single sideband technique (for 20 countries designated by 29 symbols).

From these data, it can be inferred that the situation is similar to that of frequency assignments to coast radiotelephone stations. However, it seems that, by comparing these figures with those appearing in Section 1 above, a certain number of administrations have omitted to notify the receiving frequencies of their coast stations.

There again, before applying to notices the relevant provisions of Article 9 of the Radio Regulations (Nos. 547 to 551 and 582 to 585), the Board endeavoured, when necessary, to ensure that administrations notify frequencies in accordance with the provisions of Appendix 17 to the Radio Regulations.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 156-E 18 September 1967 Original: English

#### PLENARY MEETING

#### COMMITTEE STRUCTURE

(as adopted during the 1st Plenary Meeting)

Chairman of the Conference: Mr. R.M. BILLINGTON (United Kingdom)

<u>Vice-Chairmen of the Conference</u>: Mr. Robert T. BARTLEY (U.S.A.)

Mr. Yves PLACE (France)
Mr. A. BADALOV (U.S.S.R.)

Committee 2 - Credentials

Chairman: Mr. A. PETTI (Italy)
Vice Chairman: Mr. Tesfatsion SEBHATU (Ethiopia)

Committee 3 - Budget Control

Chairman: Mr. José de Jesús HERNÁNDEZ GONZÁLEZ (Mexico)

Vice Chairman: Mr. V.V. RAO (India)

Committee 4 - Radiotelegraphy

Chairman: Mr. F. Gérard PERRIN (Canada)

Vice Chairman: Mr. Milan ZAHRADNÍČEK (Czechoslovak Soc. Rep.)

Committee 5 - Radiotelephony

Chairman: Mr. P. MORTENSEN (Norway)
Vice Chairman: Mr. Alvaro de SOUZA COELHO (Brazil)

Committee 6 - Operation

Chairman: Mr. Konstantin ČOMIĆ (Yugoslavia)
Vice Chairman: Mr. André AITHNARD (Togolese Republic)

Committee 7 - Editorial

Chairman: Mr. Habib BEN CHEIKH (Tunisia)
Vice Chairmen: Mr. F. BENITO MESTRE (Spain)
Mr. J.D. CAMPBELL (Australia)

U.I.T. GENÈVE

# INTERNATIONAL TELECOMMUNICATION UNION

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 157-E (Rev.)
19 September 1967
Original: English

#### PLENARY MEETING

#### ORGANIZATION OF WORK OF THE CONFERENCE

(based on discussions between the Chairmen of Committees 4 and 5 and the authors of Document No. 149)

## Committee 1 - Steering Committee

(consisting of the Chairman and Vice-Chairmen of the Conference and the Chairmen and Vice-Chairmen of Committees)

#### Terms of reference:

to coordinate the work of Committees, establish the schedule of meetings, etc.

#### Committee 2 - Credentials Committee

#### Terms of reference:

to verify the credentials of the delegations (No. 639 of the General Regulations annexed to the Convention).

#### Committee 3 - Budget Control Committee

# Terms of reference:

to determine the organization and the facilities available to the delegates, and to examine and approve the accounts for expenditure incurred throughout the duration of the Conference (Rule 5 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).

#### Committee 4 - Radiotelegraphy

#### Terms of reference:

to examine, inter alia, Article 5 (Nos. 158 and 167), the relevant portions of Article 7, Section IV, Article 12 (No. 677), Article 28 (Section III), Article 28 (Section VI, in so far as it applies to radiotelegraphy), Article 32 and Appendices 3 (in so far as it applies to radiotelegraphy) and 15A to the Radio Regulations, together with agenda



# Document No. 157-E (Rev.) Page 2

items 2.3, 2.4 (for preliminary consideration of proposals submitted) 2.5, 5 (frequency 500 kc/s), 7.1, 7.2 (after consideration by Committee 6), 7.3 (after consideration by Committee 6), and 7.5.

# Committee 5 - Radiotelephony

#### Terms of reference:

to examine, inter alia, the relevant portions of Article 7, Section IV, Article 9, Article 28 (Section IV), Article 28, (Section VI, in so far as it applies to radiotelephony), Article 35, and Appendices 3 (in so far as it applies to radiotelephony), 15B, 17, 18, 19 and 25 to the Radio Regulations, together with agenda items 1, 2.1, 2.2, 3, 4, 5 (frequency 2182 kc/s) and 7.6.

# Committee 6 - Operation

#### Terms of reference:

to examine, inter alia, Article 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.

# <u>Committee 7 - Editorial Committee</u>

#### Terms of reference:

to perfect the form, without altering the sense, of the texts prepared by the various Committees, and to combine them with those parts of former texts which have not been altered (Rule 21 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 157-E 18 September 1967 Original : English

## PLENARY MEETING

#### ORGANIZATION OF WORK OF THE CONFERENCE

(based on discussions between the Chairmen of Committees 4 and 5 and the authors of Document No. 149)

# <u>Committee 1 - Steering Committee</u>

(consisting of the Chairman and Vice-Chairmen of the Conference and the Chairmen and Vice-Chairmen of Committees)

#### Terms of reference:

to coordinate the work of Committees, establish the schedule of meetings, etc.

# <u>Committee 2 - Credentials Committee</u>

# Terms of reference:

to verify the credentials of the delegations (No. 639 of the General Regulations annexed to the Convention).

# Committee 3 - Budget Control Committee

# Terms of reference:

to determine the organization and the facilities available to the delegates, and to examine and approve the accounts for expenditure incurred throughout the duration of the Conference (Rule 5 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).

#### Committee 4 - Radiotelegraphy

# Terms of reference:

to examine, <u>inter alia</u>, Article 7 (except Nos. 443, 444, 456 and 457 in so far as they apply to radiotelephony), Article 28 (Section III), Article 28 (Section VI, in so far as it applies to radiotelegraphy), Article 32 and Appendices 3, 15A and 19 to the Radio Regulations, together



## Document No. 157-E Page 2

with agenda items 2.3, 2.4 (for preliminary consideration of proposals submitted) 2.5, 5 (frequency 500 kc/s), 7.1, 7.2 (after consideration by Committee 6), 7.3 (after consideration by Committee 6), and 7.5.

# Committee 5 - Radiotelephony

# Terms of reference:

to examine, inter alia, Article 7 Nos. 443, 444, 456 and 457 (in so far as they concern radiotelephony), Article 9, Article 28 (Section IV), Article 28, (Section VI, in so far as it applies to radiotelephony), Article 35, and Appendices 15B, 17, 18 and 25 to the Radio Regulations, together with agenda items 1, 2.1, 2.2, 3, 4, 5 (frequency 2182 kc/s) and 7.6.

# Committee 6 - Operation

# Terms of reference:

to examine, inter alia, Article 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.

#### Committee 7 - Editorial Committee

# Terms of reference:

to perfect the form, without altering the sense, of the texts prepared by the various Committees, and to combine them with those parts of former texts which have not been altered (Rule 21 of the Rules of Procedure of Conferences, Chapter 9 of the General Regulations).

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 158-E \
19 September 1967
Original: English

COMMITTEES 4 AND 5

#### JAPAN

#### Proposals for the work of the Conference

# Additional Agenda:

The use of frequencies in the bands allocated exclusively to the maritime mobile service

Ref. J/158(92)

#### Proposal

To draft the resolution stated in Annex I with a view to abstain from the use of frequencies in the bands exclusively allocated to this service by stations of services other than the maritime mobile service.

#### Reasons:

- 1. At the Extraordinary Administrative Radio Conference to deal with matters relating to the aeronautical mobile (R) service, a resolution to eliminate the emissions of out-of-band stations in the frequency bands allocated exclusively to the aeronautical mobile (R) service and suppress such emission by all available means was adopted.
- This resolution was made in recognition of the conception that the aeronautical mobile (R) service is a safety service. The maritime mobile service also has no other available means of communications but radiocommunications. In particular, in order to protect the safety of life and property, the international distress frequencies, 500 kc/s and 2182 kc/s, should be kept free from harmful interference caused by stations of services other than the maritime mobile service. Moreover, the frequency bands for the maritime mobile service in HF bands are allocated exclusively to this service. Therefore, in order to operate maritime transport services in a regular and effective manner, it is essential that the emissions of out-of-band stations which cause, or are likely to cause, harmful interference to the maritime mobile service should be eliminated.



# Document No. 158-E Page 2

#### Ref.

J/158(92) (cont.)

- The I.F.R.B. has sought the collaboration of administrations in identifying the source of such emissions of out-of-band stations in these frequency bands during the period from 17 April through 10 June 1967, but in our country, aside from the I.F.R.B's investigation the monitoring observation using automatic recording equipment was carried out independently during the period from 20 June to 8 July 1967. The results obtained are indicated in Annex II. According to these data, a considerable number of harmful interference was identified.
- 4. Therefore, it is essential to eliminate the emissions of out-of-band stations from the frequency bands for the maritime mobile service. To attain this purpose, it is considered necessary to take such measures as to discontinue these emissions by means of carrying out an international monitoring observation on a world-wide basis with a view to identifying the sources of such emissions as from out-of-band stations and confirming the location of these emissions.

Annexes: 2

# ANNEXI

J/158(92) (contd.)

#### RESOLUTION No.

# RELATING TO THE USE OF FREQUENCIES IN THE BANDS ALLOCATED EXCLUSIVELY TO THE MARITIME MOBILE SERVICE

The World Administrative Radio Conference, Geneva, 1967,

#### considering

- (a) that monitoring observations on the use of frequencies in the bands allocated exclusively to the Maritime Mobile Service between 2170 2194 kc/s and 4063 25 110 kc/s show that a number of frequencies in these bands are being used by stations of services other than the Maritime Mobile Service, thus causing harmful interference to one part of maritime mobile service communications and that a considerable number of emissions, the sources of which could not be positively identified, were observed in these bands;
- (b) that the Maritime Mobile Service has no other available means of communications but radio communications, and, in particular, it is essential that the international distress frequencies and the frequencies for international calls and public correspondence should be kept free from harmful interference in the light of the former indispensability to the protection of the safety of life and property and the latter indispensability to the security of the orderly and efficient operation of communications for the Maritime Mobile Service.

#### urges

administrations to abstain from the use of frequencies in the bands exclusively allocated to this service by stations of services other than the Maritime Mobile Service, except under the express conditions prescribed in Nos. 115, 200, 209, 211, 213 or No. 415 of the Radio Regulations, Geneva, 1959;

#### invites

the I.F.R.B. to continue to organize monitoring observations in the bands allocated exclusively to the Maritime Mobile Service with a view to eliminating the emissions of out-of-band stations which cause, or are likely to cause, harmful interference to the Maritime Mobile Service; and to seek the collaboration of administrations identifying the sources of such emissions by all available means including the use of automatic recording equipment, direction finding and field strength measurements, and in securing the suppression of these emissions.

# ANNEX II

J/158(92) (cont.)

# RESULTS OF TECHNICAL INVESTIGATION RELATED TO PROPOSALS OF JAPAN TO THE WORLD ADMINISTRATIVE RADIO CONFERENCE

BY

# RADIO REGULATORY BUREAU

1. With a view to furnish data to the present conference, a special investigation on the existing utilization state of frequency bands allocated exclusively to the Maritime Mobile Service was carried out by the monitoring stations in our country.

The results of this investigation are summed up in this report.

2. Regional monitoring divisions in charge of investigation and data thereof.

Name of monitoring division	Coordinate latitude and longitude	<u>Date</u>	Remarks	
Tokyo	N35°12'14" E139°39'14"	20 June to 8 July	Automatic recording of frequency spectrum. Measurement of field intensity and bearing.	
Osaka	N34°42'28" E134°57'15"	do		
Fukuoka	N33°43'23" E130°29'29"	do		
Sapporo	N43°05'12" E141°18'47"	do 		
Toyama	N36°44'39" E137°11'15"	20 June to 7 July	Measurement of field intensity and bearing.	
Miyakonojo	N31°44'01" ´ E131°02'45"	do		
Kushiro	N38°27'05" E141°14'50"	do	(A3 (BC) and multiple type mainly)	
nasna o		40		

# Annex II to Document No. 158-E Page 6

# Ref.

J/158(92) (cont.)

Further, the above data were arranged and summarized by centralizing office in Tokyo.

### 3. Instruments used

- 1. Automatic Radio Frequency Spectrum recording equipment:
  - 1) Range of frequency: 90 kc/s 30 Mc/s (with equal separation)
  - 2) Minimum field intensity possible to be recorded : approximately over -10 db (1 pw/m = 0 db)
  - Frequency resolution ability: 200 c/s (in case of sweep recording range 100 kc/s) 1 kc/s (in case of sweep recording range 500 kc/s)
  - 4) Antenna used : vertical omni-directional loaded antenna.
- 2. Field intensity measuring equipment : (direct reading finder annexed)
  - 1) Range of frequency: 500 kc/s 30 Mc/s
  - 2) Measurable field intensity and accuracy :  $0.2 \, \mu V/m 300 \, mV/m \pm 1 \, db$ .
  - 3) Antenna used: vertical antenna, in consonance with the specifications adopted in C.C.I.R., Recommendation 378, Geneva, 1963.

#### 3. Direction finding equipment

- 2) Automatic direction recorder: which can record automatically the variation of direction, which has recording wide of ±180° and can be switched over to ±90°.

# J/158(92) 4. Frequencies and bands investigated (cont.)

# 1. Bands investigated

Bands of frequency exclusively allocated to the Maritime Mobile Service, as stated below :

Frequency band (kc/s)	Fig. No.	Remarks
4 063 - 4 438 6 200 - 6 525 8 195 - 8 500 8 500 - 8 815 12 330 - 12 500 12 500 - 13 000 13 000 - 13 200 16 460 - 16 500 16 500 - 17 000 17 000 - 17 360 22 000 - 22 500 22 500 - 22 750	1-1 1-2 1-3 1-4 1-5 1-6 1-7 1-8 1-9 1-10 1-11 1-12	Sweep recording frequency range: 500 kc/s
2 182 kc/s <u>+</u> 12 kc/s	2-1, 2-2 2-3, 2-4 2-5, 2-6 2-7, 2-8	Osaka

# 2. Frequencies investigated

Of the frequencies investigated, those causing harmful interference are as follows:

Fig. No.	Frequency (kc/s)	Emission type
1-1 1-1 1-1 1-1 1-1 1-1 1-1	4 067 - 4 068 4 110 4 200 4 220 4 250 4 270 - 4 271 4 358 4 379 - 4 380	A3 (BC) A3 A3 A3 A3 (Jamming identified) A3 A2 A3 (BC)

J/158(92)	Fig. No.	Frequency (kc/s)	Emission type
(cont.)	1-2 1-2 1-2 1-2 1-2 1-2 1-2	6 225 6 250 6 280 6 290 - 6 291 6 306 6 325 6 345 6 400	A3 (BC) A3 A3 A3 A2 A3 (BC) A3 A2 A3 (BC)
	1-2 1-2 1-2 1-2 1-2	6 410 6 480 6 505 6 518 6 250 <b>-</b> 6 450	A3 A3 A3 A3 Jamming (under a change every day and A2 is inserted)
	1-3 1-3 1-3 1-3 1-3	8 195 8 240 8 260 8 300 8 320 8 345	A3 (BC) A3 A3 A3 A3 A3
	1-3 1-3 1-3 1-3 1-3	8 355 8 375 8 400 8 425 8 449	A3 (with jamming) A3 A3 A3 A3
	1-4 1-4 1-5 1-6 1-6 1-6	8 658 - 8 660 8 716 12 362 - 3 12 520 12 690 12 695	A3 (BC) (with jamming) A2 A3 (BC) A2 A3 (BC) A3
	1-7 1-8 1-9 1-9 1-10	13 120 16 480 16 710 16 920 17 220 - 1	A3 (BC) A3 (BC) A3 (BC) A3 A3 (BC)
	1-11 1-11 1-12	22 305 22 500 22 542	A3 (BC) A3 . A3 (BC)

J/158(92) (cont.)

In addition to the above, approximately 10 frequencies are identified including A3, A3 (BC), F1, A2, multiple type A7A and spurious emissions, etc. which are presumable to be causing harmful interference.

## 5. Method of investigation

- 1. The frequency spectrum of the frequency bands mentioned in paragraph 4.1 was continuously recorded with an automatic frequency spectrum recording equipment by each regional monitoring division at Tokyo (Kanto), Osaka (Kinki), Fukuoka (Kyushu No. 1) and Sapporo (Hokkaido, No. 1) and 50% value per hour in db (1 microvolt/M = 0 db) was obtained by measuring the field intensity of the radio waves (4. 2.) which cause harmful interference within each frequency band. Simultaneously with this measurement, a direction finding was conducted. In this direction finding, an automatic direction recorder was used jointly. Moreover, Figures 1-1 1-12 and Figures 2-1 2-8 were drawn up on the basis of the data obtained from the records put on the sweep recording frequency range 500 kc/s.
- 2. With respect to every frequency causing harmful interference (4. 2.), the measurement of field intensity and direction was executed by the same method as that mentioned in 1. at each regional monitoring division in Toyama (Hokuriku), Kushiro (Hokkaido, No. 2) and Miyakonojo (Kyushu, No. 2).

It is noted that, in Figure 1, all monitoring points were placed in Tokyo.

3. "Harmful interfering frequency" which was the object of this investigation means that it has high field intensity, broad occupied frequency bandwidth and daily emission for many hours.

# 6. Results of investigation and comments

1. Figures 1-1 - 1-12 were drawn upon, summing up the results on characteristics displayed in frequency distribution and hourly distribution. Regarding harmful interference, it was arranged statistically on the basis of the data obtained during three years since 1965. Therefore, it may safely be said that it shows that they had been emitting almost every day since three years ago. However, Figure 1-8 - 1-12 (16 - 22 Mc/s) shows the results in and after January 1967.

J/158(92) (cont.) In Figures all axis of abscissa indicate frequency, graduation denoting equal 10 kc/s separation, and the axis of ordinate indicates hour, graduation denoting time (two hours apart) they are listed in GMT at the right side and in JST at the left side.

Recorded line of abscissa denotes incident-state of radio wave and approximate occupied bandwidth is readable by the thickness of recorded line. For instance, in Figure 1-2, 6 250 kc/s is indicated in the state of frequency usage (0445h - 0245h) of A3 (BC) station, and is an ionospheric wave occupying the width of 10 kc/s. Similarly, in Figure 1-4, 8 550 kc/s is an ionospheric wave occupying the width of 4 kc/s.

2. Incident waves caught in the width of 2 182 kc/s ±12 kc/s were recorded in Figures 2-1 - 2-8 by each regional monitoring division at Tokyo, Osaka, Fukuoka and Sapporo. In this frequency band, average 3 - 4 waves are identified daily. (During the period from January 1966 through July 1967, the number of days affected by one incident wave or so is usually two or three and in the rest days it is used by unidentified station daily at each regional monitoring divisions as indicated in Figures respectively.

Furthermore, the field intensity of respective radio wave recorded is approximately around 20 - 35 db.

# 7. Conclusion

The obvious fact that, in the frequency bands exclusively allocated to the Maritime Mobile Service, communications for services other than this service are being conducted, is indicated in the results obtained from these recordings. In particular, in the bands 4 Mc/s, 6 Mc/s, 8 Mc/s and 12 - 13 Mc/s, continuous broadcastings by foreign countries with high field intensity are recorded for many hours. In addition to the above, in the bands of 4 Mc/s, 6 Mc/s, 8 Mc/s and 12 Mc/s, the emission type of A2 (symbol of "K" inserted) is recorded for many hours daily. Moreover, multi-waves with A7A, A9 and jammings are identified up to a considerable extent. The radio waves which are observed in the protective frequency bands (2 170 kc/s - 2 194 kc/s) for international distress and calling frequency (2 182 kc/s) are chiefly with Al or Fl. These waves are being emitted daily from various countries in the neighbourhood of Japan. Further it should be added that peculiar jamming in 6 Mc/s band has been identified almost every day since about 1961 - 1962.

# J/158(92) (cont.)

# Method of reading

# 1. Sweep recording frequency range

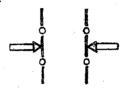
In Figures 1-1 - 1-12 and Figures 2-1 - 2-8, all are of 500 kc/s width and the axis of abscissa denotes frequency graduation (equal 10 kc/s separation).

# 2. Time scale

It is indicated by equal time separation, two hours apart, listing in GMT at the right side and in JST at the left side of the graph respectively.

Frequency band exclusively allocated to the Maritime Mobile Service

Example:

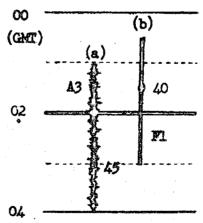


4. Time when field intensity was measured

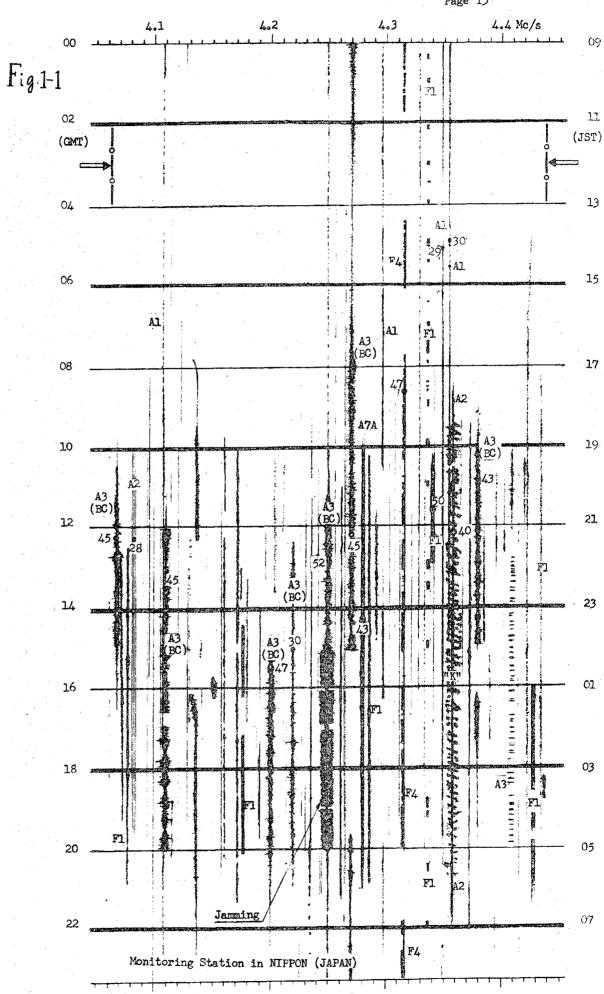
Example

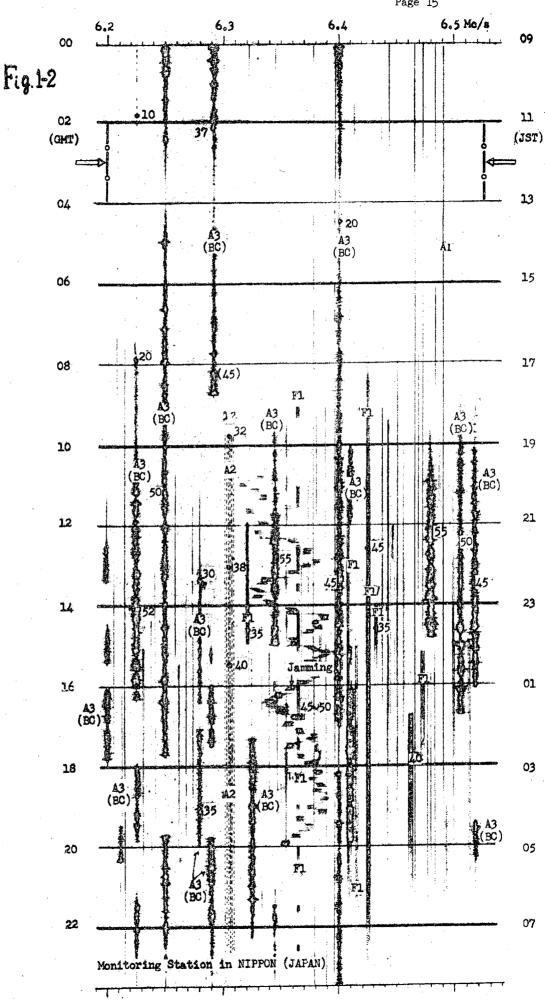


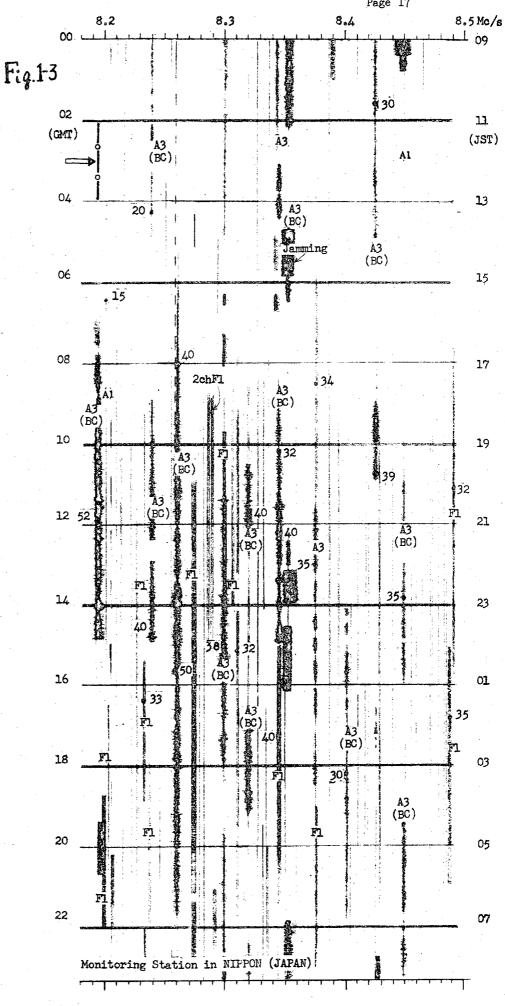
5. Pursuant to paragraphs 1 - 4, the results of recordings shall be able to read as follows:

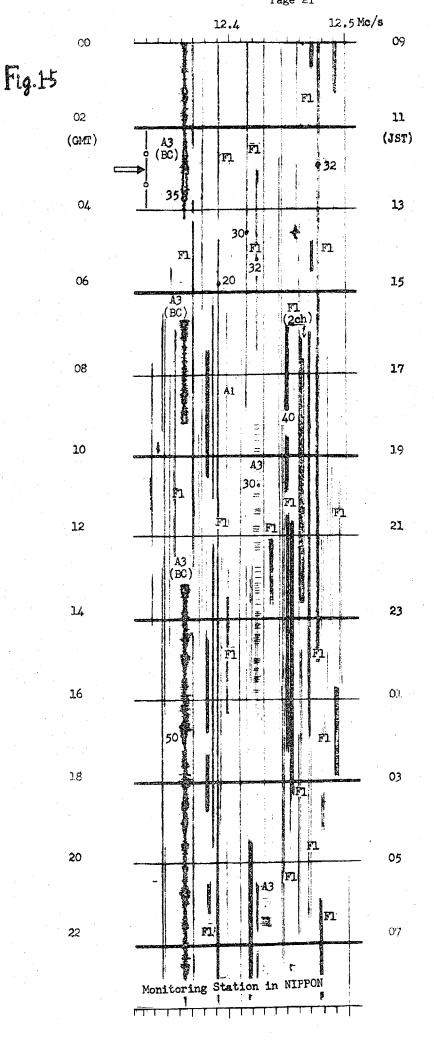


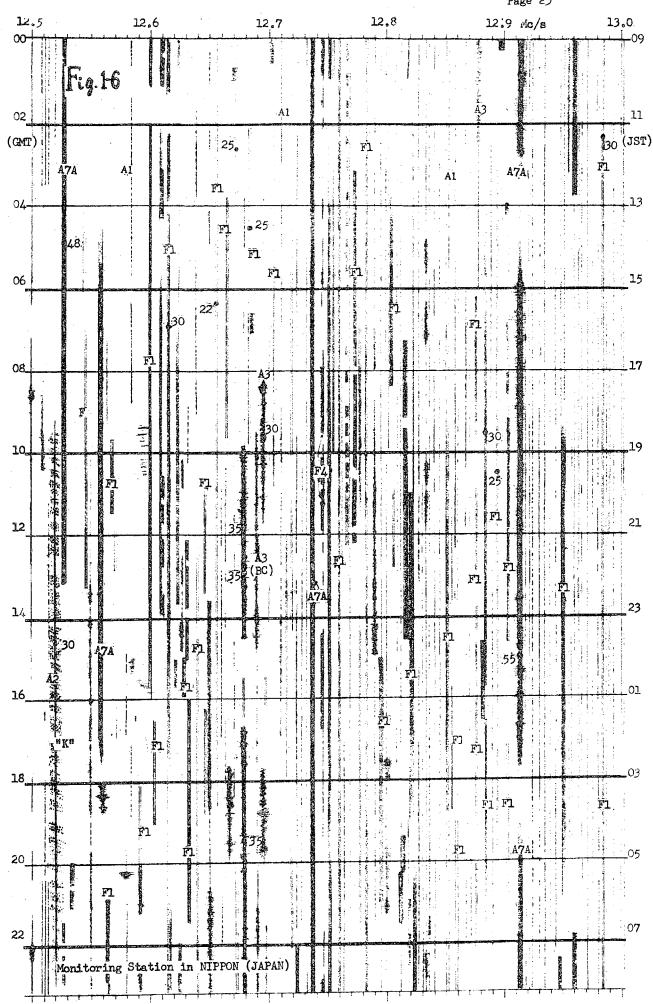
- (a) Time of reception: 0100 0400h (GMT)
  Type of emission: A3 (BC)
  Field intensity, at the rate of time 50% value: 45 db
  Measuring time of field intensity was 0300h (GMT)
- (b) Time of reception: 0030 h 0300h (GMT)
  Type of emission: Fl
  Field intensity, at the rate of time 50% value: 40 db
  Measuring time of field intensity was 0130h (GMT)

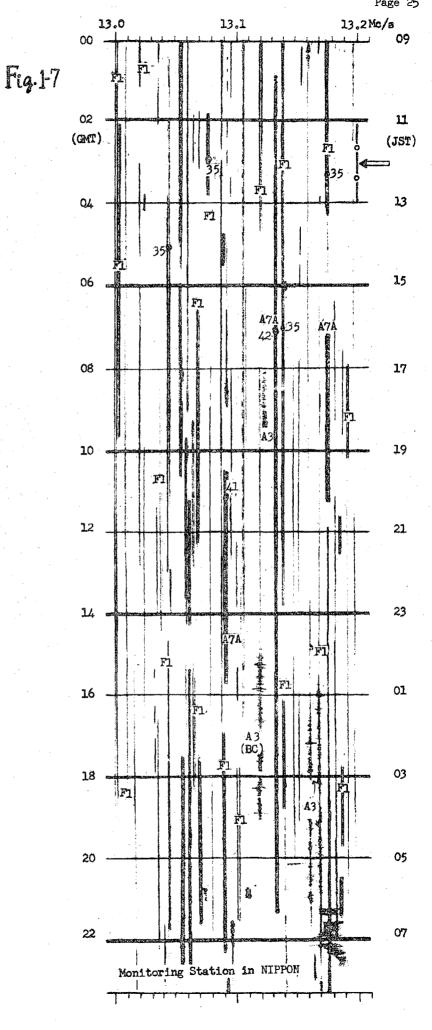












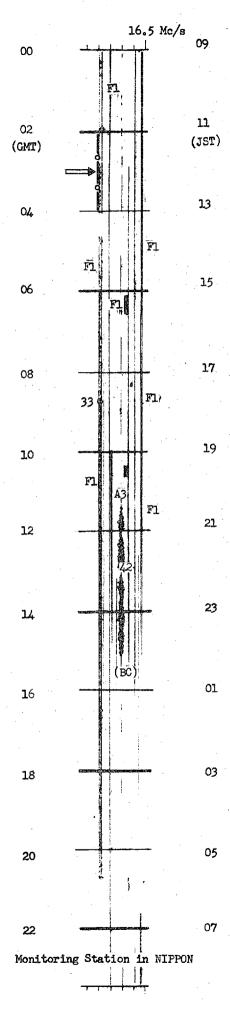
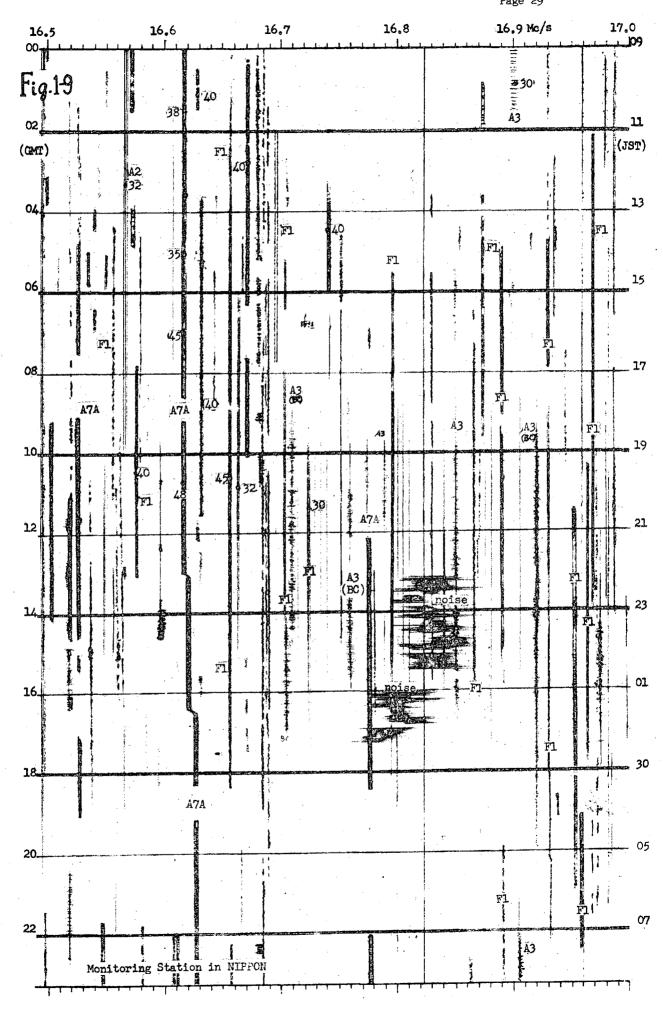
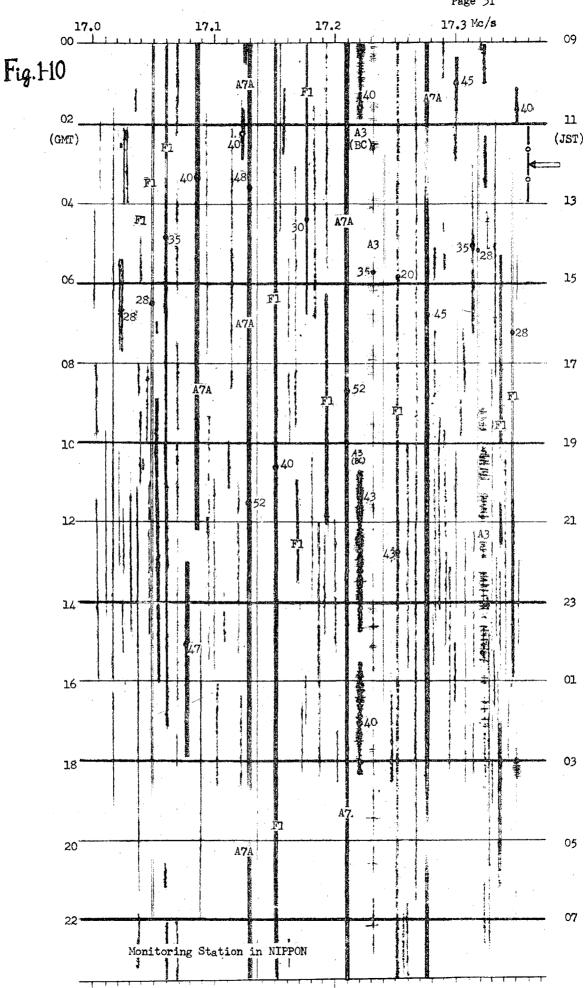
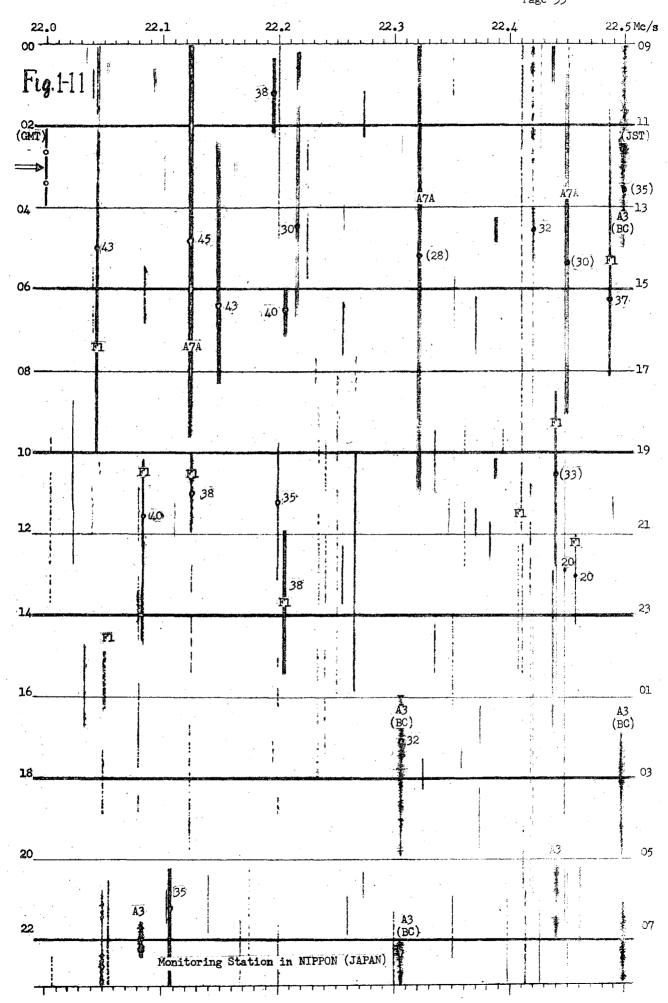
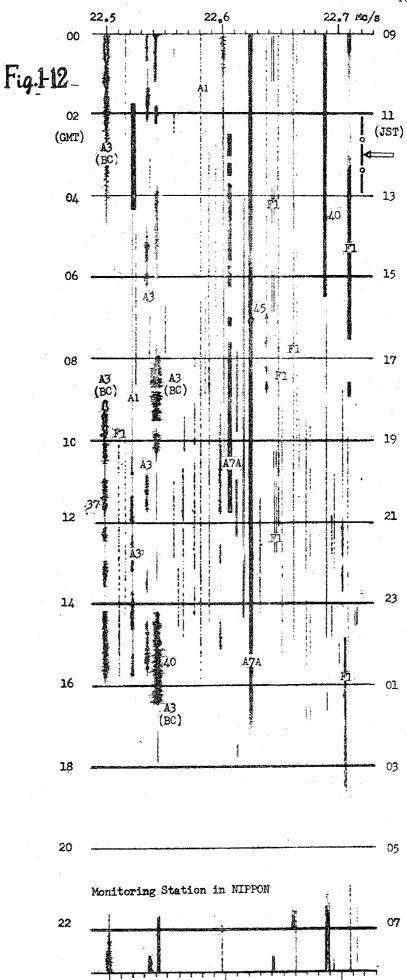


Fig.18

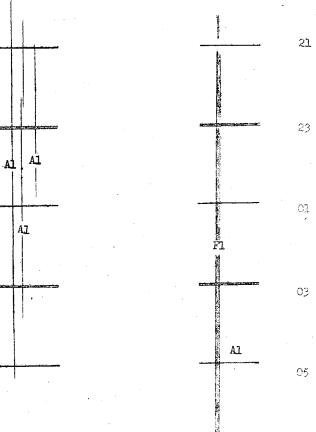








2.17 2.2 Mo/s 2.17 2.2 Mc/s Fig2-1 Fig 2-2 (JST) (GMT) 



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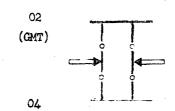
27/1/167

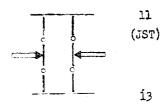
2.17 2.2 Mc/s 00

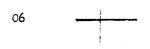
2.17 2.2 Mc/s

Fig.2-3

Fig. 2-4



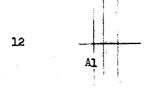




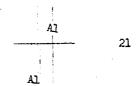




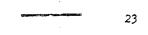




AJ.

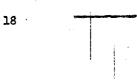


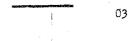












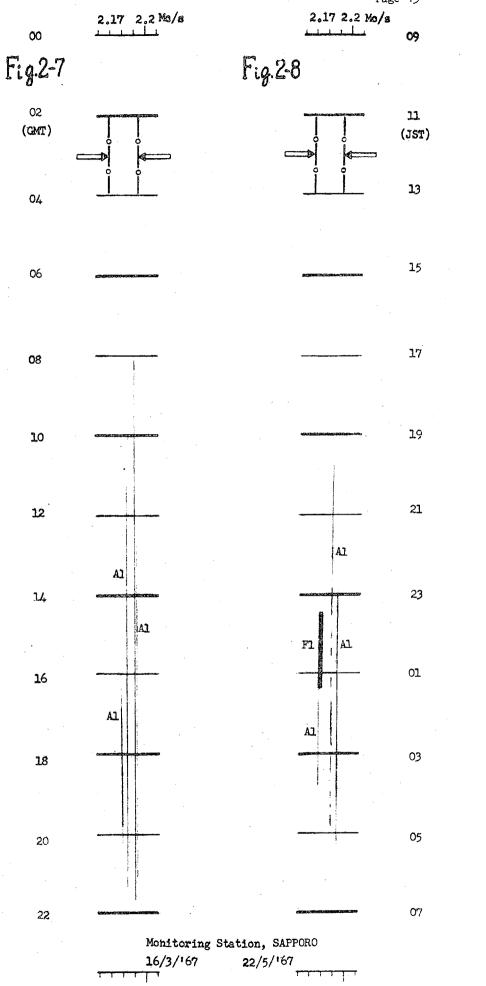




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# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 159-E 19 September 1967 Original: English

COMMITTEES 4 and 5

UNITED STATES OF AMERICA

Agenda Item 2.4:

Supporting information for U.S. proposal

Ref. USA/159(84)

THE DESTRABILITY OF ACCOMMODATING OCEANOGRAPHIC COMMUNICATIONS AT THE WORLD ADMINISTRATIVE RADIO CONFERENCE (GENEVA, 1967)

### Introduction

The following documentation is provided to support the desirability of accommodating requirements for oceanographic communications in the exclusive high frequency maritime mobile bands (W.A.R.C. Agenda Item 2.4). It is the purpose of this paper to set forth the benefits to be derived from the measure of ocean parameters together with an analysis as to the permissible density distribution of ocean data observational platforms.

The benefits to be gained by mankind from increased knowledge of the sea, together with the rationale developed in support of ocean data communications, are contained in the paper entitled "REPRESENTATIVE DISTRIBUTION OF SEGMENTS OF A WORLD WIDE INTERNATIONAL OPERATIONAL OCEAN DATA BUOY NETWORK" (April 1967).

#### Applications of marine environmental data

The oceanographic and meteorological parameters to be measured by an international ocean data buoy network include wind direction and speed, visibility, barometric pressure, temperatures at various atmospheric altitudes and ocean depths, wave-period, wave height and direction, oxygen at various levels, salinity, ambient light, heat flow and sound propagation. The applications envisioned are illustrated in Figure 1 and embrace



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Ref.

USA/159(84) (cont.) several areas of research, engineering and prediction forecasting.

In elaborating on both present and anticipated applications, it is significant to note that coastal engineering (construction of harbours, bridges, piers) and marine mining operations make use of measured parameters for research in coastal engineering, for development of mining technology, and for site survey of underwater construction. Such data are also required to provide inputs for the design and testing of deeply submerged machinery, as well as for specialized forecasts for coastal engineering and mining activities.

In the area of fisheries research and development, additional oceanographic data will facilitate studies on the relationships between oceanographic features such as temperature, salinity and oxygen, the behaviour and growth of marine organisms, together with studies on life and source of life in the oceanic abyss. Increased knowledge is required regarding the relationship between oceanographic features and fish distribution and abundance on the continental shelf and in the open ocean areas such as tuna in the tropical Atlantic, Pacific and Indian Oceans, salmon in the North Pacific and North Atlantic, ground fish in the North Atlantic, and anchovy and sardine in the Eastern Pacific. This knowledge will lead to increased efficiency in development and conservation of marine food resources, much needed to feed the world's exploding population. Measurement also will be made of oceanographic (physical and chemical) parameters to detect marine pollution which may affect adversely living marine resources.

Of particular importance is the application of marine environmental measurements to synoptic meteorology and weather forecasting. Such information is of vital importance to enhancement of global general weather analysis and prediction, marine weather analysis and prediction, World Weather Watch contributions for international global weather analysis and prediction, and in the development of observation and prediction techniques for oceanographic processes and phenomena.

Oceanographic information will be also applied for ice observations and research in the forecasting of conditions of ice formation on ships, iceberg tracks, and the life span of icebergs. Collected data will also be applied in such a manner as to help man become more knowledgeable regarding the polar environment and

USA/159(84) (cont.) the effects of marine meteorological and oceanographic parameters on ice formation, icebreaking and long range influence on world climate.

Measured parameters on prevailing sea and weather conditions will be applied in the selection of optimum ship routes for storm avoidance and appropriate ships for search and rescue missions, as well as for the prediction of drift of survivors of marine disasters. The data acquired by oceanographic buoys will also be employed in meeting the ever increasing and serious problem of control of water pollutants.

In exploring the sea and its depths, increased support of surface and subsurface vehicle operations will entail the measurement of those factors affecting the seaworthiness of ships and expanded development of specialized forecasts plus other services in support of deep submerged explorations.

In order to exploit fully the foregoing benefits, additional data must be acquired to support research. For example, the information acquired in connection with water motion studies is needed to improve the prediction of tides and tidal currents, for increased research in ocean circulation, including estuary, near shore, deep ocean and other general studies. Collected data are required in the investigation of air/sea interactions and their effects on ocean circulation. Other applications in the water motion area include studies of geophysical parameters affecting equatorial current systems, a measurement of Gulf Stream structure and dynamics, as well as the measurement of bottom currents in and along the sills of the deep basins of the Pacific Ocean. Additional measurements will also be made involving the velocity and mass fields in strong currents. Analysis of effluent waters and currents is also involved.

Research in air/sea interaction also involves the study of the dynamic processes in the ocean areas, the application of air/sea interaction data in improving weather and sea state (including cyclones, hurricanes and typhoons) forecasting, and increased investigation into the dynamics of the exchanges within the air/sea boundary layer.

To enhance understanding of the sea, additional study is required on the relationship between oceanographic data and ocean processes, including the effects of environmental conditions

USA/159(84) (cont.) on underwater acoustical propagation, the relationship between environmental parameters and ocean currents, and studies of water temperature anomalies and internal gravity waves.

<u>Permissible density distribution of ocean data observational</u> <u>platforms</u>

To facilitate an analysis of the permissible density distribution of ocean data observational platforms, certain technical boundaries have been established for illustrative purposes and are summarized as follows:

- a) Message lengths 300 to 8000 bits
- b) Number of channels ten
- c) Bit rates 100 bits per second per channel
- d) Each 3.5 kc/s band to be divided into ten 300 c/s channels with a 250 c/s buffer at each end of the band
- e) Time synchronized interrogation rate a minimum of eight equally spaced intervals per buoy per day
- f) Buoy data harvest time limit not more than one hour
- g) One channel per buoy per interrogation period, with a maximum of five channels being received simultaneously per collection point per frequency band.

In considering the permissible density distribution of ocean data observational platforms, it is noted that the Intergovernmental Oceanographic Commission (I.O.C.) has treated the basic technical factors in the design of a high frequency communication system for data collection from such platforms (UNESCO, 1967). In preparation for the World Administrative Radio Conference to deal with matters related to the maritime mobile service the United States has developed; generalized world-wide data of the type considered by the I.O.C. (Haydon, 1967). This generalized study was designed primarily to obtain an estimate of the degree that a frequency component of 4.2, 6.2, 8.3, 12.4, 16.6 and 22.1 Mc/s would satisfy world-wide ocean data communication requirements throughout the solar cycle.

USA/159(84) (cont.) For the assumptions used, it was concluded that data collections could be expected to be successful for slightly better than 80% of the time if data collection was over a single high frequency link. Since the I.O.C. has pointed out the increased reliability of HF data collection if multiple data links are used, see Table 1, it is concluded this complement of frequencies would be satisfactory.

Since only a single 3.5 kc/s band is being considered in each of the frequency orders and it is estimated that hundreds of buoys will be used in a world-wide network (UNESCO, 1967), it appears essential to make a preliminary estimate of the degree to which this 3.5 kc/s per frequency order may be expected to meet ocean data communication requirements.

Although the requirements for oceanographic and meteorological data are diverse and can be expected to vary markedly with geographic area and increase with time, the I.O.C. has suggested channel spacings and data rates which provide a basis for estimating the permissible density of data collection platforms. The I.O.C. proposes (UNESCO, 1967) to divide each 3.5 kc/s band into ten 300 c/s data channels plus a 250 c/s buffer channel at each edge which will also be used for alarm signalling such as for the critical detection of hurricanes, typhoons or tidal waves. A data rate of 100 bits per second per data channel is proposed.

Although the number of available high frequency charnels and the data rate per channel are basic in the estimates of the number of data stations which may be served by high frequency communication systems, these data must be supplemented by estimates of message length, time within which synoptic data must be gathered, the number of frequency orders which are expected to propagate reliably at a given time, and the feasibility of geographic sharing. The importance of the above parameters in estimation of permissible observation platform density and the strong interaction among these parameters make the selection of a typical situation very difficult. However, the same factors also provide tremendous opportunity in the design of data collection systems through the location of data collection stations and the engineering of interrogation schedules.

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Ref.

USA/159(84) (cont.) The difficulty of arriving at a single estimate for the number of buoys which is expected to be served is illustrated if we examine some quasi-extreme examples.

One extreme might be an operation requiring a very modest message length, e.g., 75 characters. With no redundancy, and assuming 4 bits per character, this requires a 300 bit message. Propagation conditions would permit all frequency orders and geographic sharing would permit all channels to be used. Data would be taken twice each day and the full 12-hour period would be available for collection of the data. This would indicate that theoretically each data collection station would have 6 frequency orders at 10 channels per frequency order, or 60 channels. If these 60 channels were available for 12 hours, 720 channel hours would be available. At 100 bits per second per channel, 720 channel hours equals 720 x 60 x 60 = 2,592,000 channel seconds, or 259,200,000 bits. For 300 bit messages, each data collection station could serve nearly one million observational platforms.

The other extreme might be operational synoptic observations with a 3000 character message length requiring threefold redundancy to assure accuracy. Three thousand characters equals 12,000 bits and three-fold redundance would require 36,000 bit messages. Propagation would permit only a single frequency order at the data collection station, and geographic sharing would require the serial use of each channel by three data collection stations. Synoptic data would be involved and it would be required that all data be collected within 15 minutes. On this basis, each data collection station would have one channel available for 5 minutes or 300 channel seconds. At 100 bits per second per channel, only 30,000 bits would be available during each collection period and each data collection station could not serve even a single observational platform.

Although it is possible to design communication systems to meet the foregoing extreme examples, it is realistic to establish more practical assumptions than the quasi-extremes outlined above.

Numerous factors influence the permissible density distribution of the observational platforms; the more important factors include:

USA/159(84) (cont.)

- 1) The frequency orders which are available.
- 2) The bandwidth available in each frequency order.
- 3) The channel division of the frequency orders.
- 4) The data rate per channel.
- 5) The message length required.
- 6) The time period within which the data must be collected.
- 7) The geographic area within which the frequency may not be duplicated.
- 8) The number of frequency orders which may be expected to be useful in this area at a given time.
- 9) Parameters in a typical data message (see Figure 1).

A bandwidth of 3.5 kc/s in six frequency orders is being considered. I.O.C. has suggested ten 300 c/s data channels within each 3.5 kc/s band, which will permit a message rate of 100 bits per second.

It is estimated that when operational synoptic data, including weather data, are included, a 1000 character message (5 parameters at surface level, 9 parameters at up to 20 depths, 5 characters per parameter per depth) may be required. At 4 bits per character, this requires 4000 bits. If twofold redundancy were used to assure reliability of message reception, an 8000 bit transmission would be required.

Synoptic mapping has flexibility in the time requirement that data may be collected, but delivery within one hour appears necessary.

The geographic area within which a frequency may not be duplicated varies markedly with time and frequency. This problem has been considered (Haydon, 1967) for an average month and solar activity level, March, Sunspot Number 70. Figures 2 and 3, extracted from IERTM-I.T.S.A.-54, "Theoretical evaluation of band 7 frequency complements for ocean data communications," illustrate the vast differences

USA/159(84) (cont.)

expected in interference areas and consequently the great variation in the geographic separation required. However, if we examine typical daytime and nightime frequencies, see Table 2, it appears that the average interference area is roughly equal to one-fourth of the earth's surface. Table 2 is prepared with the assumption that interference is negligible if the monthly median of the hourly median interference signal is 20 db below the minimum hourly median signal required and applied to a platform located at 20° North.

Table 3, based on the data from TERTM-I.T.S.A.—54, shows the orders of frequency which are expected to be available at the various distance ranges and geographic latitudes during nominal extremes in the propagation conditions, i.e., summer afternoon during high solar activity and pre-dawn winter during low solar activity. Since we are considering an area of roughly one-fourth the earth's surface, only the Northern hemisphere is examined. Reliability of less than 90% is tabulated only if no frequency order has a reliability of 90% or greater.

Table 3 indicates that available frequency orders may vary from 2 per distance range to a requirement that a given frequency serve all distance ranges. Available frequency orders per data collection station vary from one to five.

Although it would be prudent to consider the case of one frequency order per data collection station, it appears that if circuits greater than 2000 km are used, 2 or more frequency orders would be typical and, for the purpose of these preliminary platform density estimations, 2 frequency orders per collection station would be assumed to be useful during a given collection period.

On the basis of the above discussion, we may postulate a more representative situation than the extremes discussed previously, i.e., an 8000 bit message length, two frequency orders per data collection station, and a one hour period for data collection. If 20 stations were required in the area and one channel per frequency order per station were used, this would require serial operation of the stations with one-half hour available per station. This indicates that each

USA/159(84) (cont.) station would have two channels (one for each frequency order) and for a one-half hour period could collect 2 x 30 x 60 x 100 = 360,000 bits. For 8000 bit transmissions, this would provide 45 observational platforms per data collection station. If greater than two-fold redundancy were required for some data, the number of operational platforms per data collection station would be reduced and 25 - 30 platforms per station would be a more realistic estimate.

At 30 platforms per station and 20 stations per one-fourth of the earth's surface, successful data collection from  $20 \times 4 \times 30 = 2400$  observational platforms could be expected. This would conservatively meet the requirement for the number of buoys suggested by I.O.C. If the message length is less than 8000 bits, the number of platforms would increase proportionally, e.g., 4800 for a 4000 bit message. Conversely, if the data rate is less than 100 bits per second proportionally fewer platforms may be served.

It must be recognized that the foregoing examples are only estimates, being pessimistic in that a one-half hemisphere separation is not expected to be required at the lower frequencies, but being optimistic since a concentration of buoys at the shorter distances is probable and the lower frequencies will be more heavily loaded. This analysis is also optimistic since no time is allowed for the interrogation process.

While a wide variation in the permissible density distribution of data observational platforms may be expected, a 3.5 kc/s band per frequency order should be adequate. The most trying period will be pre-dawn winter during low solar activity when careful location of data stations and preparation of interrogation schedules will be required to complete synoptic mapping with a 3.5 kc/s band.

In conclusion, the United States submits that there can be no question as to the desirability of accommodating requirements for oceanographic communications in the exclusive high frequency maritime mobile bands and this objective can only be met in the foreseeable future by positive action at the World Administrative Radio Conference to deal with matters relating to the maritime mobile service (Geneva 1967).

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Ref.

USA/159(84) (cont.)

## REFERENCES

HAYDON, G.W. (April, 1967), Theoretical evaluation of band 7 frequency complements for ocean data communications, Institutes for Environmental Research Technical Memorandum I.T.S.A.-54, U.S. Department of Commerce.

UNESCO (1967), Radio communication requirements for oceanography, Intergovernmental Oceanographic Commission Technical Series No. 3, United Nations Educational, Scientific and Cultural Organization, Paris, France.

Individual and Combined Reliability Prediction for Propagation Between Buoy and Five Reception Paints - Sun Spot No. 10

MONTH	PREQUENCY		RELIABILITY OF RECEPTION AT													
& TIME	(Mc/s band	MIDWAY	TOKYO	VLADIVOSTOK	GLINKA	HONOLULU	RELIABILIT									
MARCH	8	_	95	_		-	95.0									
0600 GMT	12	92		85	85	69	99.4									
	16	76	_	99	70	70	99.9									
HINE	8	_	02	_		_	93.0									
JUNE 0600 CMT	12	85	93 92	89	_		99.9									
OCOU CIVIT	16	82	-	- 05		82	99.4									
. •	22	-		_		96	96.0									
DECEMBER	6	_	84	68	_	_	94.9									
0600 GMT	8	79	98	92	74	63	99.9									
*	12	08	_		74		94.8									
MARCH	3	67	85	73	64	5,0	99.8									
1200 GMT	4	73	91	81	73	57	99.9									
	6	82		80	87	64	99.9									
	ន	74	-	-	74	54	97.0									
JUNE	3	67	85	73	64	50	99.8									
1260 GMT	4	73	91	81	73	57	99.9									
1200 011	6	82	97	90	82	71	99.9									
	8	74	_	88	88	77	99.9									
	12	_	-		78	_	78.0									
D000 4050		62	05	73	64	_	99.5									
DEC EMPER	3	67 73	85 91	81	73	50	99.9									
1200 GMT	6	73	31	80	82	61	99.6									
	6	1 .		<u>[</u>	1		•									
MARCH	3	67	85	73	64	-	99.5									
1800 GMT	4	70	91	81	73	 	99.8 95.0									
	6	_	-	82	71		93.0									
JUNE	3	-	85	73	-		96.0									
1800 GMT	4		91	81	·	-	98.3									
	6	54	-	82	59	-	97.3									
	8	67		88	63	. –	96.9									
DECEMBER	3	67	85	73	64	_	99.5									
1800 GMT	4	70	91	81	73	-	99.8									
1800 GWII	6	-		82	82	-	97.0									
	8	·   ·	_	88	74	_	96.9									
•				·		_	87.0									
MARCH	8	-	87 92	74	_		97.9									
2400 GMT	12	_	92	14	ľ											
JUNE	8	-	83	_	-	-	83.0									
2400 GMT	12	-	80	85		_	97.0									
	16	70	_		_		70.0									
ncos mes	9	_	95	`	-	· —	93.0									
DECEMBER 2400 GMT	12	_	-	89	69	_	96.6									
7400 QVII	16	50	_		64	-	82 0									
	10	1			1											

Table 1. Table illustrating the increase in reliability if multiple sky wave data collection circuits are used.

TABLE 2

USA/159(84) (cont.)

# Representative Area of Interference

Арр	Approximate location at which interference becomes negligible Transmitter at 20° N, 0° Longitude														
	Frequency	Latitude -	- Degrees	Latitude - Degrees											
Time	Mc/s	North	South	East	West										
	4.2	65	15	30	50										
Night	6.2	85	55	70	80										
	8.3	85	75	90	110										
	Average	78	48	63	80										
	Range	126° Nort	h-South	143° Eas	t-West										
	12.4	58	10	30	30										
Day	16.6	85	35	100	100										
, .	22.1	85	70	140	90										
	Average	76	38	90	73										
	Range	114° Nort	h-South	163° Eas	t-West										

Theoretical reliability of sky wave communication at the various frequency orders. (Numbers in the body of table are percentages of days the frequency is expected to be useful and the captions are in Mc/s).

Latitude Degrees	Distance		Lo	w Sola	m Winte r Activ	ity	Afternoon Summer High Solar Activity 16 Lt - Jun - SSN 120							
North	Kilometers	4.2	6.2	8.3	12.4	16.6	22.1	4.2	6.2	8.3	12.4	16.6	22.1	
0 to 20	200 500 800 1000 2000 3000	* 10 44 65 88	93					,	97 98 94	94 98 99 99	91 99	91 99		
20 to 40	200 500 800 1000 2000 3000	* 42 86 95	<b>9</b> 3 90						81 98 94	99 95	99	94 99	95	
40 to 60	200 500 800 1000 2000 3000	* * 18 47 88	91					51	80	92 86	90	86		
60 to 80	200 500 800 1000 2000 3000	* 17 29 31 49						60 59		97 96	96 61			

<sup>\*</sup> Less than 5 per cent

Table 3. Useful Frequencies for High Frequency Sky Wave Data Collection Circuits

Document No. 159-E Page 17							Pa	arame	eter	3	•				
Ref. USA/159(84) (cont.)		Barometric pressure	Air temperature	Dew point	Wave elevation, x,y,t	Surface water temperature	Pressure	Subsurface temperature	Salinity	Sound velocity	Current speed	Current direction	Dissolved oxygen	Light	Ambient noise
Applications		1	2	3	4_	_5_	6	7	8	9	10	11	12	13	14
Coastal engineering and marine mining	Ţ	x			х	x		х	x	,	x	x		2	
Water motion studies	. 2	х	х	х	х	x		х	х	·x	x	х	х	х	
Fisheries research	3	х	x	x	х	x	ж	х	х	x	x	x	х	х	
Research in air/sea interaction	4	х	х	х	х	х	х	х	x		х	х	х		
Synoptic climatology and forecasting	5	х	х	х	Х	x		х	х	х	х	х			
Ice patrol monitoring and research	6	х	Х		Х	х		х	х	x	x	х			
Search and rescue	7	х	x ·		x	х		х	х	x	x	x			
Tcebreaking and polar oceanography	8	х	х		х	х		х	х	х	х	x			
Study and control of water pollutants	9					х		х	х		х	х			
Basic research in physical oceanography	10	x	х	х	х	, <b>x</b>		х	х	х	х	х	х	х	
Support of marine vehicle operations	x	х	х	х	х	х	х	х	х	х	х		x	x	

 $\underline{\textbf{FIGURE 1.}} \qquad \text{Application of Parameters in a Typical Data Message}$ 

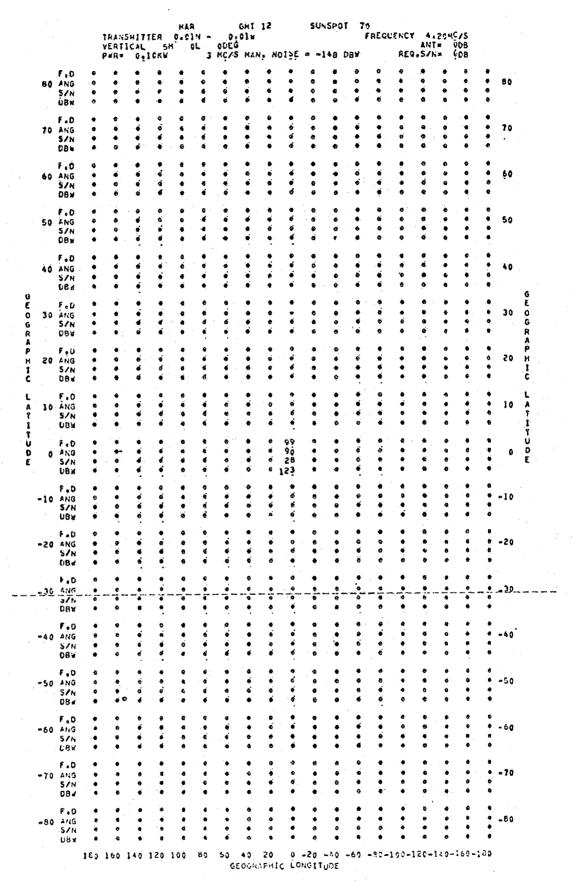


Figure 2. Chart illustrating a small interference area in contrast to the interference area of Figure 3.

(The starred (\*) area is expected to be free from interference.)

							20.4	18: 31N -		.011	24		ŞI	JHSPC	)T : 1	O FREC	UENC		- 4 CM					
	80	F D ANG SZN	72	73 5	0	10N) 64 8	7 7 2 0	69 1	9 F.C. 61 2	/\$ H. 52 4		5	33		32	36 2 34	44	0.\$/ 51 0 28		62 6 32	72 5 30	8.0		
	7.0	EBW F.O ANG	66 3	129	13 <sub>0</sub> 76 3	130 75	71	127 76	125		125 34 8	31 9	129 32 8	129 19 6	130	130 22 2	27	136 35 6	136 ·		134 66 3	7,0		
	60	F.D DNA	81	83	130 C6	86	130 85 5	86 851	75 .4	125 47 9	15 35 153	36 128 28 13 43	124 37 12	40 124 48 9	12 <sup>5</sup> 22 5		132		135 79 - 2	137 80 1	81	80		
	50	P.D		63 4		29 135 95 1	128 95	94	130 85	126 57	123 83 1	121 84 3	125 88 0	122 68 9	123 50 6	124		86 130	33 131 65 0	135 87 3 25	26 138 93 1 21	50		
	40	F.D ANG S.N				133 96 0	38 38 38		125	118 72	11 <sup>8</sup> 96	114 93 9		12¢ 84 10	76 4	153	128		131			40		
6 E O	30			1 <sup>46</sup> 95 0			131 99 1	12 <u>6</u>	122 97 3		111 98 8	168 72 24		119 95 9	121		123 66 2		140 99			30	6 6 0 6	
RAPHI	. 20		159		99	135	129 99 0	125 98 4	120 99 2	115 98 9	108 99	9ů	10 <sup>9</sup> 99 8	118	91 2		128 74	134 99 2		157 \$8 2		20	RAPHI	
C LAT	10	F.O ANG S/N	167	161 96	152 99	99	129 98 0 32	98 98 3	123 99 1	115 99 8	107 99 6 55	51 63 168	107 99 5	118 99 7	121 96 1	128 75	129 85 0	138 99	151 99 3			10	LAT	
tUUE		F.D ANS S/N					130 99 4 32	34 39 126		116 99 6	109 99 2	102 99	109	11 <sup>8</sup> 99 5	123 92 0	127			156 99 2		•	.0	1 1 0 0 E	
		F.D ANO S/N		. 0		143 99 2	131 99 4 33	12? 99 2	122 99 0	11 <sup>7</sup> 99 45	112 99 10 49	10 <sup>8</sup> 99 1	113 99 9	11 <sup>9</sup> 99	127 87 5	12 <sup>7</sup> 83 2 36	133 65 31	145 59 21	99	170		-10		
	-20	F.D ANG S/N	e e	6 6 6	159 99 1	143 99 0 21	131 99 4 33	99 99 36	125 \$9 5	99	99 6	. 8	118 99 6 45	89 3 43	72 6 36	73 2 37	19 3 33	93 0 28	99 0 10	-8	•	-20		
- <b>-</b>	_:=3&	084 F.0	\$8 1_	99 2 5	160 99 l 7	<u>.</u> 58	99	1.	127 99 37	99	99 L1	99	94	S	47 7_		-72	95 0_	88	99	99 1	3u_	<b>-</b> -	
	-40	F.C ANG S/N	93 • • ∪	59 0 3	99 1 12	135 99 0	133 99 2 31	33 68 131	?9 2 36	123 99 5	120 99 1 42	ر د 43	55 3 42	27 1 38	12 5 33	32 2 35	54 4 32	91 0 25	98 0 12	0 83	98 0 -0	_+0		
	-50	F . D ALIG S/H	98 0 6	\$9 1	99 2 13	99 2 23	97 2 31	99 4 33	99 1 36	97 3	88 6	. 41	49	20 6 35	19 4 36	20 2 33	43 5 30	85 1	95 1 13	98 0 9	95 0 6	<b>-</b> 50		
	-60	F.O ANG S/N	97 10	98 1	99 3 23	99 1 27	99 2 29	97 4 32	37 1 34	94 2 36	86 4 33	ა 3 ა	42 6 37	29 5 36	23 3	22 1 27	- 38 5 22	79 2 27	96 0 22	96 1 13	97 1	-60		
	<b>-7</b> 0	F.D ANG S/N	97 0 22	93 0 21	\$3 0 21	99 1 26	98 2 27	95 4 30	95 .0 32	92 1 34	54 2 . 35	3	51 4 33	33 3 28	23 23	18 1 25	40 S 23	78 2 28	92 1 26	96 0 25	91 0 22	_70		
	<b>_8</b> 0	FID ANG S/N	?1 2 28	89 2 27	5 2 2 23	91 2 24	92 3 20	55 4 24	98 0 26	84 0 27	77 1 27	68	56 2 27	45 2 27	37 1 26	33 1 27	53 4 24	77 3 29	87 2 23	91 2 23	91 2 23	_80		,
		7.7			-	•	-		60	.40	20	IC L	-20	-40	-50									

Figure 3. Chart illustrating a large interference area in contrast to the small area of Figure 2. (The starred (\*) area is expected to be free from interference.)

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 160-E 19 September 1967 Original: English

COMMITTEES 4, 5, 6

#### GREECE

## Proposals for the work of the Conference

#### Ref.

### Agenda Item 2.4

GRC/160(1)

The desirability of accommodating the requirements for oceanographic communications in the exclusive HF maritime mobile bands.

#### Background

Oceanographic data transmission can play a vital role in scientific research of various phenomena which develop in the sea area near the atmosphere. The knowledge of these phenomena can:

- improve considerably the safety of navigation and especially of human life at sea,
- 2. protect better human activities at sea,
- 3. indicate better the resources which may be extracted from the sea,
- 4. promote more systematically weather forecasts for inland purposes.

Consequently, Greece considers that the accommodation of frequency requirements of the before-mentioned data transmission, in the maritime mobile service bands, would be desirable. This accommodation may be achieved:

- a) by specifying the frequency bands to be used by ship stations for oceanographic data transmission, and
- b) by specifying that the same frequency bands be used by busy stations only for oceanographic data transmission and in case of automatic transmission, by stations telecommanding of buoys too.



## Document No. 160-E Page 2

## Ref.

GRC/160(1) (cont.)

This accommodation seems to be possible by the present W.A.R.C. because :

- 1. The buoys and ships transmitting oceanographic data belong to the maritime service.
- 2. These data will serve primarily navigational needs.
- 3. These data are vital for the world economy and therefore a way should be somest found not only for their transmission but also for their protection in an international basis.
- 4. It seems that it can be fulfilled under the limits of the present Conference mandate while it is not at all known if the same can be done by a future W.A.R.C.

To this end Greece proposes the following:

- a) Paragraph 36 of Article 1 of the Radio Regulations should be suitably modified in order that ocean data and ocean data telecommand stations can be included in the stations of the maritime mobile service.
- b) The following frequency bands, 3.5 kc/s each, should be allotted for the transmission of ocean data:

c) The characteristics of ocean data and ocean data telecommand stations should be specified for the prevention of interference from these stations to other maritime bands or inversely.

## Ref. Agenda Item 3

Consequential revision of Appendices 15, 17 and 25 to the Radio Regulations.

## GRC/160(2)

## APPENDICES 15 AND 17

As a consequence of the introduction of SSB operation in the maritime mobile service, it is deemed that Section B of Appendix 15 should no longer be maintained as a separate section, since its provision aimed to promote the use of SSB technique by ships.

On the other hand there is urgent need:

- 1. for increasing the number of telephony channels to facilitate traffic despatching,
- 2. for establishing selective coast to ship calling to speed up traffic despatching,
- 3. for satisfying ocean data transmission (see Greek proposal on Agenda Item 2.4).

To this end Greece proposes the following:

- a) Suppression of Section B of Appendix 15 as a separate section.
- b) Unification of the band of Section B of Appendix 15 with the ship telephony band of Appendix 17 for the increase of the number of ship telephony channels.
- c) Allotment of a portion of coast telegraphy band to the coast telephony band for the creation of the same number of channels for the coast and ship radiotelephony, due to change b) above and according to the meaning of Appendix 17.
- d) Allotment of an equal portion of ship low traffic telegraphy band due to change c) above, to the coast telegraphy so that finally the coast telegraphy band maintains the same largeness as previously.

### Document No. 160-E Page 4

#### Ref.

GRC/160(2) (cont.)

- e) Division of ship high traffic telegraphy band into a portion for the transmission of teleprinter and data signals and a portion to manual telegraphy.
- f) Allotment of a pair of channels from the new distribution according to b) and c) above to the ocean data transmission (one channel) and to coast to ship selective calling (the other channel) in the 4, 8, 12, 16 and 22 Mc/s band.
- g) Reduction of the spacing between channels in the ship high traffic telegraphy band to provoke more channels.
- h) Better distribution of ship stations between high and low traffic band to balance as equally as possible the traffic between the two bands. The before mentioned measures are presented in Figures 1 and 2.

# GRC/160(3)

#### APPENDIX 25

The introduction of SSB operation leads to abrogation of the present Appendix 25 and the necessity for the establishment of a new one. The Greek Administration expresses the wish that in the new Appendix 25, which will be established after the procedure decided during W.A.R.C. will be avoided as much as possible the defect of the present distribution where neighbour countries have the same frequencies for their coast stations with a consequence of serious interference between them in case of simultaneous emission.

The adoption of before mentioned measures a) to h) would allow a better geographical distribution of coast radiotelephone frequencies amongst the interested countries.

Ref.

# Agenda Item 7.3

Conditions for the use of selective calling devices.

GRC/160(4)

It is known that the introduction of selective calling in the maritime mobile service can reduce delay in calling and greatly facilitate traffic despatching. Such a system should permit to a coast station to establish contact with a ship irrespective of the type of radio communication equipment fitted on the ship or the type of traffic to be exchanged at any time and without regard to nationalities of stations.

In this respect, besides the international calling frequencies of 500 kc/s, 2182 kc/s and 156.8 Mc/s which are used also for safety, additional frequencies for selective calling in the HF band should be provided.

The Greek Administration having in mind the report of C.C.I.R. Study Group XIII, suggests that the following frequency bands after the redistribution of Appendix 17, should be used for the selective calling:

4364.8 - 4368 kc/s 8741.8 - 8745 kc/s 13 126.5 - 13 130 kc/s 17 286.5 - 17 290 kc/s 22 646.5 - 22 650 kc/s

It suggests also that the necessary modifications in Article 19 should be made during the W.A.R.G. for the allocation of the appropriate identification numbers for selective calling purposes to the coast and ship stations of each country.

Document No. 160-E Page 6

Ref.

Agenda Item GRC-1

Examination of the need for the retention of the calling frequency 143  $\pm$  3 kc/s.

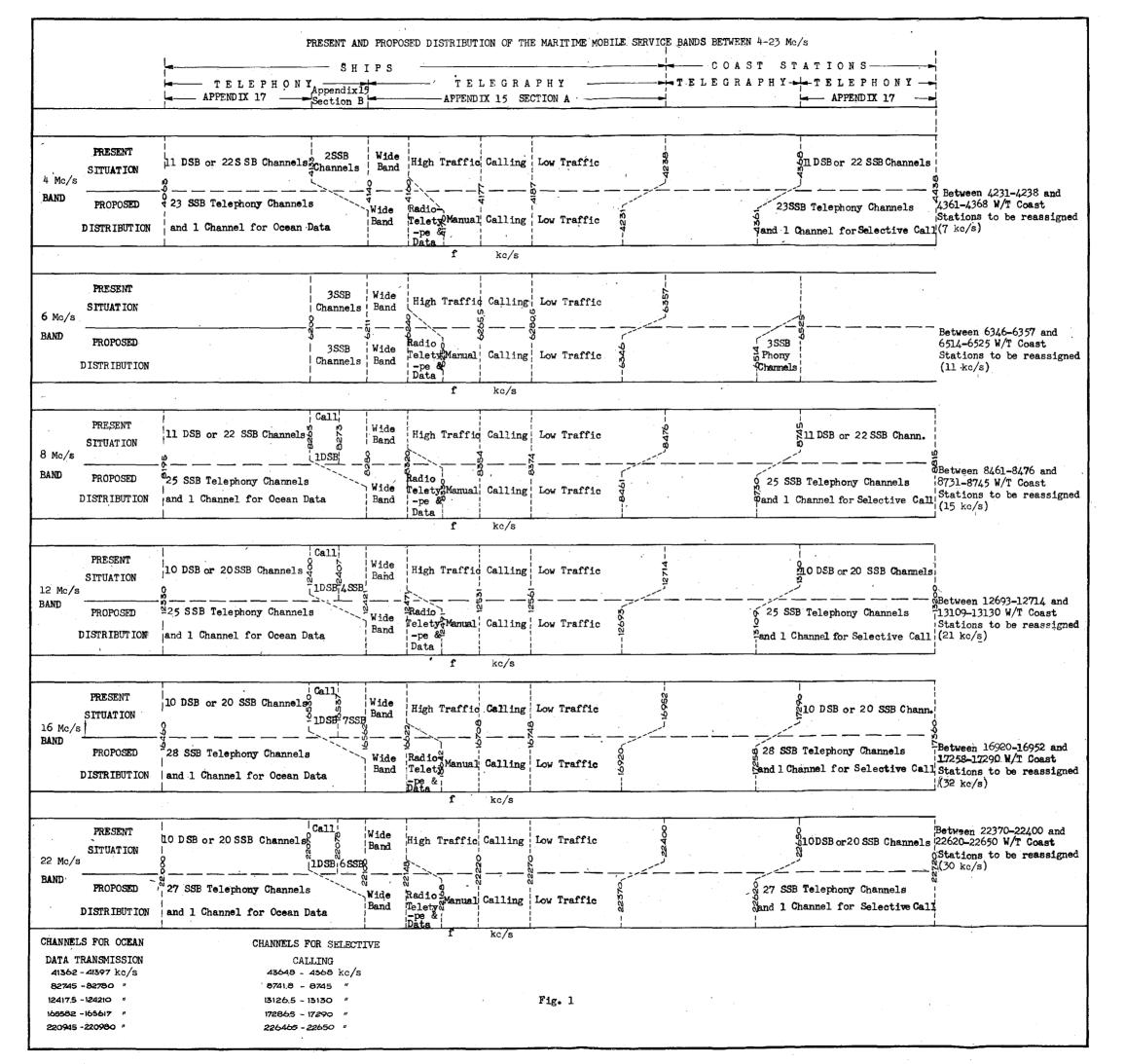
GRC/160(5)

The use of the band 90-160 kc/s by ships has gradually diminished to the vanishing point so that the need for the calling frequency of  $143\pm3$  kc/s in that band no longer exists. However, there are increased requirements of frequencies for other purposes.

Greece proposes the suppression of paragraph 171 of the Radio Regulations which allot the frequency 143 kc/s and its associated guard band 140-146 kc/s to calling purposes and the relevant paragraph 1095-1105 (included) which specify the use of this frequency.

Greece proposes also the suppression of paragraph 172, which limits, in Region 1 only, the use of the band 130-150 kc/s to ship stations so that this band may be used also by coast stations as in Region 2 and 3 of the Radio Regulations.

Annexes: 2 Figures



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Ref. GRC/160(2)

# TABLE OF SINGLE SIDE BAND\_TRANSMITTING FREQUENCIES (in KHz)

Document No. 160-E Page 9

# Nominal Carrier frequencies

Proposal for the modification of App 17 of Radio Regulation (See also Fig. 1)

	4 MHz	Band	8 MHz	Band	12 MHz Band		16 MHz Band		22 MHz Band	
Series No	Coast Station FrequencyKHz	Ship Station FrequencyKHz	Coast Station FrequencyKHz	Ship Station FrequencyKHz	Coast Station Frequencyкн	Ship Station FrequencyKHz	Coast Station Frequency KHz	Ship Station Frequ KHz	Coast Station FrequencyKHz	Ship Station FrequencyKHz
1	4368.0	4063.0	8745.0	8195.0	13130.2	12330.2	17290 2.	164602	22.6502	22000.2
2	4371 1	4066.1	8748 1	<b>8</b> 198.1	13133.5	123335	17 293 5	164635	22653.5	22003.5
3	4374 3	40693	8751.3	8201.3	13137.2	12337 2	17297.2	16467.2	226572	22007.2
. 4	4377.4	40724	8754 4	8204.4	13140.5	12340.5	17300.5	16470.5	22660.5	22010.5
5	4380.7	40757		8207.7	13144.2	12344.2	17304.2	16474.2	226642	22014.2
6	4383.8	40788	8760.8	8210.8	13147 5	12347 5	17307.5	16477.5	226675	
	4387.1	4.082,1	8764.1	8214.1	13151.2	12351.2	17311 2	16481.2	22671.2	22021.2.
8	4390.2	40852	8767.2	8217.2	13154.5	12354.5	17314 . 5	16484.5	226745	22024.5
9	43935	40885		8220.5	13158.2	12358.2	17318 2	16488.2	226782	22028.2
. 10	. 4396.6	4091.6	8773.6	8223.6	13161.5	12361 5	17321 5	16491.5		22031.5
. 11	43999	4094.9	8776.9	82269	13165.2	12365 2	17 325 2	16495.2	22685 2	22035.2
12	4403.0	4098.0	8780.0	82 30.0	13168 5	12368.5	17328 5	16498.5		220385
13	4406.3	4101.3	8783.3	8233.3	13172.2	123722	17332 2	165022	226922	22042.2
. 14	4409.4	4104.4	87864	8236.4	13175.5	12375.5	17335.5	16505.5	226955	22045.5
15	4412.7	4107.7	8789.7	82397:	13179 2		17339.2	165092	226992	22049.2
16	44158	4110.8	87928	82428	13182.5	123825	17342 5	16512.5	227025	220525
17	44191	41141	8796.1	82461	131862	12386.2	17346.2	16516.2	22706.2	22056.2
18	44222	4117.2	8799.2	82492	13189.5	123895	17349 5	16519.5	22709.5	22059.5
. 19	44255	4120.5.	8802.5	8252.5	13193.2	12393,2	17353 2	16523.2	22713 2	22063.2
20	., 4428.6.,	4123.6	88056	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				4		•
23.	43617	4133.1	8732.4	8265 1	13109 2	12400 2	17258 2	16530.2	226223	22070.2
. 24	4364B	4136.2.	8735.5	8268.2	13112.5	12403.5	17261 5	16533.5	22625.5	
25.			8738.7	8271.4.	13116 2	12407.2	17265 2	16537.2	22619.2	22077.2
. 26			8741.8	8274.5.	13119.5	124105	17 268 .5	, 165405	22632.5	220805
27						12414.2	17272 2	16544.2	22636.2	22084.2
28					13126.5	12417.5.]*	17275.5	16547 5	22639.5	22087.5
29			. <b></b>	,			17279 2	16551 2	226432	220912
30	. <b>.</b>					. <b>.</b>	17282 5	16554.5	226465	220945 *
31							17286.2	16558.2.		

	6 MHz Band					
	Coast Station Frequen	Ship Station Frequency				
1	6514.5	6203.5				
2	6518	6204				
3	6521.5	6207.5				

Greece proposes the allotment of channel 24 in 4 MHz band, 26 in 8 MHz band, 28 in 12 MHz band, 31 in 16 MHz band and 30 in 22 MHz band of the above distribution for the satisfaction—of the needs of selective calling and ocean data transmission as follows:

BAND	CHANNEL	SELECTIVE CALL CHANNELS	ING	OCEAN DATA CHANNELS
4 MHz	24	4.364,8 - 4368	KHz	4.136,2 - 4.139,7 KHz
8 "	26	8.741,8 - 8745	#	82745-82780 #
12 "	28	13126 5 -13130	n	124175-12421 0 #
16 #	31	17.286,5 -17.290	"	16.5582- <b>165</b> 61.7 #
22 .11	<b>3</b> O	22646 5 -22650	n	22.0945-22.0980 /

**GENEVA, 1967** 

Document No. 161-E 20 September 1967 Original : French

COMMITTEE 5

### SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE 5

Tuesday, 19 September 1967, at 15 hours

Chairman: Mr. P. MORTENSEN (Norway)

Vice-Chairman: Mr. A. de SOUZA COELHO (Brazil)

# Subjects discussed

Document No.

1. Organization of the work of the Conference

157

2. Other business



The Chairman thanked the members of the Committee for having elected him to the Chair.

# 1. Organization of the work of the Conference (Document No. 157)

The Chairman said that the Committee should first organize its work on the basis of the terms of reference outlined in Document No. 157, an amended version of which would be issued after the meeting.

Following consultations held on the previous day, it had been decided that Appendix 19 should be examined by Committee 5 and not Committee 4. He than reviewed the items in the terms of reference of Committee 5 as they appear on page 2 of Document No. 157. In connexion with Article 9, the Committee would have to prepare a resolution dealing with the notification and registration of frequencies during the interim period planned for the introduction of single sideband technique. The Committee would also be discussing Article 28 (No. 992', as proposals had been submitted for the use of class A3H emissions on 2182 kc/s. Other proposals had been submitted suggesting that the specifications relating to single sideband emissions should appear in the actual text of the Radio Regulations (either in Articles 7 or 35 or in Appendix 17). A careful study would also have to be made of the Conference agenda items mentioned in the Committee's terms of reference, in particular item 1 relating to the use of single sideband technique.

Replying to the <u>delegate of the Netherlands</u>, he said that the amended version of Document No. 157 would enable the Committee to examine all the provisions of Article 7 dealing with radiotelephony.

On a proposal of the Chairman, it was decided that the work of the Committee would be divided up between four Working Parties, as follows:

- 1. Working Party 5A Chairman: Mr. Per Aakerlind (Sweden)
  - Terms of reference: Questions relating to radiotelephony in frequency bands below 4000 kc/s.
- 2. Working Party 5B Chairman: Mr. J. Bes (Frence)

Terms of reference: Questions relating to radiotelephony in frequency bands between 4000 and 30 000 kc/s.

3. Working Party 5C - Chairman: Mr. M.E. Frommer (Federal Republic of Germany)

Terms of reference: Questions relating to radiotelephony in frequency bands above 30 Me/s.

4. Working Party 5D - Chairman: Mr. P.E. Willems: (Netherlands)

Terms of reference: Questions relating to the notification and registration of frequencies and the possible revision of Appendix 25.

A document would be issued later giving details of the terms of reference of the Working Parties. It would be necessary to coordinate the activities of Working Parties 5A and 5B as regards certain technical specifications.

The <u>Chairman</u>, replying to the <u>delegates of France</u> and of the <u>U.S.S.R.</u>, said that he would propose holding a general discussion on Appendix 25 at a forthcoming meeting of the Committee.

The second meeting of the Committee would open with a general discussion of Conference agenda item 1 to establish whether the majority of Committee 5 were in favour of the use of single-sideband technique. The Committee would also discuss the revision or deletion of Appendix 25. The Working Parties would then be able to meet.

### 2. Other business

The <u>delegate of Belgium</u> said it would be useful if the Committee could have a working paper listing the various points on the agenda and indicating the proposals of administrations of interest to the Committee and the four Working Groups.

The Chairman said that the question had already been discussed with the Secretary of the Committee, and a document was being prepared.

The meeting rose at 15h.55

Secretary of Committee 5:

Chairman of Committee 5:

J. BALFROID

P. MORTENSEN

**GENEVA, 1967** 

Document No. 162-E 21 September 1967 Original: English

COMMITTEE 6

SUMMARY RECORD

OF THE

FIRST MEETING OF COMMITTEE 6

(OPERATION)

Wednesday, 20 September 1967, at 9.30 a.m.

Chairman: Mr. K. COMIC (Federal Socialist Republic of Yugoslavia)

Subject discussed

Organization of work

Document Nos.

157, DT/2, DT/3

# Document No. 162-E Page 2

The <u>Chairman</u> welcomed the delegates to the first meeting of Committee 6 and expressed his thanks to them for having elected him.

Organization of work (Document Nos. 157, DT/2 and DT/3)

The <u>Chairman</u> explained that although Document No. DT/2 contained comprehensive information on the work of the Committee, it would be supplemented by other documents to be submitted by delegations and containing further proposals.

He then raised the question whether a time limit should be fixed for the submission of new proposals for the Committee's consideration.

In the absence of comments on that suggestion, it was agreed to fix no time limit for the moment.

The Chairman invited attention to Document No. DT/3, in which the subjects arising from the terms of reference of the Committee had been divided into eight sections and listed under paragraph B. He suggested that three Working Groups, 6A, 6B and 6C, should be set up on the following basis:

Working Group 6A to consider Sections B, 1, 2 and 3 namely:

- Matters of radiotelegraph procedure
- Matters of radiotelephone procedure
- Service Documents

Working Group 6B to consider Sections B, 4, 5 and 6 namely:

- Revised International Code of Signals
- Questions related to distress and safety
- General provisions to be applied to ship stations

  Working Group 6C to consider Sections B, 7 and 8 namely:
- Questions related to personnel
- Questions related to radiotelegrams and radiotelephone calls

The mandates of the Working Groups would be to consider all proposals to which cross-reference is made in Document No. DT/3 under the respective subjects listed above. In the list of these proposals appearing in the annex to Document No. DT/3 an indication is given against those which are to be considered also by other Committees.

In the absence of comment, the Chairman declared that the three Working Groups were thus constituted.

With respect to the nomination of Chairmen for the Working Groups, the Chairman asked the Delegations of France, the United States of America and the Federal Republic of Germany kindly to accept his invitation to nominate candidates, to which request the said Delegations responded favourably.

The Committee unanimously approved the following nominations:

Chairman of Working Group 6A: Mr. A. CHASSIGNOL (France)

Chairman of Working Group 6B: Cdr. H.A. FEIGLESON (USA)

Chairman of Working Group 6C: Mr. F. WEIFELSPUTZ (Federal

Republic of Germany)

The meeting rose at 10.10 hours.

Secretary

Chairman

A. A. MATTHEY

Konstantin COMIC

**GENEVA, 1967** 

Document No. 163-E 26 September 1967 Original : English

## PLENARY MEETING

MINUTES

of the

# FIRST PLENARY MEETING

Monday, 18 September 1967 at 1500 hours

Chairman (for items 1 and 2): Mr. A. BIGI (Italy)

Chairman: Mr. R.M. BILLINGTON (United Kingdom of Great Britain and .

Northern Ireland, the Channel

Islands and the Isle of Man)

		Documents Nos.
1.	Opening of the Conference	-
2.	Address by the Secretary-General a.i.	_
3.	Election of the Chairman of the Conference	<del>-</del> ,
4.	Election of the Vice-Chairmen of the Conference	
5.	Constitution of Committees	103, 116 148, 149
6.	Election of the Chairmen and Vice-Chairmen of Committees	-
7•	Constitution of the Conference Secretariat	. · · · · · · · · · · · · · · · · · · ·
8.	Admission of international organizations	127
9•	Situation of certain countries with respect to the Convention	RCHIVES 146
10.	Hours of work	ENÈVE

11. Programme of forthcoming meetings

# Document No. 163-E Page 2

# Present:

# The delegations from the following countries:

#### Members:

Algeria (Algerian Democratic and Popular Republic); Argentine Republic: Australia (Commonwealth of): Belgium: Brazil: Bulgaria (People's Republic of); Canada; Ceylon; China; Cyprus (Republic of); Korea (Republic of); Ivory Coast (Republic of the); Cuba; Denmark; Group of Territories represented by the French Overseas Post and Telecommunications Agency; Spain; United States of America; Ethiopia; Finland; France; Greece; Guyana; Hungarian People's Republic; India (Republic of); Indonesia; Ireland; Iceland; Italy; Japan; Malaysia; Malta; Mexico; Norway; New Zealand; Pakistan; Netherlands (Kingdom of the); Poland (People's Republic of); Portugal and Portuguese Oversea Provinces; Federal Republic of Germany: United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man; Singapore (Republic of); South Africa (Republic of); Sweden; Switzerland (Confederation); Czechoslovak Socialist Republic; Territories of the United States of America; Tunisia; Turkey; Union of Soviet Socialist Republics; Venezuela (Republic of); Yugoslavia (Federal Socialist Republic of).

# Operating agencies:

Cable and Wireless Ltd.

#### Specialized agencies:

World Meteorological Organization United Nations Educational, Scientific and Cultural Organization Intergovernmental Maritime Consultative Organization

### General Secretariat:

Mr. Mohamed Mili, Secretary-General a.i.

I.F.R.B. : Mr. Berrada, Acting Chairman

C.C.I.R. : Mr. Herbstreit, Director

C.C.I.T.T. : Mr. Rouvière, Director

# 1. Opening of the Conference

Mr. A. Bigi (Italy), as the oldest Head of Delegation present, declared open the Maritime Conference, Geneva, 1967.

# 2. Address by the Secretary-General a.i.

The Secretary-General a.i. made the following statement:

"Mr. Chairman, Ladies and Gentlemen.

"On behalf of the International Telecommunication Union, I am happy to welcome you to Geneva to take part in this World Administrative Radio Conference which will be dealing with matters relating to the maritime mobile service.

"Actually, the object of this Conference takes us back to the beginning of the century, to the birth of radiotelegraphy - to a time when this new means of communication had but one use: to establish shipto-shore and ship-to-ship links.

"It was in 1903 that what was then known as 'The Preliminary Conference concerning wireless telegraphy' took place in Berlin.

"At the inaugural meeting where, of the 9 countries represented, only one - the United States of America - was not European, Mr. Kraetke, Secretary of State of the German Department of Posts, spoke in the following terms:

'Ship-to-shore and ship-to-ship communications have all at once become of major importance. It is thanks to radiotelegraphy that communication has been established between points of the globe which hitherto were deprived of such links. Ships in mid-ocean, formerly cut off from stations connected to the network of cables and overhead wires, are now in a position to announce their arrival by the transmission of electric waves and to help shipowners to prepare without delay for the embarkation and disembarkation of passengers, the sending and receiving of telegrams and the loading and unloading of cargo. Every hour saved, thanks to radio messages, is of considerable profit. A passenger on the high seas is now able to tell his family of his arrival and of the state of his health.

Ships in distress, which hitherto had no means of asking for help unless a friendly ship happened to be passing, are now able to send distress messages over hundreds of kilometres to passing vessels or coastal stations, thus safeguarding the lives and possessions of their passengers.'

"Those, Ladies and Gentlemen, were the words spoken by the Minister of that period. Sixty-four years later, his message still holds good.

"The purpose of that Preliminary Conference was to prepare a draft International Convention concerning wireless telegraphy - a Convention which was finally approved by the International Radiotelegraph Conference in Berlin in 1906.

"It is interesting to recall that Article 1 of that Convention opened with the following declaration, which places the radio services of that time in their true context:

The High Contracting Parties undertake to apply the provisions of the present Convention in all radiotelegraph stations - coast stations and ship stations - open to the public correspondence service between land and ships at sea which are established or operated by the Contracting Parties.'

"In other words, the reference at that time was to the maritime mobile service. At the opening of this new conference, I thought it meet to recall this fact.

"The second International Radiotelegraph Conference was held in London in 1912. Though its purpose was to revise the Berlin Convention it made no amendments which affected the user service, which thus remained unchanged.

"Since then, radio communications have become so important that the frequency spectrum has had to be apportioned among the various services that use it. For, with the development of technique, the number of these services has steadily grown until some ten years ago space communications burst upon the scene, upsetting all the established data.

"Fifty-five years have had to pass since 1912 before a new world administrative conference - your conference - was convened to deal solely with the maritime mobile service.

"In the interim, administrative radio conferences - such as the conference of 1959 - have dealt with all the services, including the maritime mobile service.

"Does it mean, then, that on this occasion the service concerned is receiving preferential treatment? The answer is No - for since the Administrative Radio Conference in Geneva in 1959 the services have one by one been the subject of extraordinary administrative conferences now called, since Montreux 1965, world administrative conferences.

"Thus, in 1963, a 'space' conference was held, and two sessions of the Aeronautical Conference were held in 1964 and 1966.

"This tendency to hold specialized administrative conferences is no doubt due to the importance and complexity of the media used by the various radiocommunication services. Admittedly there may appear to be disadvantages in this apparent dealing with the Radio Regulations piecemeal while telecommunications form a whole and the radio services are interlocked for the very reason that the transmission medium is common to all.

"On the other hand there is an undoubted advantage in being able to deal with each problem more thoroughly and leaving general questions to a future world administrative radio conference.

"Undoubtedly the changes in maritime radio communications, which were already taking form when the Radio Regulations and the Additional Radio Regulations were drawn up, have been clearly confirmed since 1959.

"For example, in the sphere of merchant shipping, as a result of competition from air travel, we have seen a reduction in the number of passenger liners (high traffic ships).

"On the other hand, the number and tonnage of cargo ships have increased and they have become much more specialized (petrol tankers, ore ships, methane-tankers and container-carriers), while there has been a spectacular expansion of fishing fleets.

"One of the consequences of these developments is that the mumber of ship stations appearing in the list published by the General Secretariat of the I.T.U. rose from 33,209 in 1960 to 39,500 in 1966, an increase of nearly 20% in seven years.

"Side by side with this development, the use of radiotelephony has greatly increased, as ship and coast stations have benefited from technical progress.

"Finally, the number of countries which have achieved independence during this period is such that there may be justification for adjusting some of the provisions of the present Regulations.

"For all these reasons which I have rapidly recalled ... and a few others, we have a particularly heavy agenda, merely because the provisions to be considered represent more than three-quarters of the 1959 Radio Regulations. This situation is unavoidable, for when regulations as well-ordered as those of 1959 have to be altered, there is bound to be a chain reaction ! ... and that is in fact what you are requested to produce, according to the agenda prepared by the Administrative Council, since it asks the Conference 'to consider, and revise as necessary, the provisions of the Radio Regulations and of the Additional Radio Regulations pertaining to the maritime mobile service!'.

"However, the number and variety of the problems to be faced should not make us overlook the fact that, as can be seen from the documents submitted by the administrations, they are of varying degrees of importance.

"Thus, the use of single sideband operation in radiotelephony is certainly one of the most important questions with which the Conference will be concerned. It will be recalled that the use of this technique had already been recommended by the Radio Conference in 1959, and that the Panel of Experts set up by it to study measures to be taken to reduce congestion in the frequency bands between 4 and 27.5 Mc/s recommended target dates for its introduction. Finally, the C.C.I.R. issued Recommendation No. 258-1 on the technical characteristics of the systems to be used.

"Since then, a certain number of ship and coast stations has been equipped for single sideband operation. It must, however, be borne in mind that to bring this technique into general use, quite apart from the important economic considerations involved, a timetable will have to be drawn up for the period of transition from double sideband to single sideband technique, especially since the international radiotelephone calling and distress frequency 2182 kc/s is in one of the bands affected.

"In connection with problems of safety, your Conference will be called upon to consider the conditions for the use of emergency position-indicating radio beacons. Such beacons, which can be rapidly launched at sea, make it possible to locate the scene of a disaster when it occurs so

suddenly that the ship station has no time to send out a distress call. Widespread use of these beacons would undoubtedly reduce the number of losses without trace of ships of small tonnage (such as fishing vessels) that are reported each year.

"Conditions for the use of selective calling devices are another important problem and the Conference may wish not only to define the signals to be used but also decide in which frequency bands these devices should operate.

"There is no doubt that, for coast stations wishing to call ship stations which do not keep a permanent watch, selective calling is of great advantage — in VHF for example, though the system could be used in all the bands of the maritime mobile service. It may be noted with satisfaction that some administrations have already carried out conclusive tests of the system.

"Furthermore, in view of the growing importance of oceanographic data in recent years, you will be called upon to examine proposals based on the conclusions of the Intergovernmental Oceanographic Commission concerning telecommunication facilities for oceanography. In addition to their more general applications, these data - together with those supplied by meteorological services - can contribute to the safety of navigation. However, this question is not simply technical but has legal implications of which you are no doubt aware.

"Another matter that is both technical and legal is the consideration of the pertinent portions of the International Code of Signals. This code, which was under I.T.U. auspices for a very long time, is now within the competence of the Inter-governmental Maritime Consultative Organization (I.M.C.O.) as the result of a decision of the I.T.U. conferences held in Atlantic City in 1947.

"I.M.C.O. has done a great work in bringing this code up to date and, allowing for the meeting of this Conference, proposes that it come into force on 1 January 1969. The portions of this code relating to radiocommunication procedure should therefore be examined by this Conference.

"I would, however, remind you that, although it is recommended, it is not compulsory for ships to carry a copy of the International Code of Signals. On the other hand, there is a code in Appendix 13, Section I, of the Radio Regulations which it is compulsory for ships to carry; this is the "Q"code, which also gives the abbreviations to be used for distress purposes in radiocommunication. The Conference may wish to consider how responsibilities in this field should be shared between the I.T.U. and I.M.C.O., with a view to harmonizing the complementary roles played by our organization and another specialized agency of the United Nations.

"In this connexion, allow me to stress how close and beneficial is our cooperation with I.M.C.O., and pay tribute from this rostrum to my friend Mr. Jean Rouiller, Secretary-General of I.M.C.O., who is on the eve of retirement. I also have pleasure in welcoming among us Mr. Sdougos, who has been chosen by I.M.C.O. to follow your discussions.

"Another point I should like to mention is that the General Secretariat and the I.F.R.B. have made a study of the possibility of compiling and publishing the List of Ship Stations with the aid of the computer.

"This new method, which will enable us to reap all the benefit of modern computer technique, will entail some changes in the lay-out of station particulars. Of the many advantages offered by this new method, special mention may be made of:

- 1. the shorter time required to publish the List, and
- 2. the possibility of rapidly obtaining extracts and statistics in various forms by mechanical means.

"The use of the computer would, however, require some alteration of the Radio Regulations, in particular with regard to the order in which the information is presented and the system of symbols used. For this purpose Appendices 9 and 10 annexed to the Regulations would have to be somewhat amended as shown in Document No. 119 which has been submitted for your consideration.

"Lastly, I should like to stress how the matters to be considered by you ultimately go far beyond a mere technical or juridical context, for telecommunications, too, have to serve mankind and be operated by men. There is no doubt that the decisions which will be taken in the coming weeks will sooner or later affect the work of operators in the maritime mobile service. This is a human aspect of the question which should not be overlooked.

"But I must not take up any more of your valuable time. I know, Mr. Chairman, and ladies and gentlemen, that your time is limited and that you will certainly need all of the seven weeks ahead of you to complete the weighty task before you.

"Before closing, let me assure you that we have done all in our power to ensure that you will be working in the best possible conditions. However, should you consider that any improvements could be made in the material organization of the Conference, I invite you to let us have your suggestions which we shall act on whenever possible. And here I can assure you in advance of the loyal help of all Union officials detached to this Conference.

"The members and staff of the I.F.R.B. present here will be happy to assist you in seeking the most judicious solutions to the complex frequency problems you will have to examine. Several senior officials of the C.C.I.R. are likewise at hand to help you in every possible way.

"Mr. Chairman, ladies and gentlemen, you may rest assured that, although my many duties will prevent me from being amongst you all the time, I shall follow the course of your discussions very closely.

"Whenever possible I shall occupy an office near to that of the Chairman of the Conference, and it will be a pleasure to receive any of you who may wish to see me.

"Ladies and gentlemen, the seven weeks ahead will be a period of intense activity for you. We are all ready to make the necessary efforts to ensure that this Conference produces constructive results and is crowned with complete success.

"Thank you."

### 3. Election of the Chairman of the Conference

The Acting Chairman said that the Heads of Delegations had unanimously proposed that Mr. R.M.-Billington\_(United Kingdom) be elected Chairman of the Conference.

Mr. R.M. Billington (United Kingdom) was elected Chairman of the Conference by acclamation.

The Chairman said he had been deeply touched by the honour done to his country and himself and thanked the Conference for the confidence it had shown in him. The Secretary-General had given a masterly outline of the background and tasks of the Conference. Indeed, the first Conference on ship-to-shore and ship-to-ship communications in 1903 had been attended by only nine countries, whereas some 60 countries were represented at the current Conference, which was the first world administrative radio conference dealing exclusively with the maritime mobile service on such a large scale, although in the past regional meetings had been convened to discuss specific aspects.

He agreed with the Secretary-General that the Conference had some highly important issues before it, such as the introduction of single sideband working in the medium and long-distance radiotelephone services so that more channels could be made available to provide for the expanding needs of shipping, the introduction of selective calling and modification of the very high frequency allocation table, again to meet increasing The allocations which were only introduced on a worldwide basis at the 1959 Administrative Radio Conference were already inadequate for the requirements of shipping and of port authorities in certain parts of the Moreover, they had to consider developments in the radio-telegraph services, and among the many problems before them were the need to make provision for the introduction of a teleprinter service to ships and the collection of oceanographic data. These few items served to indicate the importance of the Conference. Seven weeks was a short period in which to complete a task which involved the revision of about three-quarters of the Radio Regulations, but he was sure that all participants would cooperate with him in trying to bring the Conference to a successful conclusion.

# 4. Election of the Vice-Chairmen of the Conference

The <u>Chairman</u> said that the Heads of Delegations had proposed that Mr. Robert T. Bartley (United States of America), Mr. Yves Place (France) and Mr. A. Badalov (Union of Soviet Socialist Republics) be elected Vice-Chairmen of the Conference.

Mr. Bartley (United States of America), Mr. Place (France) and Mr. Badalov (U.S.S.R.) were <u>elected</u> Vice-Chairmen of the Conference <u>by</u> acclamation.

# 5. Constitution of Committees (Documents Nos. 103, 116, 148 and 149)

The Chairman said that Document No. 149 which had been prepared by the French and United Kingdom Delegations, would supersede Decuments Nos. 116 and 148.

The <u>Secretary-General a.i.</u> said that under the circumstances the General Secretariat would withdraw Document No. 103.

The <u>delegate of Belgium</u>, referring to the fact that Part A of Appendix 15 to the Radio Regulations would be dealt with by Committee 4 and Part B by Committee 5, said that every effort should be made to ensure that, when Appendix 15 was discussed, Committees 4 and 5, or any working groups of those Committees, did not meet simultaneously. Delegations should be able to take part in the discussions on both parts of Appendix 15.

The <u>delegate of the Netherlands</u> supported the opinion of the delegate of Belgium. It might also be more appropriate if Article 28 (Sections IV and VI) and Appendix 19, which related to radiotelephony, were dealt with by Committee 5 rather than by Committee 4.

The <u>delegate of Poland</u> said that it was not clear which numbers of Article 7 would be dealt with by Committee 4.

The Chairman, supported by the delegate of France, suggested that Article 28 (Section IV) be transferred to Committee 5 and that the phrase "(except Nos. 443, 444, 456 and 457)", be inserted between the figures "7" and "28" in the first line of the terms of reference of Committee 4.

The <u>delegate of Portugal</u> pointed out that the questions raised by the Belgian and Netherlands delegations concerning Appendices 15 and 19 had not been settled. The division of Appendix 15 between Committees 4 and 5 would impede quick and efficient work.

The Chairman said that the reason for the division was that Part A of Appendix 15 dealt with radiotelegraph allocations and Part B with allocations to radiotelephony. It seemed appropriate, therefore, that Part B should be considered with the other radiotelephony matters. There were no proposals to use the frequencies in Part B for purposes other than telephony.

The <u>delegate of Portugal</u> drew attention to the fact that there were proposals before the Conference to change frequencies from radiotelegraphy to radiotelephony. In his opinion the Conference structure proposed in Document No. 103 was better than that proposed in Document No. 149.

The <u>delegate of Belgium</u> said that although he was not entirely satisfied with the Chairman's explanation he would not oppose the proposal made in Document No. 149. It was essential, however, that the Chairmen of

Committees 4 and 5 should ensure that when Appendix 15 was discussed all delegations had an opportunity to take part in the discussions. The question raised by the delegate of the Netherlands concerning Appendix 19 had not been answered.

The <u>delegate</u> of <u>India</u> suggested that the Conference should adopt the proposal made in <u>Document No.</u> 149 on the understanding that if questions of interest to all delegations were divided between two committees, those questions should be discussed at joint meetings of the committees concerned.

The <u>delegate of Italy</u> suggested that agenda item 2.4 should be discussed by Committee 5 as well as by Committee 4.

The delegate of the Netherlands supported the Indian delegate's proposal. In discussing Appendix 15, the joint meeting should also consider Appendix 17 because the two Appendices were interrelated. It should be noted that Appendix 3 also dealt with both radiotelegraphy and radiotelephony.

The Chairman agreed that there were proposals under agenda item 2.4 to allocate radiotelephony frequencies. It would be appropriate, therefore, if the item were also considered by correittee 5. Joint meetings should be kept to a minimum and delegations could rest assured that everything possible would be done to arrange a programme which would enable them to attend all the meetings in which they were interested.

The <u>delegate of Belgium</u>, recalling that the Aeronautical Conference had questioned its competence to allocate frequencies for oceanographic communications, suggested that the principle of agenda item 2.4 should be discussed in a plenary meeting before the question was referred to a committee.

The Chairman said that there did not seem to be any reason why the proposals on oceanography should not be referred to a committee for preliminary discussion. He proposed that Document No. 149 should be adopted in principle on the understanding that he, the Chairman of Committees 4 and 5 and the authors of Document No. 149 would examine the question of overlap of interests and issue a revised document.

It was so decided.

# 6. Election of the Chairmen and Vice-Chairmen of Committees

The Chairman said that the Heads of Delegation recommended that the Chairman and Vice-Chairman of the Committees should be as follows:

# Committee 2 - Credentials

Chairman .

Mr. A. PETTI (Italy)

Vice-Chairman:

Mr. Tesfatsion SEBHATU (Ethiopia)

Committee 3 - Budget Control

Chairman

Mr. José de Jesus HERNANDEZ GONZALEZ

(Mexico)

Vice-Chairman:

Mr. V.V. RAD (India).

Committee 4 - Radiotelegraphy

Chairman

Mr. F. Gérard PERRIN (Canada)

Vice-Chairman:

Mr. Milan ZAHRADNICEK (Czechoslovak

Socialist Republic)

Committee 5 - Radiotelephony

Chairman

:

Mr. P. MORTENSEN (Norway)

Vice-Chairman:

Mr. Alvaro de SOUZA COELHO (Brazil)

Committee 6 - Operation

Chairman

Mr. Konstantin COMIC (Yugoslavia)

Vice-Chairman:

Mr. André AITHNARD (Togolese Republic)

Committee 7 - Editorial

Chairman

0

Mr. Habib BEN CHEIKH (Tunisia)

Vice-Chairman:

Mr. F. BENITO MESTRE (Spain)

Mr. J.D. CAMPBELL (Australia)

The recommendation of the Heads of Delegation was approved by acclamation.

# 7. Constitution of the Conference Secretariat

The <u>Secretary-General</u> a.i. said that the General Secretariat would supply all the staff necessary to ensure the smooth progress of the Conference. It was proposed that Mr. Stead should act as Secretary of the Conference and that Mr. Millot of the I.F.R.B. should act as Technical Secretary.

## This was agreed.

The Acting Chairman of the I.F.R.B. said that the Board had studied all the proposals submitted to the Conference and prepared documents for the information and assistance of delegations. In addition to Mr. Millot, who would act as Technical Secretary of the Conference, two members of the I.F.R.B., including Mr. Petit, would always be available to give delegations any advice or assistance they might require. The Maritime Division of I.F.R.B. had been transferred to the Maison des Congrès for the duration of the Conference.

# 8. Admission of International Organizations (Document No. 127)

The <u>Secretary-General a.i.</u>, referring to Document No. 127, said that applications for admission to the Conference had been received from the International Radio Maritime Commission, the International Chamber of Shipping, the International Federation of Radio Officers and the International Shipping Federation.

The Conference approved those four applications.

# 9. Situation of certain countries with respect to the Convention (Document No. 146)

The <u>Secretary-General a.i.</u> referred to Document No. 146 which listed the countries which had not signed the Montreux Convention and had not yet acceded thereto.

The Conference took note of Document No. 146.

# 10. Hours of work

The Chairman announced that the hours of work of the Conference would be:

# 11. Programme of forthcoming meetings

The Chairman announced that the Steering Committee would meet that evening to decide on the programme for the current week.

The meeting rose at 1645 hours.

The Secretary-General a.i

The Chairman:

Mohamed MILI

R.M. BILLINGTON

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 164-E 21 September 1967 Original: English/French

# COMMITTEE 5

## ALTERNATIVE PROPOSALS FOR THE TERMS OF

REFERENCE OF WORKING GROUP 5 D (presented at the end of the meeting of Committee 5 on 21 September 1967)

- 1. In the light of the discussions in Committee 5:
  - to recommend to Committee 5 a procedure whereby conversion to the single sideband in maritime mobile radiotelephone bands should be effected.
- 2. The principle of an allotment plan being regarded as retained:
  - 1) What modifications should be made in Appendix 25 if any?
  - 2) When should these modifications be made?



**GENEVA, 1967** 

Document No. 165-E(Rev.)
25 September 1967
Original: Russian

PLENARY MEETING

UNION OF SOVIET SOCIALIST REPUBLICS

Proposal for the work of the Conference

Agenda item 2.4

## DRAFT RESOLUTION

# ON THE PREPARATORY WORK WITH A VIEW TO MEETING

# OCEANOGRAPHIC FREQUENCY REQUIREMENTS

The World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967,

# considering

- a) that it is important to solve the problems of the creation of a world system for the transmission of oceanographic data;
- b) that the allocation of specific frequencies for oceanographical purposes must be based on a clearly defined world system for the assembly and transmission of oceanographical data;
- c) that such a world system for assembling and transmitting data has not yet been introduced;

# resolves

1. to recommend that the Intergovernmental Oceanographic Commission and the World Meteorological Organization prepare plans for an international system of assembling and transmitting oceanographic data, including a plan for the geographical distribution of oceanographic stations and their system of operation;



# Document No. 165-E(Rev.)

# Page 2

- 2. to recommend that national telecommunication administrations and the I.F.R.B. appoint experts to collaborate with the I.O.C. and W.M.O. in preparing an oceanographic data assembly and transmission system with a view to determining its frequency requirements;
- 3. to recommend that, in determining frequency requirements in accordance with paragraph 2 above, consideration should be given to the possibility of meeting oceanographic needs by using the frequency bands allocated exclusively to the maritime mobile service and other services concerned;
- 4. to recommend that the 1.0.0. and the w.m.o., in consultation with the I.F.R.B., submit a plan for the use of radio frequencies for oceanographic purposes for consideration by the next Ordinary Administrative Radio Conference.

GENEVA, 1967

Document No. 165-E 22 September 1967 Original: Russian

PLENARY MEETING

## RESOLUTION

# ON THE PREPARATORY WORK WITH A VIEW TO MEETING

## OCEANOGRAPHIC FREQUENCY REQUIREMENTS

The World Administrative Radio Conference to deal with matters relating to the maritime mobile service, Geneva, 1967,

# considering

- (a) that it is important to solve the problems raised by the creation of a world system for the transmission of oceanographic data;
- (b) that the allocation of specific frequencies for oceanographical purposes must be based on a clearly defined world system for the assembly and transmission of oceanographical data;
- (c) that such a world system for assembling and transmitting data has not yet been introduced;

#### resolves

- 1. to recommend that the Intergovernmental Oceanographic Commission and the World Meteorological Organization prepare plans for an international system of assembling and transmitting oceanographic data, including a plan for the geographical distribution of oceanographic stations and their system of operation;
- 2. to recommend that national telecommunication administrations and the I.F.R.B. appoint experts to collaborate with the I.O.C. and the W.M.O. in preparing an oceanographic data assembly and transmission system with a view to determining its frequency requirements:



# Document No. 165-E Page 2

- to recommend that, in determining frequency requirements in accordance with paragraph 2 above, consideration should be given to the possibility of meeting oceanographic needs by using the frequency bands allocated exclusively to the maritime mobile service and other services concerned;
- 4. to recommend that the I.O.C. and the W.M.O., in consultation with the I.F.R.B., submit a plan for the use of radio frequencies for oceanographic purposes for consideration by the next Ordinary Administrative Radio Conference.

**GENEVA, 1967** 

Document No. 166-E 22 September 1967 Original: English

COMMITTEE 5

#### UNITED KINGDOM

# Alternative proposals for the terms of reference of Working Group 5D

The United Kingdom delegation requests that for the first proposal in Document No. 164 the following by substituted:

To make a detailed examination of Decuments Nos. 10, 18, 33, 41, 50, 77, 80, 86, 134 and 138 and to recommend to the Committee:

- i) a procedure to facilitate the conversion from DSB to SSB in the HF radiotelephone bands from the date of implementation of the Final Acts of this Conference to the end of the conversion period, at the same time giving full regard to the dates recorded in the MFR in respect of existing assignments, and
- ii) in the light of this procedure, the treatment to be given to
  Appendix 25, either at this Conference or some future Conference.



**GENEVA, 1967** 

Document No. 167-E 22 September 1967 Original: English

# PLENARY MEETING

### KINGDOM OF THE NETHERLANDS

# Proposal for the work of the Conference

## Additional Agenda Item

Ref.

## Article 23

HOL/167(35) 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, 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.

HOL/167(36) ADD 863A

The radiotelephone service of ships for which a radiotelephone installation is not made compulsory by international agreements may be carried out by an operator holding a radiotelephone operator's restricted certificate.



# Document No. 167-E Page 2

# Ref.

HOL/167(36) (cont.)

# Reasons :

It is considered impractical and illogical to associate the two existing categories of radio telephone certificates, i.e. the general and the restricted certificate, with the power of the transmitter being used.

Under the present provisions the holder of a radio-telephone operator's restricted certificate may carry out the radiotelephone service of almost any ship. The criteria whether a general or a restricted radiotelephone operator's certificate is required could be more appropriately determined by the category of the ship concerned. Furthermore, it is considered advantageous to follow the same principles regarding radiotelephone certificates as are provided by Number 865.

6 This will make it possible that the radiotelephone service on board of yachts and fishing craft may be carried out by holders of radiotelephone operator's restricted certificates.

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 168-E 22 September 1967 Original: English

# COMMITTEE 4

#### SUMMARY RECORD

FIRST MEETING OF COMMITTEE 4

Wednesday, 20 September 1967, at 0930 h.

Chairman : Mr. F.G. PERRIN (Canada)

<u>Vice-Chairman</u>: Mr. M. ZAHRADNICEK (Czechoslovak Socialist Republic)

### Subjects discussed:

- 1. Organization of work
- 2. Proposals concerning Section III of Article 28
- Proposals concerning Section VI of Article 28
- 4. Proposals concerning Section V of Article 28

# Document No.

DT/4, DT/2, pages 176 - 179

DT/4, DT/2, pages 195 - 197

DT/4, DT/2, pages 190 - 192



# 1. Organization of the work

The Chairman indicated some changes in the terms of reference of Committee 4 and said that further items might be added if necessary; a reference document on the lines of DT/4 would be published to facilitate consideration of the various proposals. He suggested that ad hoc working groups be set up only if specific items warranted special study, but that otherwise the Committee should work in plenary.

# 2. Proposals concerning Section III of Article 28 (DT/4, DT/2, pages 176 - 179)

The Chairman reminded delegates that Committee 4 would only deal with proposals relating to the use of 500 kc/s.

# No. 974:

The Chairman pointed out that several amendments have been proposed and that all of these are in accordance with C.C.I.R. Recommendations.

The Delegate of the United States of America said that, although he agreed in principle with the French text F/12(71), on page 177 of DT/2, he thought it should be made clear that a station could send A2 or A2H emissions but must be able to receive both. He also proposed the inclusion of the word "carrier" before the frequency.

The <u>Delegate</u> of the <u>United Kingdom</u> said that the <u>United Kingdom</u> proposal had been divided into two clauses precisely for the reasons of clarity mentioned by the <u>Delegate</u> of the <u>United States</u>.

The Delegates of India, Brazil and the Netherlands supported the United Kingdom proposal G58(5) on page 177 of DT/2, with the addition of the words "with carrier frequency".

Proposal G/58(5) as amended was approved.

# No. 975 :

The Chairman suggested that the Canadian proposal CAN/40(12) (Document No. 40, page 6), which was related also to that point, should be considered at a later stage.

The Delegates of the Netherlands and the United Kingdom said that their proposals were identical with F/12(72) on page 178 of DT/2.

Proposal F/12(72) was approved, subject to the deletion of the brackets around "or A2H".

#### No. 976:

The Chairman suggested using the text of F/12(73) on page 178 of DT/2 as a basis for discussion, as it was almost exactly the same as the amendments submitted by the United Kingdom and the Netherlands.

Proposal F/12(73) was approved.

## No. 976 A:

After a discussion on the continued permissive use of Al emissions in the band 490-510 kc/s, the Delegate of the United Kingdom withdrew his proposal.

The <u>Delegate of Canada</u> considered that at some point (either in Article 7 or in connection with Nos. 974 - 976) it should be stated that the upper, not the lower, sideband should be used.

It was <u>agreed</u> that the proposal would be examined when the Committee deals with Article 7.

#### No. 978:

The proposal AUS/54(7) on page 179 of DT/2, to begin the paragraph with the words "In Region 2, any radiotelegraph station ..." (deleting "and 3") was approved.

#### No. 980:

The <u>Delegate of Israel</u> asked that the proposed amendment to No. 980 be considered after discussions in a Working Group of Committee 6.

#### No. 981:

The amended version in proposal USA/24(58), page 179 of DT/2, was approved.

3. Proposals concerning Section VI of Article 28 (DT/4, DT/2, pages 195 - 197)

#### No. 995:

The Chairman said that the various proposed amendments to No. 995 were very similar in content.

Proposal CAN/43(19) on page 195 of DT/2, was approved, the words "on 500 kc/s" being replaced by "with carrier frequency on 500 kc/s" in both the cases where they are used. The reference to No. 677 would remain in square brackets to indicate its possible deletion following discussions on Article 12.

Document No. 168-E Page 4

#### No. 996:

The <u>Delegate of Japan</u> agreed to defer discussion on the proposed footnote 966.1 (DT/2, page 198) pending the outcome of discussions in Committee 5.

#### No. 997:

The Chairman said that no amendments to that Regulation had been received. It was logical, however, for the text to be made consistent with others already approved, so that it would read:

"be able to transmit on 8 364 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 A, A2 and A2H emissions throughout the band ..."

The amendment was approved.

## 4. Proposals concerning Section V of Article 28 (DT/4, DT/2, pages 190 - 192)

#### No. 992:

The Chairman suggested that, as many of the proposals submitted were practically identical, it should be left to the Editorial Committee to produce the final text, in conjunction with Committee 5.

Proposal USA/20(35), on page 192 of DT/2, was approved, with the insertion of the word "carrier" before "frequency" and the retention of the word "preferably".

The Chairman announced that the next session of Committee 4 would discuss agenda items 3, 4 and 5 as contained in C4/1.

The meeting rose at 1245 hours.

The Secretary of Committee 4:

Chairman of Committee 4:

Mr. LURASCHI

Mr. F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 169-E 22 September 1967

Original: French/English

## COMMITTEE 4

SUMMARY RECORD

of the

SECOND MEETING OF COMMITTEE 4
Thursday 21 September 0930 hr.

Chairman: Mr. F.G. PERRIN (Canada)

Vice-Chairman: Mr. M. ZAHRADNICEK (Czechoslovak Socialist Republic)

#### Subjects discussed

- 1. Proposals relating to agenda item 2.3
- 2. Proposals relating to agenda item 2.5
- 3. Preliminary examination of proposals relating to agenda item 2.4

## Documents Nos.

DT/2, pp. 249-257 & DT/4

DT/4 & 8

17, 32, 40, 49, 10<sup>4</sup> 128, 132, 137 & DT/4



1. Proposals relating to agenda item 2.3 (Document No. DT/2 - pages 249-257 and Document No. DT/4)

The  $\frac{\text{ng to age}}{\text{DT/4}}$  said that the proposals submitted in connexion with No. 1156 of the radio regulations did not differ very much from one another basically and that the main problem was one of drafting.

The delegates of the countries which had submitted proposals for amending No. 1156 elucidated the texts appearing on pages 249-257 of Document No. DT/2. It was generally felt that the provisions of the Radio Regulations should be more flexible:

The delegates of the U.S.S.R., Norway and Denmark, which had not submitted specific proposals, agreed that No. 1156 should be made more flexible.

On a proposal by the <u>delegate of Portugal</u>, the <u>Chairman</u> asked the representatives of the <u>Netherlands</u>, <u>France</u>, the <u>United States of America</u> and the <u>United Kingdom</u> to try to reach agreement on the final wording of No. 1156 and the consequential changes in Nos. 1155 and 1157.

It was so decided.

The <u>delegate of the Netherlands</u> said that the small group instructed to draft a revised version of No. 1156 had decided on the following text

"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."

Nos. 1155 and 1157 could then be deleted, and there would be other consequential drafting amendments.

That text was approved, with the understanding that the numbers 1151 and 1153 may be subject to change.

2. Proposals relating to agenda item 2.5 (Documents No. DT/4 and No. 8)

The Chairman pointed out that Reference F/8 (9) should be changed to F/8 (11) in Document No. DT/4(Conference agenda item 2.5). Other proposals on agenda item 2.5 had been presented by Australia, Brazil, France, India, Italy, New Zealand, Poland, the United Kingdom and the United States of America.

The Committee should first discuss the proposals for amending the title of No. 453 of the Radio Regulations.

The <u>delegates</u> of <u>Italy</u> and the <u>United States</u> of <u>America</u> said that they had no specific proposals of their own to make but that they supported the proposal made by France on page 5 of Document No. 8, since the title suggested was more complete than the existing title.

The delegates of the Metherlands, the United Kingdom and Greece agreed. It was decided to adopt the title proposed by France, (F/8 (11)).

3. Preliminary examination of proposals relating to agenda item 2.4 (Documents Nos. 17, 32, 40, 49, 104, 128, 132, 137 and DT/4)

The Chairman said that the meeting would only have time for a general preliminary discussion of agenda item 2.4. A detailed discussion would take place later.

The representative of the Intergovernmental Oceanographic Commission (I.O.C.) said that all the proposals submitted under agenda item 2.4 recognized the need for meeting the telecommunication requirements of oceanographers. The point of view of the I.O.C. was set forth in a brochure, Technical Series No. 3, a few copies of which were available for distribution to delegates. The proposals submitted by I.T.U. Member States differed in form and content but it was to be hoped that the Conference would reach an agreement which would meet the frequency requirements of the oceanographic service. The I.O.C. considered that its requirements should be treated as a matter of urgency and could not, therefore, accept the view expressed by the U.S.S.R. on page 3 of Document No. 49.

The proposals presented by Brazil (Document No. 137), Canada (Document No. 40), Italy (Document No. 32), the United States of America (Document No. 17) and New Zealand (Document No. 132) suggested that oceanographic communication requirements should be methy means of assignments in the HF bands allocated exclusively to the maritime mobile service. It should be emphasized, however, that the problem was not one of creating a new service, and that the data transmission requirements of oceanographers could be met by allocating a minimum bandwidth of 3.5 kc/s (see paragraph 4, page 12 of Document No. 17).

The delegates of the countries which had presented proposals on agenda item 2.4 elucidated the documents presented by their Administrations. Particular attention was paid to the Italian proposal. It was generally felt that frequencies should be allocated for the transmission of oceanographic data. Some delegates thought that the frequency bands allocated to the maritime mobile service should be used for this purpose; others thought that the frequency bands of the aeronautical mobile service would be more suitable.

The <u>delegate</u> of the U.S.S.R. said that the allocation of frequency bands to the oceanographic service would have to be preceded by a clear definition of the international legal status of the service, a solution of the technical and operational problems involved, and the establishment of a geographical allocation table for oceanographic stations. A resolution to that effect should be drawn up and adopted by the Conference.

The <u>delegate of France</u> said that the problem of oceanographic data transmission should be dealt with along national lines because national requirements in that field were very different.

The <u>delegate</u> of the <u>United Kingdom</u> said that although his country had not submitted any specific proposal, he shared the view that the Conference should provide facilities for the transmission of oceanographic data, which was of vital importance to science as well as to the safety of shipping. He supported the Italian proposal contained in Document No. 32.

The delegate of the Netherlands agreed.

The <u>delegate of Poland</u> said that, before frequencies were allotted to the oceanographic data transmission service, it was essential to have more information on the legal aspects and on such questions as the international organization which would operate the system, how it would be financed, what the expenses would be and in what form the data would be published. He therefore supported the U.S.S.R. proposal (Document No. 49) that a specific plan should be submitted to a later World Administrative Radio Conference.

The <u>delegates of Hungary</u>, <u>Czechoslovakia</u> and <u>Bulgaria</u> endorsed that view.

The <u>delegate of Mexico</u> considered that, from the legal point of view, the agenda item as set out in Document No. 1 (Rev.) clearly empowered the Conference to allot frequencies to the oceanographic service. From the practical standpoint, too, the Conference should reach a decision at least on bands for ship data transmission, perhaps leaving the question of bands for fixed services until a later Conference. He therefore supported the relevant parts of the Italian and French proposals (Document Nos. 32 and 128).

The <u>delegate</u> of <u>South Africa</u> said that, since the service was mainly intended for objects at sea, not in the air or on land, it seemed logical to use for it frequencies in the maritime bands. Moreover, proposals to use fixed service bands were not viable because those bands were as yet unplanned, while maritime bands were already planned to some extent. The suggestion to apply the procedure set out in Article 9 would involve unnecessary work for the I.F.R.B., which would be obviated if a planned channel was used.

The U.S.S.R. solution was perhaps the ideal one, but was not practical; the I.O.C. could no doubt supply interested participants with the necessary information for reaching a decision on setting aside a channel assigned to one service for use by another. A precedent for such a decision in the I.T.U. had been set by the African Regional VHF Conference, which had assigned a channel exclusively for radioastronomy.

The delegate of Portugal considered that, although the Conference was not competent to try to define the new service in the Radio Regulations, it was empowered to take a decision on the bandwidth allocation for oceanographic data transmission, in accordance with the Italian proposal. On the other hand, its terms of reference did not cover the Scandinavian proposal, and he did not consider that the provisions of Article 9 were applicable. Finally, he saw no need to prepare a plan before allotting frequencies.

The representative of the Intergovernmental Maritime Consultative Organization said that the I.M.C.O. Assembly, on the recommendation of its Maritime Safety Committee, had reluctantly concluded that it could not endorse the interim or permanent use of the maritime frequency bands for oceanographic data transmission, because of possible interference with distress signals. Moreover, hydrological and meteorological oceanographic data had no value for merchant ships until they were processed on shore.

The <u>delegate of Cuba</u> agreed that the Conference should consider allocating frequencies to the oceanographic service, but did not think it was competent to reach a final decision on the matter.

The <u>delegate of Finland</u> supported the Scandinavian proposal (Document No. 104).

The <u>delegates of Argentina and Malaysia</u> endorsed the Italian proposal (Document No. 32).

The delegate of Denmark said that, since the 1966 Aeronautical Conference had set aside some small HF bands, those might well be used for the oceanographic service. The use of HF bands for that service was warranted for the time being, although the transmission might be effected by satellite at a later stage. It would be noted that the Scandanavian countries proposed using the non-allotted HF bands of the aeronautical mobile (R) service pending the decision of an appropriate Radio Conference; such a conference need not be a general one for all services, which might be difficult to convene in the foreseeable future.

The representative of the International Radio Maritime Commission pointed out, in connexion with the suggestion that 15 B frequencies should be used for the new service, that the single sideband was already being used by several countries.

The delegate of Pakistan, referring to the loss of life and hazard to shipping represented by biennial cyclones over East Pakistan, said that the problem of timely oceanographic data transmission was primarily a humanitarian one and that its solution must not be hampered by legalistic considerations. His delegation was in favour of the promulgation of an international legal code for the data transmission system to be prepared by the I.O.C. and W.M.O.; frequencies could be allotted in due course.

The <u>delegate</u> of France supported the various arguments advanced against the allotment of frequencies from the maritime mobile service band to the oceanographic service.

The <u>delegate</u> of <u>Norway</u> said that his <u>delegation</u> could not support the proposal to use the 3.5 kc/s bandwidth in the very limited space available in the maritime mobile band. The Scandinavian proposal was a compromise solution: 14 kc/s were left free in the 10, 11 and 17 Mc/s bands of the aeronautical mobile (R) service, but additional spectrum space might be required in the lower bands of 4, 6 and possibly 8 Mc/s, and the French Delegation's proposals in that regard seemed reasonable.

The <u>delegate of Italy</u> proposed that the Committee should forthwith allocate frequencies to the oceanographic data transmission service, on the basis of his delegation's proposal, and should approve a resolution stating that, in principle, the use of those frequencies should be coordinated by the I.O.C. and W.M.O. and that certain guarantees should be given to Administrations which asked for them.

The Acting Chairman of the I.F.R.B. pointed out that the administrations represented at the 1966 Aeronautical Conference had not renounced their right to use non-allotted parts of bands, which could therefore be used on a national or regional basis. From the technical point of view, the I.F.R.B. thought it desirable, with a view to maximum economy of spectrum space, that the frequencies to be used for oceanographic data transmission stations, which were of low power, should be located in bands where there was a minimum possibility of harmful interference.

The meeting rose at 1255 hours,

The Secretary of Committee 4: LURASCHI

The Chairman of Committee 4: F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCÉ

**GENEVA, 1967** 

Document No. 170-E 22 September 1967

Original: French, English

#### COMMITTEE 5

#### TERMS OF REFERENCE OF WORKING GROUP 5D

The principle of an allotment plan being regarded as retained, Working Group 5D should make a detailed examination of all relevant documents and recommend to the Committee:

- i) a procedure to facilitate the conversion from DSB to SSB in the HF radiotelephone bands from the date of implementation of the Final Acts of this Conference to the end of the conversion period, at the same time giving regard to the dates recorded in the M.F.R. in respect of existing assignments, and
- ii) the treatment to be given to Appendix 25, either at this Conference or some future Conference.



# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 171-E 25 September 1967 Original: English

COMMITTEE 5

#### SUMMARY RECORD

of the

SECOND MEETING OF COMMITTEE 5

Wednesday, 20 September 1967, at 1500 hrs.

Chairman: Mr. P. MORTENSEN (Norway)

Vice-Chairman : Mr. A. de SOUZA COELHO (Brazil)

#### Subjects discussed:

#### Documents Nos.

- 1. The use of single sideband technique in the Maritime Mobile Radiotelephone Service in the bands available to that service between 1605 and 4000 kc/s and in the exclusive HF Maritime Mobile Radiotelephone bands.
- 8, 16, 31, 39, 48, 70, 76, 84, 136, 154

2. General discussion on Appendix 25

10, 18, 33, 41, 50, 77, 80, 86, 134, 138, 155.



1. The use of single sideband technique in the Maritime Mobile Radiotelephone Service in the bands available to that service between 1605 and 4000 kc/s and in the exclusive HF Maritime Mobile Radiotelephone bands

(Documents Nos. 8, 16, 31, 39, 48, 70, 76, 84, 136 and 154)

The delegates of France, Italy, the United Kingdom, Poland, Belgium, Argentina and Spain said that the congested state of the spectrum necessitated the introduction of SSB technique. The changeover from DSB to SSB would, however, confront shipowners and radio manufacturers with certain difficulties. A transition period would, therefore, be necessary. It was proposed that conversion to SSB should have been completed by 1 January 1980 in MF bands and by 1 January 1977 in HF bands.

The <u>delegate of the United States of America</u> drew attention to the transition periods proposed in Document No. 16. A short transition period would enable administrations to start planning immediately for the use of the other half of channels. When the transition was completed, expenditure on equipment could be reduced. The United States planned, if the Conference agreed, to begin the transition to SSB in 1970.

The <u>delegate of Canada</u> said that if technical characteristics were kept exactly the same for use of frequencies below and above 4 Mc/s, a uniformity would be achieved which, for reasons of equipment and operation, would benefit the Maritime Mobile Service. In proposing that the transition period end on 1 January 1974 the Canadian Administration had been influenced by the need to effect the transition to SSB as soon as possible and to allow a fair amortization period for existing equipment.

The <u>delegate of the Union of Soviet Socialist Republics</u> drew attention to the dates proposed in Document No. 48. No decision on final dates for conversion to SSB should be taken until all countries had had an opportunity of expressing their opinions on the matter.

The <u>delegate of the Netherlands</u> said that it was important to fix a date after which the use of DSB equipment would be prohibited. It was also important that the SSB technique should be introduced simultaneously in MF and HF bands even if that meant delaying its introduction in HF bands.

The <u>delegate of Japan</u> made reference to the wide use of SSB in their maritime services and drew attention to the resolution on page 16 of Document No. 84. The Japanese Administration supported the introduction of SSB and proposed that coast and ship stations should cease DSB radiotelephone operation on 31 December 1969 and 31 December 1973 respectively.

The <u>delegate of Cuba</u> said that although the advantages of the SSB system were apparent, the question of the length of the conversion period should be discussed carefully. Some of the less developed countries should express their views on the matter.

The <u>delegate of Brazil</u> said that the changeover to SSB, which was desirable, would entail changes in Brazilian industries producing transmitters and receivers; an amortization period for existing equipment would also be necessary. In addition, training programmes for qualified personnel would be affected. In consequence, Brazil might require a longer conversion period than other countries. The Brazilian Administration's proposals were contained in Document No. 136.

The <u>delegate of Turkey</u> said that the conversion period should be the one proposed by Brazil.

The representative of the I.F.R.B., referring to Document No. 154, said that the statistical data received from administrations was incomplete. Although those data indicated a trend towards SSB they did not permit an accurate assessment of the extent of the trend.

The representative of Ireland said that the Irish Administration would be able to accept the introduction of SSB at coast stations in 1977.

The <u>delegate of Mexico</u> said that although SSB should be introduced as soon as possible no decision concerning the end of the conversion period should be taken until all relevant factors, including those mentioned by the Brazilian delegate, had been carefully discussed.

The <u>delegate of India</u> said that the use of SSB should not be compulsory before 1973 in either coast or ship stations; the use of DSB should not be prohibited before 1975 in coast stations and before 1980 in ship stations.

The <u>delegates of Denmark</u> and the <u>Federal Republic of Germany</u> said that 1980 should be the earliest conversion date for small ships with MF equipment.

The <u>delegates of Algeria</u> and <u>Pakistan</u> said that the difficulties that developing countries would encounter as the result of the introduction of SSB should be borne in mind. A suitable date for the end of the conversion period would be 1980 in HF bands.

The <u>delegate of South Africa</u> supported the United States proposal concerning the end of the conversion period for HF bands. A final date of 1980 for MF bands would benefit small ships.

The <u>delegate of Portugal</u> said that the earliest dates acceptable to the Portuguese Administration would be 1980 for the MF bands and 1976 for the HF bands.

The <u>delegate of Greece</u> said that steps should be taken to ensure that no country was placed at a disadvantage by transferring from DSB to SSB. A final date of 1980, or 1982, for MF bands and 1977, at the earliest, for HF bands would be acceptable to the Greek Administration.

The <u>delegate of Norway</u> said that the Norwegian Administration proposed 1976 as the conversion date for HF bands and 1982 for MF bands; if, however, the majority of countries decided on 1977 for HF and 1980 for MF, those dates could be accepted.

The <u>delegates of Bulgaria</u>, <u>Malaysia</u> and <u>Indonesia</u> said that 1980 should be fixed as the date by which full conversion to SSB should have been effected.

The <u>delegate of Sweden</u> said that the Swedish Administration could accept 1975 as the conversion date for HF bands; for MF bands, 1980 would probably be a suitable conversion date.

The representative of the International Chamber of Shipping said that at a recent meeting the Chamber came to the conclusion that the earliest conversion dates for HF and MF bands should be 1977 and 1980 respectively; later dates might be more appropriate.

The <u>Chairman</u> concluded that there was general agreement on the introduction of SSB and suggested that the question of the transition period for MF and HF bands be further discussed by Working Groups 5A and 5B respectively.

It was so decided.

2. Appendix 25 (Documents Nos. 10, 18, 33, 41, 50, 77, 80, 86, 124, 134, 138 and 155)

The <u>delegate of France</u> said that the Conference should do its utmost to prepare a revised allotment plan which would take past allotments and new requirements into account.

The delegate of the United States of America drew attention to Document Nos.  $\overline{18}$  and  $\overline{124}$ , which contained the United States Administration's proposals and the reasons for those proposals. Under the proposals, although Appendix 25 would be abrogated, its benefits would remain.

The <u>delegate of Italy</u> said that. for the reasons stated on page 3 of Document No. 33, Appendix 25 should be abrogated. A resolution would have to be prepared containing instructions for administrations and the I.F.R.B. for the transition period.

The <u>delegate of Canada</u> said that the Canadian Administration considered that Appendix 25 should be revised on the basis of SSB operation. Such a plan would increase the sharing possibilities of the available frequencies.

The <u>delegate of the Union of Soviet Socialist Republics</u> said that Appendix 25 should be maintained but adjusted to take into account the wishes of administrations and the projected transfer to SSB operation. Once that transfer had been completed, Appendix 25 should be revised, to distribute SSB channels among the various countries.

The <u>delegate of the United Kingdom</u> said that nothing said in the discussions had caused the United Kingdom Administration to revise the opinion expressed on page 2 of Document No. 77.

The <u>delegate of the Netherlands</u> said that the Netherlands Administration's opinions on the matter were stated on page 3 of Document No. 80. Although Appendix 25 should be abrogated, existing rights laid down in the Master Register in accordance with the allotment plan in Appendix 25 should be retained.

The <u>delegate of Japan</u> said that the Japanese Administration shared the opinions of the United States and Italian Administrations. The matter should be discussed in greater detail in a working group.

The <u>delegate of New Zealand</u> said that Document No. 134 was self-explanatory. The main reason for abrogating Appendix 25 was that there would not be time during the Conference to do the research and analysis work necessary for a revised plan.

The <u>delegate of Brazil</u> said that, although the Brazilian Administration considered that Appendix 25 should be abrogated, it nevertheless wished to ensure that no country lost any of its rights.

#### Document No. 171-E Page 6

The Chairman invited Mr. Petit to comment on Document No. 155 of the I.F.R.B.

Mr. Petit made some comments on the various sections of Document No. 155 and said that the purpose of this document was to report to the Conference on the manner the Board had applied the relevant provisions of the Radio Regulations to the notices of frequency assignments notified by the administrations in the bands covered by the Plan contained in Appendix 25.

The <u>Chairman</u> said that the Committee now had heard presentations from all the delegations having submitted proposals to the Conference. He suggested that the meeting should continue on the next day with a general discussion on the subject.

The meeting rose at 1750 hrs.

Secretary of Committee 5:

J. BALFROID

Chairman of Committee 5:

P. MORTENSEN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 172-E 25 September 1967 Original: English

# COMMITTEE 4

SUMMARY RECORD

of the .

THIRD MEETING OF COMMITTEE 4

Chairman: Mr. F.G. PERRIN, (Canada)

<u>Vice-Chairman</u>: Mr. M. ZAHRADNÍČEK (Czechoslovak Socialist Republic)

#### Subjects discussed:

Documents Nos.

1. Article 5, Nos. 158, 167 and 200

DT/2, 145, 143

2. Article 7, Section IV

DT/2



## 1. 'Article 5, Nos. 158, 167 and 200 (Documents Nos. DT/2, page 9; 145 and 143)

No.: 158 - Proposals CAN/46(24) and USA/25(59) (Document No. DT/2, page 9)

The <u>delegate of Canada</u> explained that the addition of class A7J to the modes of emission was particularly important in Canada because the frequent blackout in HF communications caused by the magnetic North Pole made efficient LF communication necessary. The proposed use of A7J emissions would make a more efficient use of the spectrum.

The <u>delegate of France</u> considered that some restriction should be placed on its use (on the lines of footnote 271 of the Radio Regulations) as the bands in question were shared with other services.

The <u>delegate of the U.S.S.R.</u>, supported by the <u>Delegate of Poland</u>, also thought that the other services should be taken into account and suggested limiting the radiation to 200 c/s, which would produce normal working conditions. That limitation should apply to every kind of emission in the band concerned and to all Regions.

The delegate of the United States of America thought that such a restriction was unnecessary, as the provisions of Article 9 would protect assignments already notified. Some assignments in excess of 200 c/s were already entered in the International Frequency Register, and placing limitations of bandwidth would hamper any new techniques which might be developed in the future.

The <u>delegate of India</u> suggested that the modification be made applicable to Region 2 only.

The <u>delegates of Italy</u> and <u>Australia</u>, however, asked for Regions 1 and <u>3</u> respectively to be included.

The <u>Chairman</u> confirmed that the restriction in question would apply only to the Maritime Mobile Service and not to the fixed services using the same frequency bands.

The <u>delegate of Mexico</u> said that in that case he saw no need for a restrictive note. He considered that there could be no objection to the proposal if the A7J emissions did not use a wider bandwidth than that used for the existing modes of emission.

The <u>delegate of the United States of America</u> said that the coordination implied by the Delegate of France would be a cumbersome process as VLF propagation guaranteed coverage of a very wide area.

The <u>delegates of New Zealand</u>, <u>Italy</u>, <u>Greece</u>, the <u>Federal</u> <u>Republic of Germany</u>, <u>Australia</u>, <u>Japan and Denmark</u> were in favour of the proposal as it had been submitted originally.

The <u>delegate of France</u>, at the request of the <u>Delegate of the U.S.S.R.</u>, specified that the addition of a clause such as "... subject to special agreements between interested and affected Administrations" was intended to avoid subsequent problems, as use of a higher bandwidth by the Maritime Mobile Services would have repercussions on the fixed services.

The <u>delegate of Canada</u> noted the attempts to prevent the possibility of harmful interference by restrictions of region, bandwidth or by prior coordination, but considered, like the Delegate of the United States, that the provisions for frequency registration contained in Article 9 were quite adequate.

The <u>delegate of the U.S.S.R.</u>, supported by the <u>delegates of Poland</u>, <u>Czechoslovakia</u>, <u>Hungary and Bulgaria</u>, agreed that Article 9 provided protection for existing assignments to some extent but thought it preferable to restrict the bandwidth in the case under consideration.

The <u>delegate</u> of the <u>United States</u> of <u>America</u> explained that the bandwidth envisaged for A7J emissions was similar to that used for Fl emissions; as far as he knew, any cases of interference encountered with Fl had been dealt with by the normal procedures given in Article 9.

The <u>representative of the I.F.R.B.</u> said that in practice the band being used for Fl emissions was fairly wide, and a reasonable use of A7J should not make an appreciable difference.

The <u>delegate of Portugal</u> agreed with the legal point raised by the delegate of France but thought that use of A7J emissions would be acceptable if they did not occupy a wider bandwidth than that already in use with F1 emissions.

The delegate of India proposed the retention of the original text contained in No. 158, with the addition of the following sentence:

"... Exceptionally, the use of A7J is permissible subject to the bandwidth not exceeding that normally used for Al or Fl emissions in the bands concerned."

The proposal was approved, as amended.

No. 167 - Proposals USA/25(60) and CAN/46(25)

The <u>delegate of Canada</u> withdrew his proposal CAN/46(25) in favour of proposal USA/25(60).

#### Document No. 172-E Page 4

The delegate of the U.S.S.R. considered it logical to make the same amendment as for No. 158, but said he would not insist, in view of the assurance given by the representative of the I.F.R.B. that A7J emissions would not aggravate the situation.

Proposal USA/25(60) was approved.

No. 200 - Proposals B/143(124) and CAN/145(40)

The Chairman pointed out that proposal CAN/145(40) would make the band in question available for radiotelephony.

The <u>delegate</u> of the <u>United States</u> of <u>America</u> suggested that the question not be settled until after the Japanese proposal concerning the use of 2 089.5 kc/s had been discussed in connection with Article 32.

The <u>delegate of Canada</u> said that the modification he had proposed only applied to Region 2, but if it were to be extended to Region 3 he was willing to exclude that frequency, as eight channels would be made available for SSB.

The delegate of Japan expressed his appreciation of the gesture.

The Chairman observed that the Committee seemed to approve the Canadian proposal in principle and that the details of frequencies listed in Document No. 145 would be examined in Committee 5 which was concerned with radiotelephony.

Proposal B/143(124) to delete No. 200 was therefore approved, and it was agreed to refer proposal CAN/145(40), which is supported by Brazil, to Committee 5.

# 2. Article 7, Section IV (Document No. DT/2, page 45)

No. 437 A - Proposal CAN/40(12) (Document No. DT/2, page 45)

The <u>delegate of Canada</u> said that the main purpose of the proposal was to reduce the bandwidth required for A2 emissions. He pointed out that the text was not categorical as it included the words "if possible".

The <u>delegate of the United States of America</u> did not see the need to include such a clause, as the use of A2 and/or A2H emissions would be recommended in the Radio Regulations in any case, and the date suggested might prove impossible.

Those views were endorsed by the <u>delegates of the United Kingdom</u>, <u>Norway</u>, <u>Italy</u>, <u>Denmark</u>, <u>Brazil</u>, <u>Netherlands</u>, <u>Singapore</u>, <u>Federal Republic of Germany and Ireland</u>.

The delegate of Canada withdrew the proposal.

No. 437 B - Proposal CAN/40(12) (Document No. DT/2, page 45)

The <u>delegates of the United States of America</u> and <u>France agreed</u> with the principle of the proposal.

In view of the consequential changes to parts of Article 28 already discussed and the possibility of inserting the addition of Article 32, it was agreed that the Delegates of Canada, the United States, France and the Chairman should re-word the text and attach it to the Committee's draft report.

Mo. 438 - Proposal G/78(89) (Document No. DT/2, page 45)

The <u>delegates of France</u>, <u>Italy</u> and <u>Brazil</u> thought that No. 438 should be retained for reference purposes.

No. 438 therefore remained unchanged.

No. 439 - Proposal G/78(89) (Document No. DT/2, page 45)

No. 439 also remained unchanged.

No. 442

It was <u>agreed</u> that proposals for modification of this regulation relating to selective calling would be dealt with under agenda item 7.3.

The meeting rose at 1225 hours

Secretary of Committee 4:

Chairman of Committee 4 :

M. LURASCHI

F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 173-E 25 September 1967 Original: English

#### PLENARY MEETING

#### JAPAN

#### Proposals for the work of the Conference

#### Agenda Item 2.4:

# The desirability of accommodating requirements

#### for oceanographic communications

Article 7

# Ref.

J/173(93) MOD 451 (e)

Ship stations, wideband telegraphy, facsimile, and special transmission systems

4 140 - 4-160 4 156.5 kc/s

6 211 - 6-240 6 236.5 kc/s

8 280 - 8-320 8 316.5 kc/s

 $12\ 421 - 12 - 471$   $12\ 467.5$  kc/s

16 562 - 16 622 16 618.5 kc/s

22 100 - <del>22 148</del> 22 144.5 kc/s

# J/173(94) ADD 451A(e)(bis) Oceanographic communications

4 156.5 - 4 160 kc/s

6 236.5 - 6 240 kc/s

8 316.5 - 8 320 kc/s

12 467.5 - 12 471 kc/s

16 618.5 - 16 622 kc/s

22 144.5 - 22 148 kc/s



Document No. 173-E Page 2

Ref.

J/173(94) (cont.)

Reasons:

To accommodate the requirements for oceanographic communications in the exclusive HF Maritime Mobile Bands.

#### J/173(95) Background:

We recognize the necessity of providing frequencies in HF bands for oceanographic communications. However, we are unable to agree with the views to provide them in frequency bands for SSB radiotelephony mentioned in Section B of Appendix 15 of the Radio Regulations, because it is considered that the above frequency bands have already been in progressive use on the SSB system world-widely, including Japan.

In view of the foregoing, we propose to provide the frequencies for oceanographic communications in the frequency bands for wideband telegraphy, facsimile, and special transmission systems in Section A of Appendix 15 to the Radio Regulations.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 174-E 25 September 1967 Original: English

#### COMMITTEE 5

SUMMARY RECORD

of the

SECOND MEETING OF COMMITTEE 5

Thursday, 21 September 1967, at 15 hours

(continuation of the meeting called on Wednesday, 20 September 1967)

Chairman: Mr. P. MORTENSEN (Norway)

Vice-Chairman : Mr. A. DE SOUSA COELHO (Brazil)



Subject discussed

Document No.

Continuation of the discussion on Appendix 25

157

#### Organization of the work of the Conference (Document No. 157).

The <u>Chairman</u> invited the Committee to continue its discussion on the question of Appendix 25 and reminded delegates that the alternative courses of action that had emerged from the discussions were retention of Appendix 25 in revised form or abrogation of Appendix 25 and its replacement by an appropriate procedure for the recording of the frequency assignments.

The <u>delegate of Belgium</u> said that all administrations using radiotelephone communications found difficulties in making optimum use of the spectrum and there now existed means of almost doubling the possibilities for these communications in the change-over from double sideband to single sideband systems. The best results would be obtained from the adoption of plans taking in account new advances in technology. However, he feared that the remaining six weeks would not allow the Conference sufficient time to take action on Appendix 25. If Appendix 25 were to be abrogated he insisted that amendments be made to Article 9, thereby protecting existing facilities and assisting every administration to make the best use of the new techniques.

The <u>delegate of Portugal</u> favoured revision of Appendix 25, but considered that from the practical point of view, the existing Appendix 25 must be retained pending the introduction of a new plan. The plan should provide for the interim period until the full introduction of single sideband systems in about ten years' time. A final plan foreseeing requirements in ten years' time should be drawn up. The Administrative Council should take the matter into consideration and examine whether it would be appropriate to convene a special conference to draw up a new plan taking into account the use of single sideband systems.

The <u>delegate of the Federal Republic of Germany</u> agreed that there was insufficient time for the Conference to draw up that new plan and endorsed the views of the Netherlands Administration (Document No. 80).

The <u>delegate of Poland</u> stressed the advantages of the existing system. Experience had proved that the Plan for the Maritime Mobile Service gave a fair and reasonable distribution of frequencies. He favoured a meeting of technical experts to prepare the basis for a plan for submission to a full Administrative Conference.

The <u>delegate of Sweden</u> had not been convinced by the arguments in favour of abrogating Appendix 25 and particularly those based on the facts that time is too short, that insufficient technical data are available and that it is impracticable to plan in 1967 for ten years hence. He stressed the need to avoid any action that might lead to a race in the notification of frequencies and consequently supported a revision of the plan at the appropriate time.

The <u>delegate of the U.S.S.R.</u> favoured retention of Appendix 25 and a new paragraph in Article 9, possibly accompanied by a new Resolution or Recommendation, to allow for new notifications of frequencies to be registered in the <u>upper part</u> of the single sideband without encroaching on the lower part. Even with more time, there was no purpose in the current Conference preparing a new plan, since that involved a change to single sideband operation which would not be fully introduced until 1980. A Special Conference should be convened in about ten years! time to draw up a new Appendix 25 which would provide for exclusive operations on single sideband.

The <u>delegate of India</u> thought that a Working Group should be set up to consider action on Appendix 25.

The <u>delegate of France</u> said that abrogating Appendix 25 would in the first instance give benefit to those administrations who had notified assignments outside the allotments they had in Appendix 25.

The <u>delegate of Norway</u> said that his recommendations regarding Appendix 25 would depend on what alternatives to the existing appendix were suggested. In Norway, HF traffic continued to increase and coast stations handled a large number of calls. The sharing of channels with Denmark and Sweden was already implemented on a time-sharing basis, whereas sharing with a number of other European countries with much shipping was not covered with similar arrangements. Many ships already had SSB equipment. An extension of the bands available for radiotelephony was favoured and new channels should be restricted to SSB.

The <u>Chairman</u> said that the alternatives emerging from the discussion were either to retain Appendix 25, possibly with some revisions, and later to hold a special conference to draw up a new plan or to abrogate Appendix 25 and amend Article 9 in a suitable way.

The <u>delegate of France</u> suggested as a third possibility the drawing up of a new Appendix by the current Conference.

The <u>delegate of Belgium</u> said that his delegation could only accept abrogation of Appendix 25 if serious guarantees were given in a revised Article 9 concerning the right acquired under the present regulations.

The <u>delegate of Canada</u> suggested that it might be practicable to make plans now for the revision of Appendix 25, first of all providing for DSB operation and, at a given date, making provision for SSB systems. He considered it urgent to decide whether the task of adapting Appendix 25 to present-day requirements could be accepted by the current Conference. Experience at the Aeronautical Conference (I.C.A.O.) in 1963 indicated that that would be so.

The <u>delegate of the United States</u> agreed that the proposal to abrogate Appendix 25 might seem rather drastic. However, although it was legally correct to use the term "abrogation" in the case of Appendix 25, certain facilities now provided for in that Appendix would, according to the United States proposals, be retained, Although lack of time would rule out revision of Appendix 25 by the current Conference, nothing should be done to hinder Administrations from taking full advantage of SSB systems.

The <u>delegate of Korea</u> said that his delegation was in favour of abrogating Appendix 25 and replacing it by an appropriate special procedure of notification.

The Chairman, summarizing the views expressed by the <u>delegates</u> of Cuba, <u>Greece</u>, <u>Algeria</u>, <u>Singapore</u>, <u>Spain</u>, <u>Malaysia</u>, <u>Mexico</u> and <u>India</u>, all of whom were in favour of the revision of Appendix 25, said that it was important to provide for the period of transition during the transfer from DSB to SSB operation. That period might be as long as ten years. He proposed that Working Group 5D be requested to study all the proposals concerning the problem and take the general discussion in Committee 5 into account.

The <u>delegate of the United Kingdom</u> felt that this directive was too unprecise and proposed the following terms of reference: "to recommend to Committee 5 a procedure whereby conversion to the single sideband in maritime mobile radiotelephone bands should be effected."

The <u>delegate of France</u> proposed the following terms of reference: "The principle of an allotment plan being regarded as retained:

- 1) What modifications should be made to Appendix 25, if any?
- 2) When should these modifications be made?"

After further discussion on the precise meaning of the two proposals, the <u>Chairman</u> suggested that they should be published in a document for consideration at the next meeting of the Committee.

It was so decided.

The meeting rose at 1805 hours.

Secretary of Committee 5:

Chairman of Committee 5:

J. BALFROID

P. MORTENSEN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 175-E 26 September 1967 Original: English

### COMMITTEE 4

#### SUMMARY RECORD

of the

FOURTH MEETING OF COMMITTEE 4

Monday, 25 September 1967, at 0930 hours

Chairman: Mr. F.G. PERRIN (Canada)

Vice-Chairman: Mr. M. ZAHRADNIČEK (Czechoslovak Socialist Republic)

#### Subjects discussed:

1. Article 7, Section IV

2. Appendix 15 A

#### Document Nos.

DT/2, 145

DT/2, 123, 130, 133, 138



## 1. Article 7, Section IV (Document Nos. DT/2, 145) (continued)

The <u>Chairman</u> proposed that, in considering the remainder of the Section, the Committee should deal with proposals for changes other than frequency changes, so as not to duplicate its work on Appendix 15 A.

It was so agreed.

#### No. 455

The <u>delegates of Australia</u> and <u>Canada</u> said they could agree to the suppression of the Regulation, in accordance with the United Kingdom proposal (G/78(89)).

The delegate of the United States of America thought that the Japanese proposal (J/90(86)), which entailed retaining the Regulation for calling and for safety, should not be acted on until Committee 6 had taken the necessary decision.

After a discussion in which the <u>delegates of Japan</u>, <u>Brazil</u>, <u>Australia</u>, the <u>United States of America</u>; <u>Venezuela</u>, <u>Canada</u>, <u>Korea</u>, <u>France</u> and <u>New Zealand</u> took part, the <u>Chairman</u> suggested that No. 455 should be deleted, on the understanding that the point raised in the Japanese proposal was discussed later on the basis of the relevant decision of Committee 6.

It was so decided.

## 2. Appendix 15 A (Document Nos. DT/2, 123, 130, 133, 138)

The Chairman invited the Committee to hold a general discussion on the principle of giving up radiotelegraphy frequencies for the use of the radiotelephony maritime service and then to discuss the relevant proposals in detail.

The <u>delegate</u> of the <u>United States</u> of <u>America</u> explained that Document No. 123 set out the results of the study on spacing referred to on page 3 of his Administration's proposal (USA/18(26)).

The <u>delegate of Israel</u> said that Document No. 130 contained his Administration's proposal to modify No. 454, which would also affect Appendix 15 A.

The delegate of the United Kingdom explained that his Administration's proposal (G/77(37)) was designed to make possible joint frequency use in coastal and ship telephony by a reduction in the 8, 12, 16 and 22 Mc/s bands for low traffic ships. That would present no difficulty, as the Group B band was lightly loaded compared to that of Group A, and ships

could be accommodated in the high traffic bands. His Administration could endorse the Netherlands proposal to shift wideband channels, rather than alter bandwidths.

The <u>delegate of Brazil</u> said that the Brazilian Administration's proposal (Document No. 138) was intended to make Appendix 15 applicable exclusively to radiotelegraphy, so that all discussions of radiotelephony should be held in connection with Appendix 17.

The delegate of the Netherlands explained that his Administration's proposal (HOL/72(12)) was based on the United Kingdom and United States proposals (G/77(37), USA/18(26)), with a few minor changes. The main difference lay in the Netherlands proposal to introduce a new Section B with frequencies for a limited number of teleprinters.

The <u>delegate of France</u> said that his Administration's proposal (F/10(60)) was very similar to that of the United Kingdom Administration.

The <u>delegate of Italy</u> said that the Italian proposal (I/32(13)) was analogous to the French proposal.

The <u>delegate</u> of the <u>United States</u> of <u>America</u> stressed that his Administration's proposal was designed to achieve the maximum flexibility since the determining factor would be the use to which space made available for telephony would ultimately be put.

The <u>delegate of Japan</u> endorsed that view and supported the United States proposal.

The delegates of Norway, the Federal Republic of Germany, Canada, Poland, and Argentina said that, although they had submitted no proposals, they supported the principle of reducing radiotelegraphy frequencies for the use of radiotelephony services.

The Committee approved that principle.

The <u>Chairman</u> invited the Committee to consider Appendix 15 A column by column and observed that the only proposal involving the amendment of the column for wideband telegraphy was that of the Netherlands (HOL/72(12)).

The delegates of the United States of America and Italy said they had no objection to shifting certain channels, so long as the number and spacing of frequencies remained the same.

The <u>delegates of France</u>, <u>Norway</u> and <u>Japan</u> said they were in favour of retaining the column in its existing form.

The delegate of the U.S.S.R. considered that no change should be made to the wideband column, with the exception of the 6 Mc/s band, on which he intended to make a proposal later.

The Acting Chairman of the I.F.R.B. pointed out that the purpose of the Netherlands proposal was to establish a new Section B for a 4 kc/s band taken from the high traffic band. The bandwidth would not be reduced, but the channel would merely be shifted; it might, however, be best to discuss the proposal in connection with the high traffic band.

The delegate of the Netherlands endorsed that interpretation.

He thought that acceptance of the Chairman's suggestion of considering Appendix 15 A column by column might lead to action that would prove to be too rigid, and suggested the establishment of a Working Group composed of Members of Committees 4 and 5 to study that matter as a whole and present specific proposals to Committees 4 and 5 at a joint meeting. Furthermore, since the question of ocean data stations had not yet received detailed consideration, the Working Group he had proposed could also study that matter and endeavour to find a solution.

The delegate of the United States agreed that a Working Group might be needed to prepare a plan, but thought that such action at that juncture seemed somewhat premature. General discussion in Committee 4 was the first requirement.

The delegate of France also favoured full discussion in Committee 4 which had a mandate to deal with radiotelegraphy. Nevertheless, he wished to know what the mandate of the Working Group would be.

The <u>delegate of Italy</u> suggested the setting up of a Working Group after a general discussion in Committee 4 which could lead to the drafting of terms of reference for the Working Group. There should be no restrictions regarding participation in the Working Group.

The delegates of Japan and Greece agreed with the Italian proposal.

The <u>delegate of Argentina</u>, supported by the <u>delegate of the</u>
<u>U.S.S.R.</u>, proposed as a first step a joint meeting of Committees 4 and 5.
Any proposals there formulated could be referred back to Committee 4.

The Chairman, summarizing the discussion, said that the suggestion to establish a Working Group seemed to be acceptable to most delegations.

In the absence of objections, it was so decided.

The <u>delegate of Italy</u> favoured a wide mandate for the Working Group, which could be invited to submit a draft revision of Appendix 15 A for the Committee's consideration.

The <u>delegate of France</u> considered that the terms of reference for the Working Group should include some mention of frequencies for the use of low traffic ships.

The Chairman, taking into account amendments submitted by the delegates of France and the U.S.S.R., proposed the following draft terms of reference for the Working Group:

"Following a general discussion in Committee 4, to draft a revised Appendix 15 A, noting agreement in principle for reduction of frequencies for radiotelegraphy purposes and in particular those working frequencies for low traffic ships, and taking into account the various proposals pertinent to the subject."

On receiving further textual amendments to the draft terms of reference from the <u>delegates of Brazil</u>, <u>United States</u>, <u>U.S.S.R.</u>, <u>France</u> and <u>Venezuela</u>, the <u>Chairman</u> suggested discontinuing discussion at that juncture and proposed that <u>delegates</u> of Italy, France and the United States should draft terms of reference for the Working Group to be submitted to the meeting of Committee 4 on the following day. If those terms of reference were agreed, the Committee could immediately go into session as a Working Group.

It was so decided.

The meeting rose at 1225 hours.

Secretary of Committee 4:

Chairman of Committee 4:

F. LURASCHI

F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 176-E 26 September 1967 Original: French

#### PLENARY MEETING

#### NOTE BY THE SECRETARY-GENERAL AD INTERIM

The attached letter from the Ministry of Information and Telecommunications of Senegal is submitted to the Conference for information.

> Mohamed MILI Secretary-General a.i.

Annex: 1



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Republic of Senegal

No. 2698/MIT/OPT/

MINISTRY
OF INFORMATION
AND
TELECOMMUNICATIONS

Dakar, 20 September 1967

The Minister

To the Secretary-General of the International Telecommunication Union Place des Nations

CH 1211 GENEVA 20 (SWITZERLAND)

<u>Subject</u>: Delegation of powers

Sir,

I have the honour to inform you that, in application of the provisions of Chapter V, No. 640 of the General Regulations annexed to the International Telecommunication Convention (Montreux, 1965), the Administration of Senegal is delegating its powers to the delegation of the Republic of the Ivory Coast taking part in the Administrative World Radio Conference, in Geneva, from 18 September to 4 November 1967.

The delegation of the Republic of the Ivory Coast is empowered to represent Senegal without any restriction.

I should be greatly obliged if you would forward this document to the Secretariat of the Conference.

Yours faithfully,

The Minister

Sign. : A. FOFANA

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 177-E 26 September 1967 Original : English

COMMITTEE 5

#### UNITED STATES OF AMERICA

In further explanation of the U.S. Proposal for designation of a frequency for use on a world-wide basis for navigation communications

The proposal of the United States for the provision of a frequency for navigation communications is contained in Document No. 55 (see proposals USA/55(45), (46) and (47)). The relevant portion of U.S. 55 primarily describes the domestic action which underlies the U.S. proposal for availability of a common navigation channel. Since the drafting of the U.S. proposal, certain actions have taken place within I.M.C.O. which have a bearing on this subject and emphasize the necessity for affirmative measures by this Conference.

The I.M.C.O. Assembly has before it proposed regulations to govern those situations where a country establishes a VHF radio system for navigational safety within its own sovereign waters (MSC XV/22, ANNEX VII). Under these regulations and the accompanying recommendation (ANNEX VIII) a country which wishes to require ships to participate in such a system established by it, will report the matter to I.M.C.O., and specify

- the ships to be covered:
- the geographical limits of the regulated area, and
- the radio frequency or frequencies to be guarded by ships navigating in the area.

The VHF radio equipment with which the ship must be fitted must comply with established international standards.

These pending I.M.C.O. regulations are broad enough to cover all situations where a government may determine that the use of VHF radio should be required for navigational safety within its sovereign waters. Examples of systems which might be included under these regulations are:



- individual port advisory programs such as exist in many ports of the world:
- programs for specific waterways, such as planned for the Gulf and River St. Lawrence: and even
- programs for the pilotage waters of an entire country, such as is contemplated under legislation introduced in the United States Congress.

When such programs are conducted under the I.M.C.O. regulations the VHF radio requirement becomes mandatory for ships operating in the area covered. Thus, when one considers the many VHF port systems now in existence and others yet to be established which may be brought under the I.M.C.O. procedures it is clear that the number of ships required to be fitted with VHF radio will rapidly expand. Moreover, it is probable that in the future there will be a requirement that all ships in the international service must be fitted with multichannel VHF radiotelephone equipment for navigational safety. In fact, this very question is currently before I.M.C.O.

The pending I.M.C.O. regulations provide for only those situations which are under the control of individual governments. Experience has shown that once fitted, ships will want to use, and will use, the VHF radiotelephone for navigational exchanges. Surely, it must be admitted that if the use of VHF radiotelephony can increase the navigational safety of shipping in sovereign waters, it can also increase navigational safety in other areas such as coastal waters and the high seas.

It is emphasized that the United States proposal does not intend any change in the well established and sound procedures in use in existing port programs, nor is it intended to limit in any way the development and nature of domestic programs which any individual nation may wish to establish for its sovereign waters. The use of this frequency would not be obligatory in any domestic program and, if included in a domestic program, its function need not be confined to the single frequency.

The main problem for the Conference in this matter is to reexamine the VHF radio rules and the frequency arrangements contained in Appendix 18 to determine how the broader navigational requirement apart from domestic programs can best be met.

There are some who appear to believe that the present rules in this regard are adequate. The United States does not share this view. In considering the overall requirement the following problems have been noted:

- 1. One ship should always be able to contact another ship directly for navigational safety. If a continuous watch should ultimately be required, the only frequency provided for general contact purposes under the present rules is 156.8 Mc/s. This frequency has been reserved for general calling and safety, and its use circumscribed by regulations which unduly limit its effectiveness as a navigation frequency, except for those imminent situations which may qualify as "security" messages (Art. 36, Section X). Moreover, the channel loading which may be expected from its use for general calling purposes would greatly limit its operational effectiveness.
- 2. A ship which wishes to communicate with another ship concerning navigational movement should not be subjected to the delay and uncertainty of having to shift to another radio channel. Surely, there would be occasions when it would be found that the channel to which a shift is requested would be occupied with other communications. This would lead to further delay and confusion until a channel is found on which the navigational communication could be completed. The delay and uncertainty in such procedure is considered operationally undesirable, and perhaps detrimental to safety. In practice, it is feared that the above procedure would be ignored, and could not be enforced.
- 3. An exchange of navigational communication between ships should not be subjected to interference from non-navigational communications. For this reason the frequency used for navigational exchanges must be reserved for the navigational purpose alone.
- When the navigational movement of a vessel or vessels is involved, it is important that other vessels in the vicinity be aware of what is taking place. This, of course, is just an additional reason why it appears undesirable, and perhaps detrimental to navigational safety, to require the shifting to another channel for the conduct of these communications. Moreover, the more information which one vessel obtains from listening to the communications of others, the less need for that vessel to take up time on the communication channel.

# Document No. 177-E

The foregoing describes the operational requirement and the problems and deficiencies found in the present rules. The solution which the United States thinks best, as contained in its proposals, is the designation of a specific frequency, restricted in use to navigational exchanges, and authorization that such frequency may be used for both contact and working purposes. Our interest is not in seeking to promote a specific channel (No. 13) for this purpose solely because it is being used as a navigation frequency in the U.S. - but to find a solution to a particular need in the interests of navigational safety.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 178-E 26 September 1967 Original: English

#### COMMITTEE 4

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, THE CHANNEL ISLANDS AND THE ISLE OF MAN

#### Proposals for the work of the Conference

#### Revision of Appendix 15

Ref.

G/178(101)

Following an examination of Documents 10, 14, 17, 18, 22, 32, 33, 40, 41, 45, 49, 50, 60, 69, 72, 75, 77, 86, 98, 104, 115, 122, 123, 128, 130, 132, 133, 137, 138, 142, 159, 160 and 165, a compromise proposal for the revision of the ship station frequencies of Appendix 15A has been made and is reproduced in Annex 1 - Annex 6.

The revision includes :

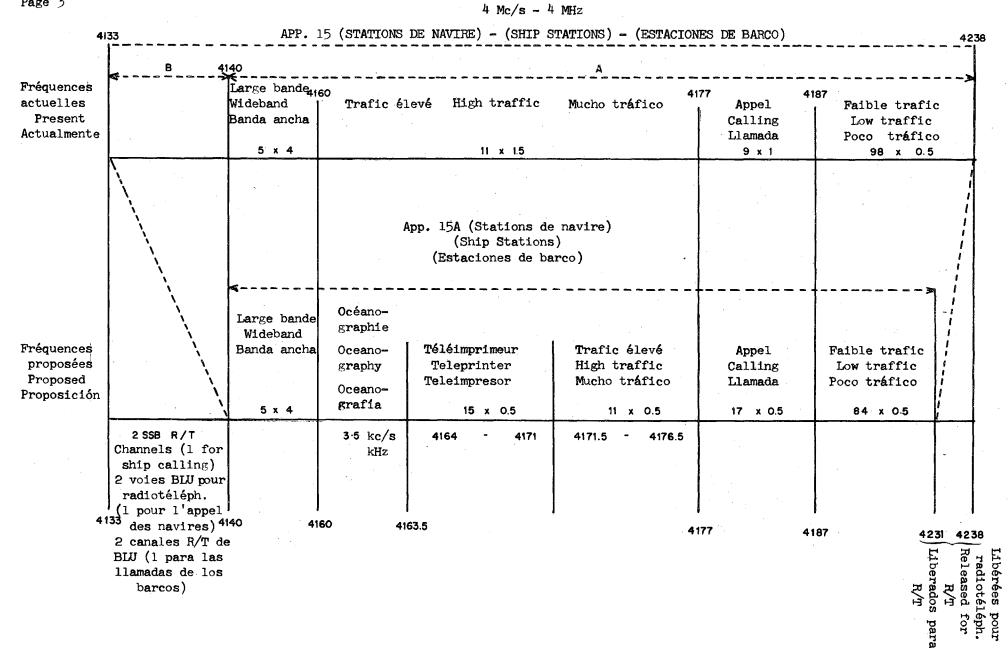
- a) the provision of frequencies for
  - 1) Oceanography,
  - 2) Direct Printing Telegraph Systems;
- b) revised spacing in the Calling and in the High Traffic bands;
- c) the release of frequencies for radiotelephony by reducing the frequencies assignable to low traffic ships and by repositioning the wideband channels.

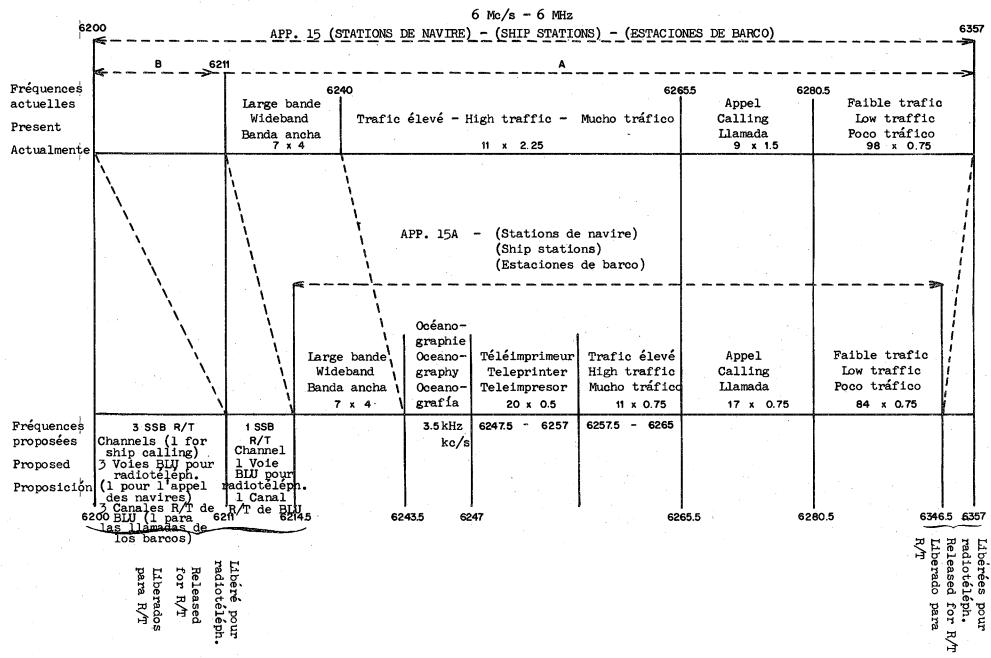
P.W.F. FRYER

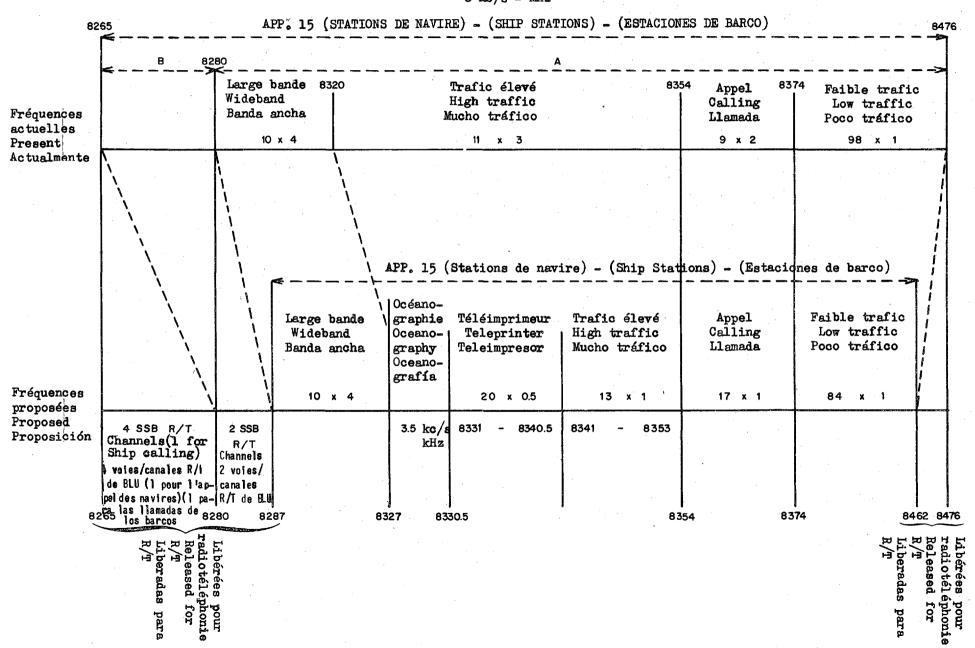
Annexes: 6



ANNEXE 1 - ANNEX 1 - ANEXO 1

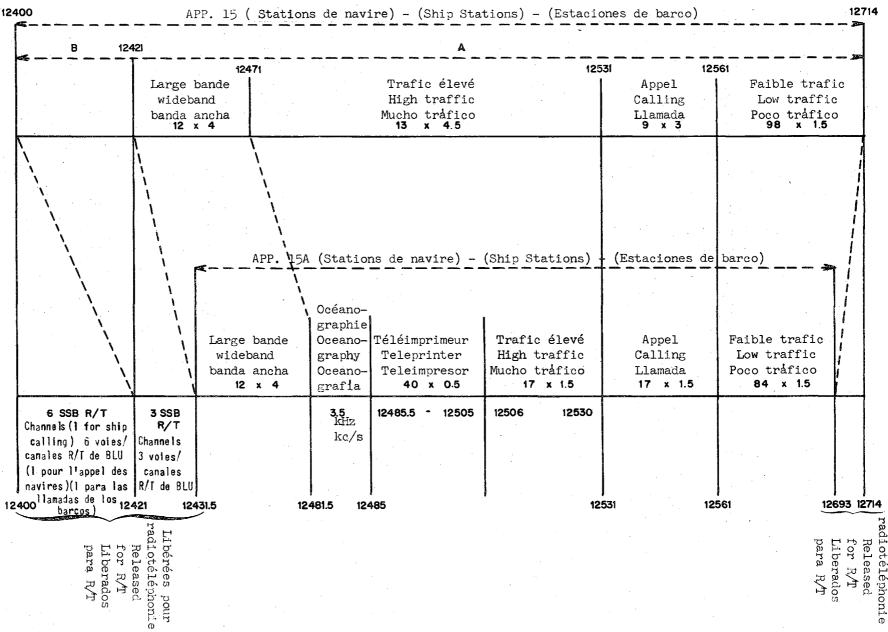






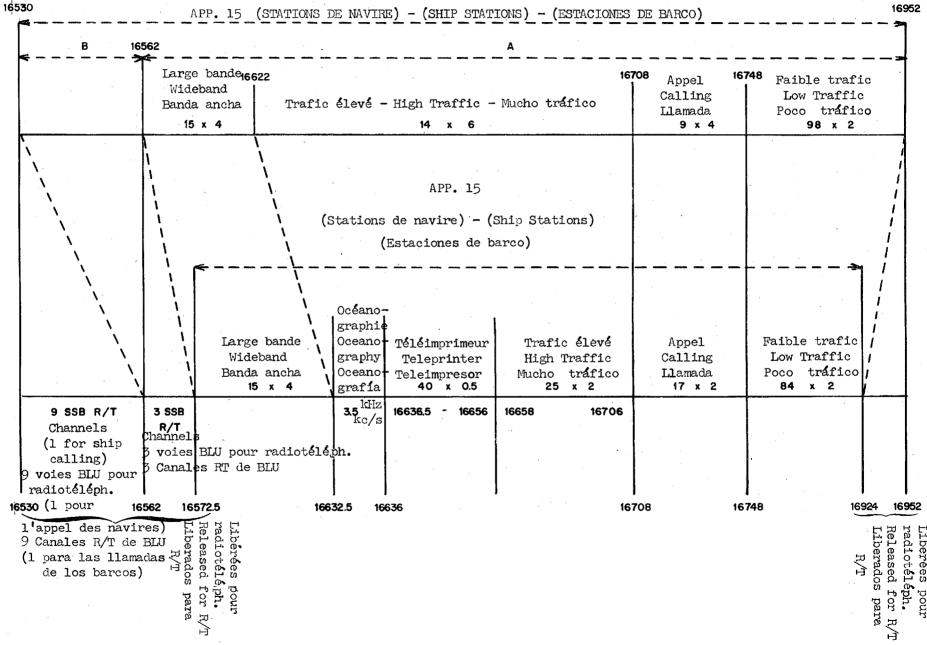
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#### 12 MHz - 12 Mc/s



Libérées pour radiotéléphonie

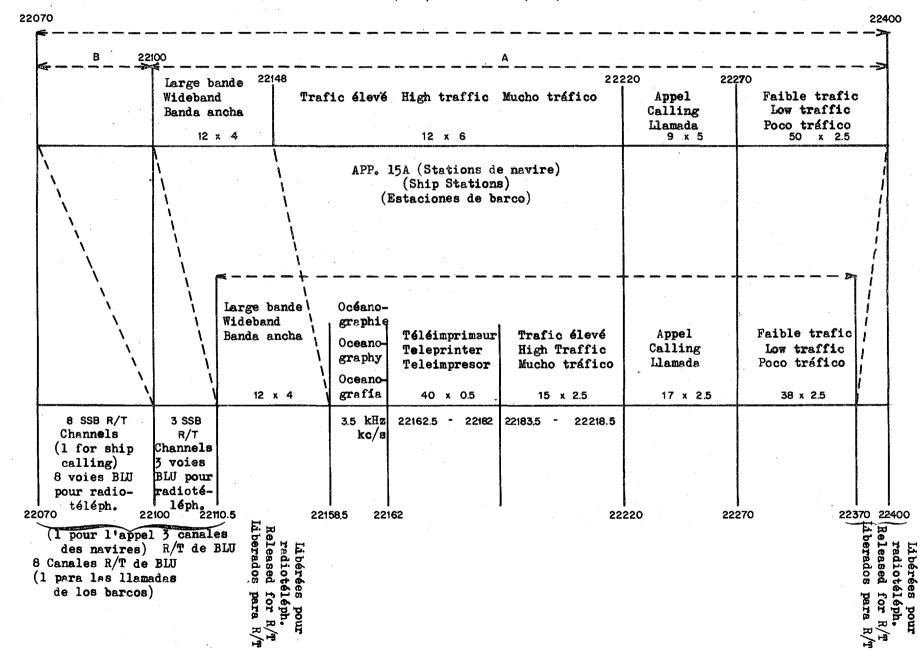
16 Mc/s - MHz



Liberées pour radiotéléph. Released for R/T Liberados para

22 Mc/s - MHz

APP. 15 (STATIONS DE NAVIRE) - (SHIP STATIONS) - (ESTACIONES DE BARCO)



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 179-E 27 September 1967 Original: French

#### PLENARY SESSION

#### ALGERIA

(Algerian Democratic and Popular Republic)

Ref.

Proposal for work of the Conference

ALG/179(1) Article 19\*

Table of allocation of international call sign series

#### Proposals

Algeria proposes a revision of the table of allocation of international call sign series, Section II, No. 747 of Article 19 of the Radio Regulations. The General Secretariat of the Union could submit an up-to-date version of this table if the Conference adopts the present proposal.

#### Reasons:

The purpose of this revision is to take account of changes in the membership of the Union and of the new series of call signs allocated to new Members of the Union since 1959.



<sup>\*</sup> Additional agenda item relating to Article 19 proposed for consideration by Algeria.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 180-E 27 September 1967 Original: English

COMVITTEE 7

SUMMARY RECORD

of the

FIRST MEETING OF COMMITTEE 7
Monday, 25 September 1967, at 0930 hrs.

Chairman: Mr. H. BEN CHEIKH (Tunisia)

Vice-Chairmen: Mr. F. BENITO MESTRE (Spain)
Mr. J.D. CAMPBELL (Australia)

#### Subjects discussed

#### Documents Nos.

- 1. Appointment of rapporteurs
- 2. Organization of work
- 3. Form in which Final Acts should be issued

28, 62, 117

- 4. Submission to Plenary Meetings of documents examined by the Editorial Committee (number of readings)
- 5. Procedure for reproduction of documents
- 6. Other business



#### 1. Appointment of rapporteurs

The <u>Chairman</u> said that it would be necessary to ensure that the various language groups were sufficiently represented at the Committee's meetings.

The <u>Vice-Chairman for the English language</u> said that he himself and Mr. Wigg would attend the meetings of the Committee.

The <u>delegate of the United Kingdom</u> said that Mr. Fryer would endeavour to attend all the meetings of the Committee.

The delegate of the United States of America said that the Committee's meetings would be attended by Mr. Huffoutt and Mr. Glunt.

The <u>delegate of France</u> said that Mr. Chassignol would be responsible for ensuring that a French-speaking delegate was always present at the meetings.

The <u>Vice-Chairman for the Spanish language</u> said that he would endeavour to attend all the meetings of the Committee. The other Spanish-speaking delegations would be requested to send representatives to the meetings.

The Secretary of the Committee suggested that delegations should inform the Secretariat which of their members would be attending the Committee's meetings. In that way it would be possible to ensure that sufficient numbers of documents were prepared.

It was so decided.

#### 2. Organization of work

The Chairman said that a "Note for the Editorial Committee" would be circulated at the end of the meeting.

#### 3. Form in which Final Acts should be issued (Documents Nos. 28, 62 and 117)

The <u>Chairman</u> said that the question of the revision of the layout of the Radio Regulations had been under discussion since 1961. He suggested that a Working Group should be established to examine developments since that date and, on the basis of Documents Nos. 28, 62 and 117, to prepare a report for submission to the Conference in Plenary meeting.

It was so agreed.

The <u>Chairman</u> suggested that Mr. Fryer of the United Kingdom Delegation should act as Chairman of the Working Group.

It was so agreed.

# 4. Submission to Plenary Meeting of documents examined by the Editorial Committee (number of readings)

The <u>Chairman</u> referred to Rule 23 (No. 763) of the General Regulations annexed to the International Telecommunication Convention and noted that two readings of texts in Plenary Meeting would be necessary.

#### 5. Procedure for reproduction of documents

The <u>Secretary of the Conference</u> recommended that the typeset method of document reproduction be adopted. Texts reproduced by that method were more easily amended than texts reproduced by the roneo method and it would be possible, after the Conference, to use the composition again to produce the definite version of the Final Acts. In addition, since the financial regulations of the I.T.U. provided that the Conference should bear a proportion of the cost of composition, the selling price of the Final Acts would be lower if the typeset method were used.

It was <u>decided</u> that the use of the typeset reproduction should be recommended to the Finance Committee.

#### 6. Other business

The Secretary of the Committee suggested that the Chairmen of Committees 4, 5 and 6 should be requested to submit the texts approved by their Committees to the Editorial Committee as soon as possible. A draft outline of the form in which texts should be submitted to the Secretariat should be attached to the summary record of the meeting.

It was so agreed.

The meeting rose at 1015 hours.

Secretary of Committee 7:

Chairman of Committee 7:

A. WINTER-JENSEN

H. BEN CHEIKH

Annex : 1

#### ANNEX

# MODEL TO BE USED FOR SENDING TEXTS TO THE EDITORIAL COMMITTEE

ADD	84ана	(text)
NOC	84AI	
MOD	84AJ	(text)
SUP	84AK	

#### ABBREVIATIONS

The following abbreviations will be used for amendments in the partial revision of the Radio Regulations:

Symbol	Meaning
MOD	Amendment
SUP	Deletion
ADD	Addition
NOC	No change

Note: If an amendment only affects the wording of the paragraph without changing its meaning, the symbol (MOD) should be used.

Sent to Committee 7, 1967

Chairman of the Committee

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 181-E 27 September 1967 Original: French

#### COMMITTEE 6

# 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 <u>unanimously agreed</u> the <u>statu quo</u> or revision shown in the amnex 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 <u>agreed</u> 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



## ANNEX

		Article 29
•		Section I
NOC	1000	
ЙОС	1001	
NOC	1002	
NOC	1003	
-	1004	held in abeyance/
	1005	_held in abeyance/
÷		Section II
SUP	1006	
NOC	1007 <b>-</b> 1011	
		Section 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 coll giom of the etation 12cd and more than

- 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.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 182-E 27 September 1967 Original: English

COMMITTEE 5

SUMMARY RECORD

of the

SECOND MEETING OF COMMITTEE 5.

Friday, 22 September 1967, at 1500 hours

(continuation of the meeting called on Wednesday, 20 September and continued Thursday, 21 September 1967)

Chairman: Mr. P. MORTENSEN (Norway)

<u>Vice-Chairman</u>: Mr. A. de SOUZA COELHO (Brazil)

Subjects discussed:

Cocuments Nos.

Continuation of the discussion on AP25 (Terms of reference of Working Group 5D)

164, 166



# 1. Continuation of the discussion on Appendix 25 (Terms of reference of Working Group 5D) (Documents Nos. 164, 166)

The <u>Chairman</u> indicated that in addition to Document No. 164 which contained the two proposals put forward respectively by the delegations of the United Kingdom and France at the end of the meeting of the previous day, the Committee had before it a new proposal of the United Kingdom which was published in Document No. 166. He asked the delegate of the United Kingdom to comment on this document.

The <u>delegate of the United Kingdom</u>, introducing Document No. 166, which the United Kingdom Administration wished to substitute for Proposal No. 1 in Document No. 164, said that Document No. 124 should be added to the list of documents and the word "full" deleted from the penultimate line of sub-paragraph (i). If the French proposal (Proposal No. 2, Document No. 164) were adopted, the Committee would to all intents and purposes, have rejected without discussion the proposals contained in certain documents, some of which, particularly those in Document No. 80, had received considerable support. The United Kingdom Administration therefore proposed that the Working Group should examine all the documents submitted on the subject and, if possible, reach a compromise between the two points of view expressed in those documents. If it were unable to reach a compromise, the Working Group should refer the two points of view to Committee 5 for decision.

The <u>delegate of France</u> said that the words "and under what procedure" should be inserted between the words "what" and "modifications" in the first sub-paragraph of Proposal No. 2 in Document No. 164. It should be noted that the wording of that proposal was intended to cover the modifications which would have to be made to other Articles of the Radio Regulations, particularly to Article 9, and the interim procedures which would have to be followed until the transfer to SSB had been completed. The revised United Kingdom proposal made no reference to the Committee's discussions and was therefore less acceptable than Proposal No. 1 in Document No. 164.

The <u>delegate of the United Kingdom</u> said that the words "In the light of the discussions in Committee 5" could be inserted at the beginning of the introductory phrase of the United Kingdom's proposal.

After a discussion in which the delegates of Canada, Czechoslovakia, Belgium, The Federal Republic of Germany, Italy, the Ivory Coast, Sweden, Mexico, The Netherlands, India, Denmark, the United States of America and the Union of Soviet Socialist Republics took part, the delegate of the Union of Soviet Socialist Republics, supported by the delegate of Poland, proposed the closure of the debate.

The <u>delegates of Sweden and the United States of America</u> opposed the proposal.

The U.S.S.R. proposal was rejected by 34 votes to 19.

The <u>delegate of India</u>, supported by the <u>delegate of Sweden</u>, proposed that the first line of the French proposal be followed by the text of the United Kingdom proposal and that the introductory phrase of the latter be amended to read: "to make a detailed examination of all relevant documents and recommend to the Committee:".

The <u>delegate of France</u> said he could accept the Indian proposal if the words "in the light of this procedure" were deleted from subparagraph (ii) of the United Kingdom proposal.

The <u>delegate</u> of <u>India</u> accepted the French amendment.

The <u>delegate of the United States of America</u> said that the first line of the Indian proposal prejudged the issue and was therefore unacceptable to his Administration. He proposed that the introductory phrase of the United Kingdom proposal be amended to read: "Noting the support in Committee 5 for the retention of an allotment plan, to make a detailed examination of all relevant documents and recommend to the Committee:".

After having heard the <u>delegates of Portugal. Tunisia and Argentina</u>, the <u>delegate of Australia</u> proposed the following text for the terms of reference of Working Group 5D: "In the light of the discussions of Committee 5 thus far, Working Group 5D shall make a more detailed examination of all relevant documents and proposals with the object of recommending to this Committee: (1) What action should be taken with regard to Appendix 25, (2) When this action should be taken".

This proposal was not seconded.

The <u>Chairman</u> said that the discussion had shown that there were two definite proposals and that he had to put them to the vote. Since the United Kingdom proposal with the amendment proposed by the United States of America was the furthest from the present situation, this proposal would be put to the vote first.

The proposal was rejected by 31 votes to 16 with 2 abstentions.

Document No. 182-E Page 4

The <u>Chairman</u> then put to the vote the Indian proposal as amended by France.

The proposal was adopted by 37 votes to 10 with 5 abstentions.

The <u>delegate of the Netherlands</u> asked whether the fact that the Indian proposal, as amended by France, had been adopted meant that the proposals in Document No. 80 would not be considered by the Working Group.

The <u>Chairman</u> said that the terms of reference of the Working Group were to regard the principle of an allotment plan as retained and to examine all relevant documents and proposals accordingly. Although Document No. 80 contained a proposal for the abrogation of Appendix 25, it also contained proposals for the transition period, which would be considered by the Working Group. The Working Group could not disregard Document No. 80; rather, it would have to examine the document within the framework of the terms of reference given to it by the Committee.

The <u>delegate of the Netherlands</u> expressed his satisfaction with this explanation.

The second meeting of Committee 5 closed at 1740 hours.

Secretary of Committee 5:

J. BALFROID

Chairman of Committee 5:

P. MORTENSEN

# MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 183-E 27 September 1967 Original : English

#### PLENARY MEETING

#### KINGDOM OF THE NETHERLANDS

#### Proposal for the work of the Conference

#### Additional Agenda Item

Ref.

Article 35

HOL/183(37)

ADD 1336 A

 $^{
m l}$  To be discussed by the Conference.

#### Reasons:

On board ships, equipped with a single sideband installation, where the radio telephone operation is carried out by the radio telephone operator, a crystal controlled spot frequency receiver is essential in order to facilitate correct tuning.

Consequently the single sideband receivers on board ships making international voyages, which wish to communicate with coast stations of another nationality, need to be provided with a considerable number of additional crystals.

In order to reduce this number and to ensure that the cost of single sideband receivers is kept to an economical level the Netherlands Administration proposes that an international working frequency chosen from a limited number should be allocated to all coast stations for working with ship stations of another nationality.

To this end the necessary frequencies must be assigned by this conference.



# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

GENEVA, 1967

Document No. 184-E 27 September 1967 Original: English

#### COMMITTEE 5

#### FEDERAL REPUBLIC OF GERMANY

Proposal for the reduction of the frequency separation between adjacent channels from 50 kc/s to 25 kc/s in the VHF (metric) maritime mobile band

#### Ref.

#### Agenda Item 4

### D/184(30) 1. Introduction

Although there has been no serious congestion so far in the VHF channels in the area of the Federal Republic of Germany, it is expected, in view of the trend in this service and the fact that more and more ships will be equipped with VHF-radio installations, that additional channels will be required before long. The situation is certainly similar in other countries, so that it appears reasonable to gain additional channels by reducing the separation of adjacent channels. As the transition from the existing 50 kc/s channel separation to 25 kc/s separation will become more expensive with the ever increasing number of equipment in operation, this transition should be initiated as soon as possible. A complete alteration of the technical characteristics\* of the existing 50 kc/s equipment to achieve a 25 kc/s channel separation would make the following measures necessary:

- 1) Reduction of the peak deviation from ±15 kc/s to ±5 kc/s.
- 2) Increase in the audio frequency gain of the receiver by approximately 10 db.
- 3) Reduction of the frequency tolerances of transmitter and receiver to a value to be determined.\*

<sup>\*</sup> This problem is under study in the C.C.I.R. See Question D. e/XIII, Geneva, 1967.



Ref.

D/184(30) (cont.)

4) Reduction of the receiver bandwidth.

Of these four measures only those referred to under 1) and 2) can be realized in the existing mobile equipment without involving too great expenditure. The result thereof, i.e. that the measures referred to under 3) and 4) cannot be realized, is that the channels gained can only be used during the transition period during which the old and new equipment is in operation, if the geographical distance between adjacent channels (25-kc/s separation) is sufficiently large. A time-schedule should be agreed upon for the alteration of the existing installations. The proposal as given under item 2. is submitted for this purpose.

#### 2. Time-schedule for the alteration of the existing equipment

The work which is necessary for the alteration of the equipment can be started as soon as the decision taken by the Conference become effective. The following measures should be realized in the order as they are listed below:

#### 2.1 First step (duration: 3 years)

Preparation of the reduction of the peak deviation of the <u>mobile transmitters</u> to ±5 kc/s and preparation of the increase in the audio frequency gain of the <u>mobile receivers</u> by 10 db.

#### Reasons:

The alteration of the frequency deviation in the transmitter consists of two measures, i.e. the modification of the limiter circuit and the adjustment of the deviation rate itself. In order to increase the audio frequency gain of the receiver by 10 db, an additional amplifier stage is needed, because, according to our experience, most of the existing receivers have only an audio frequency amplification reserve of less than 3 db.

For these alterations a major intervention in the equipment is needed and precise measuring instruments must be available. In most cases, it will therefore be necessary to carry out these alterations in a suitable workshop and not on board ships. For accomplishing these actions in all existing VHF installations, we estimate that about three years will be needed.

#### Ref.

D/184(30) (cont.)

During the same period the <u>coast stations</u> should be equipped with manually operated or automatically working equipment for the adjustment to the audio frequency amplification to different deviations of the ship stations ( $\pm 15$  kc/s and  $\pm 5$  kc/s). Furthermore, the measures mentioned under 2.2 should be prepared.

#### 2.2 <u>Second step</u> (duration: less than one month)

The peak deviation of all coast stations should be reduced to  $\pm 9$  kc/s (see also 2.4). This measure should be realized as quickly as possible. As from the same date, the frequency tolerances of the transmitters and receivers of the coast stations should be brought to the value\* which is required for a channel separation of 25 kc/s.

#### 2.3 Third step (duration: 1 year)

The preparatory measures listed under 2.1 (reduction of the deviation and increase in the audio frequency gain) should be realized in the ship stations.

#### 2.4 Fourth step (duration: less than one month)

The reduction of the deviation in the <u>coast stations</u> from  $\pm$  9 kc/s to  $\pm$  5 kc/s should be accomplished within a period which is as short as possible.

#### Reasons:

By reducing the deviation in two steps it should be made possible for <u>ship stations</u>, irrespective of the fact whether their audio frequency gain has already been increased or not, to operate without interference with the coast stations during the transition period. In particular, this is of importance in view of the introduction of a selective calling system.

<sup>\*</sup> This problem is under study in the C.C.I.R. See Question D. e/XIII, Geneva, 1967.

#### Ref.

D/184(30) (cont.)

### 3. Implementation of the new channels

- 3.1 When the measures specified under 2.4 have been completed, it will be possible to put equipment with the definite characteristics for a channel separation of 25 kc/s into operation. At the same time, the new channels can already be used if the geographical distance between adjacent channels (25-kc/s separation) is sufficiently large.
- 3.2 After a further period which allows for an economical amortization of the existing equipment (modified according to 2.1 and 2.3), the use of such equipment can be prohibited. A period of approximately 10 years will be necessary for this. Afterwards, the new channels can be used without the limitation mentioned under 3.1.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 185-E 27 September 1967 Original: French/English

#### COMMITTEE: 4

#### SUMMARY RECORD

OF THE

#### FIFTH MEETING OF COMMITTEE 4

Tuesday, 26 September 1967, at 0930 hours

Chairman: Mr. F.G. PERRIN (Canada)

Vice-Chairman: Mr. M. ZAHRADNICEK (Czechoslovak Socialist Republic)

Sub	jects discussed:	Document No.
1.	Possible establishment of an ad hoc working group to examine proposals relating to the revision of	
	Appendix 15, Section A	DT/16
2.	General debate on Appendix 15, Section A	DT/16
<b>3.</b>	Examination of proposals concerning Appendix 15, Section A	DT/16



1. Possible establishment of an ad hoc working group to examine proposals relating to the revision of Appendix 15, Section A (Document No. DT/16)

The <u>Chairman</u> opened the discussion on the proposal in Document No. DT/16.

The <u>delegates of the United States of America, India, France,</u>

<u>Venezuela and the U.S.S.R.</u> considered that Appendix 15A should be examined by the plenary Committee, not by an ad hoc working group.

The <u>delegate of the United Kingdom</u>, supported by the <u>delegate of the Netherlands</u>, considered that there must be some flexibility in the study of the question, so that all proposals could be taken into account. The working group might be set up later if necessary.

Noting that the consensus seemed to be not to set up a working group for the time being, the <u>Chairman</u> said that the terms of reference set out in Document No. DT/16 would become those of the Committee 4 itself.

The <u>delegate of the U.S.S.R.</u> suggested adding the phrase "except for proposals relating to the allocation of frequencies for the oceanographic service" at the end of item a).

The <u>delegates of the United States of America</u>, <u>Brazil and Italy</u> did not consider that that addition was justified.

The <u>delegate of France</u> thought that, although there was no question of excluding the examination of any proposal, an order of priorities should be established: the Conference should obviously first try to meet the needs of the maritime mobile service, and could not consider the problems of the oceanographic service until that task had been completed.

In the light of those comments, the <u>Chairman</u> suggested that the terms of reference set out on page 2 of Document No. DT/16 should remain unchanged and that the needs of the oceanographic service should be studied later, when the Committee had settled certain questions of principle. It would then be decided whether the Committee or an ad hoc working group should deal with the problems of the oceanographic service.

In the absence of any objection, the <u>Chairman</u> opened the discussion on item c) of the terms of reference, pointing out that the four parts of the item should be considered before proceeding to a detailed examination of Appendix 15A.

### 2. General debate on Appendix 15, Section A (Document No. DT/16)(Item c) 1))

In connection with additional explanations given by several delegates whose administrations had submitted proposals on channel spacings in the various sub-bands, the <u>delegate of Australia</u> said that, since systems using 500 c/s spacing could be set up easily and economically and since modern emission and reception devices were very stable, it seemed possible to bring the spacing to 0.5 kc/s (Document No. 122, page 5).

The <u>delegate of Italy</u> said that his delegation was in favour of introducing no changes for spacing of frequencies used by low traffic ships and calling frequencies (Document No. 33). He also proposed that the spacing for manual system frequencies be reduced by half and that the spacing used for high traffic ships be increased slightly, to limit possibilities of interference.

The <u>delegate of the United States of America</u>, supported by the <u>delegate of India</u>, said he was in favour of retaining the existing spacing between assignable working frequencies for low traffic ships.

The <u>delegate of France</u>, summarizing his administration's proposals in Document No. 10, mentioned the value of 0.5 kc/s for the spacing of assignable working frequencies for low traffic ships and said he was in favour of retaining a spacing of 1 kc/s for calling frequencies in the 4 Mc/s band.

The <u>delegate of the United Kingdom</u> supported that view, but considered that the spacing should be the same for calling frequencies and for assignable frequencies for high traffic ships and should be fixed at 0.5 kc/s.

The delegates of Norway, the Netherlands, Denmark, France and Japan endorsed the views of the delegate of the United Kingdom.

The <u>delegate of the U.S.S.R.</u>, supported by the <u>delegate of Hungary</u>, said he could endorse proposals to retain the spacing of calling frequencies and assignable frequencies for low traffic ships as they appeared in the Radio Regulations, except for the 6 Mc/s band, where the existing spacing of 0.75 kc/s should be reduced to 0.7 kc/s.

A remark by the <u>delegate of Italy</u> to the effect that, if the spacing of assignable frequencies for high traffic ships was to be the same as for low traffic ships, there would no longer be any need to have two categories of traffic, led to a general debate in which the <u>delegates of the United Kingdom</u>, the Netherlands, Norway, the United States of America and

France took part, the latter pointing out that, although the Italian delegate's remark was logically correct, from the practical point of view the establishment of a single category of traffic would entail unduly extensive modifications of the Radio Regulations.

The <u>Chairman</u> declared the debate on that point closed and invited the Committee to return to the problem of channel spacing in the various sub-bands.

The <u>delegate of Japan</u> raised the question of frequencies to be assigned to teleprinter systems.

The <u>delegate of the United Kingdom</u> said that his earlier proposal did not apply to those systems, to which his administration referred in Document No. 60, expressing the view that a spacing of 500 c/s should be adopted, in conformity with the decision taken by the Special Meeting of C.C.I.R. Study Group XIII.

The <u>delegate of the United States of America</u> agreed that the question of teleprinter systems should be dealt with separately, in accordance with the recommendation of the aforesaid C.C.I.R. Study Group. A distinction should be made between manual telegraphy and automatic systems.

The <u>delegate of the U.S.S.R.</u>, supported by the <u>delegate of Israel</u>, thought it would be better to retain the existing spacing of assignable frequencies for high traffic ships, since the existing rules ensured a considerable degree of stability. Reduction of spacing for high traffic ships roughly to the level of spacing for low traffic would lead to much interference, in the teleprinter service as well.

In connection with data transmission, the <u>delegate of Japan</u> raised the questions of modulation rate and the required bandwidth; he considered that spacing of 0.5 kc/s was not sufficient for data transmissions.

In reply, the <u>delegate of the United Kingdom</u> pointed out that the C.C.I.R. specified in its Recommendation No. 440 that the modulation rate should not exceed 100 bauds and that the bandwidth required per channel should not exceed 340 c/s.

The <u>delegate of the U.S.S.R.</u> observed that, for the 4 Mc/s band, the new text that the Committee had approved for No. 1156 of the Radio Regulations allowed ship stations to use either the high traffic or the low traffic band, at the discretion of the administration concerned. He had no

objection to a spacing of 500 c/s for low traffic ships. In the 4 Mc/s band, the spacing for high traffic ships and calling frequencies should be retained at 1.5 kc/s and 1 kc/s, respectively. The question of bands for the teleprinter and data transmission systems should be dealt with separately, as their use was a relatively new one for ship stations. Channel spacing might be increased to 1 kc/s and the modulation rate to 100 bands instead of 50.

# 3. Examination of proposals concerning Appendix 15, Section A (Document No. DT/16)

The <u>Chairman</u> suggested that the Committee consider the frequencies for low traffic ships, band by band.

He reminded delegates that the Australian proposal was to make the channel spacing  $0.5~{\rm kc/s}$  throughout all the bands.

#### Low traffic ships

#### 4 Mc/s band

The <u>delegate of Sweden</u> pointed out that it was necessary to decide first whether or not the principle of harmonic relationships between frequencies (on which most of the existing equipment was based) was to be maintained.

The <u>delegates of the United States of America</u>, Italy, Greece, India, the <u>United Kingdom</u>, the <u>U.S.S.R.</u> and <u>Argentina</u> favoured retention of the existing channel spacing of 0.5 kc/s for the band in question.

It was <u>agreed</u> to maintain channel spacing of 0.5 kc/s in the 4 Mc/s band.

#### 6 Mc/s band

The <u>delegate of Australia</u> said that experience had shown that it was possible to work satisfactorily with a 500 c/s frequency separation. Reducing the spacing between frequencies would make for better use of the spectrum and provide for future development and new equipment.

The <u>delegate of Greece</u>, agreeing with the <u>delegate of Italy</u>, explained that it would be very difficult to oblige administrations to provide the new equipment (particularly synthetizers) that would be necessary. He thought it preferable to retain the existing spacing for all the bandwidths being considered for low traffic ships.

The delegate of Indonesia shared that opinion.

The <u>delegate of Cuba</u> supported the U.S.S.R. proposal to reduce the spacing in the 6 Mc/s band to 0.7 kc/s.

The <u>delegate of New Zealand</u> suggested keeping the 0.75 kc/s for the time being, and re-examining it if necessary during the discussions on harmonic relationships.

The <u>delegates</u> of <u>Venezuela</u>, the <u>United Kingdom</u>, <u>India</u>, <u>Pakistan</u>, <u>Ireland</u>, <u>France</u>, <u>Singapore</u>, <u>Poland</u>, <u>Spain and Malaysia</u> were also in favour of retaining 0.75 kc/s.

The delegate of the U.S.S.R. said he would not press for the reduction of that figure to 0.7~kc/s in view of the majority of the views expressed.

It was <u>agreed</u> to maintain channel spacing of 0.75 kc/s in the 6 Mc/s band.

#### 8, 12, 16 Mc/s bands

The <u>delegate of India</u>, supported by the <u>delegates of the United</u>
States and Singapore, suggested that the three bands be considered together and that the existing channel spacing be maintained in each case.

It was <u>agreed</u> that channel spacing of 1 kc/s, 1.5 kc/s and 2 kc/s be maintained in the 8 Mc/s, 12 Mc/s and 16 Mc/s bands respectively.

#### 22 Mc/s band

The <u>delegate of India</u> suggested maintaining the existing spacing of 2.5 kc/s, as he understood that the band was the one least used by low traffic ships and that there was therefore no great demand for saving spectrum space.

The <u>delegate of Norway</u> said that in the case of his country the 22 Mc/s band was widely used and more heavily loaded than the lower bands; since it was not in harmonic relationship with other bands, he wondered if it were possible to reduce the spacing to 2 kc/s.

The <u>delegates of the United Kingdom</u>, France and the Netherlands, said their countries also used the band but thought it preferable to have 2.5 kc/s spacing.

That view was shared by the delegates of Poland and Hungary.

The <u>delegate of Norway</u>, supported by the <u>delegate of Sweden</u>, thought that the spacing was not of great consequence providing the frequency tolerances were sufficiently large. He did not wish to insist on reduction to 2 kc/s if the majority favoured 2.5 kc/s.

It was <u>agreed</u> to maintain channel spacing of 2.5 kc/s for the 22 Mc/s band.

It was also agreed to defer discussion of the 25 Mc/s band.

#### Calling frequencies

#### 4 Mc/s band

The <u>Chairman</u> explained that four proposals (United States, Italy, Brazil and France) favoured retaining 1 kc/s spacing while four others (Netherlands, United Kingdom, Australia and New Zealand) preferred 0.5 kc/s.

The <u>delegate</u> of the <u>United Kingdom</u>, supported by the <u>delegate</u> of the <u>Netherlands</u>, thought that a spacing of 0.5 kc/s would give more even spread and that modern receivers would have little difficulty in separating adjacent frequencies.

The <u>delegate of Italy</u> said he preferred 1 kc/s mainly because it facilitated the task of coast station operators.

He was supported by the <u>delegates of Venezuela</u>, <u>Bulgaria</u>, <u>Poland</u>, <u>the U.S.S.R.</u>, <u>Argentina</u>, <u>Hungary</u> and <u>Turkey</u>.

The <u>delegates of Norway</u>, Japan, Denmark, Canada, Finland and <u>Australia</u> were in favour of reduction to 0.5 kc/s.

The <u>delegate of France</u> said he would be willing to accept 0.5 kc/s, but drew attention to the special frequency 8 364 kc/s in the 8 Mc/s band, which would probably be better protected with 2 kc/s channel spacing.

The <u>delegate of Sweden</u> thought administrations should be given the legal possibility of assigning twice as many channels in the same band, as those who preferred to use only half as many could obviously continue to do so.

In reply to queries by the <u>delegates of the United States and Italy</u>, the <u>delegates of the United Kingdom</u>, <u>Norway</u>, <u>Denmark</u>, <u>New Zealand and Australia</u> said that they visualized the use of normal receivers and that there would be no need to exchange the crystals in existing equipment.

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The <u>delegates of the United States of America</u>, Argentina, Belgium and <u>Italy</u> said that in view of those explanations they had no objections.

It was agreed to reduce channel spacing from 1 kc/s to 0.5 kc/s.

6 Mc/s

In the absence of any objections, it was <u>agreed</u> to reduce channel spacing in this band from 1.5 to 0.75 kc/s.

8 Mc/s

The <u>delegate of the United States of America</u> suggested reduction to 1 kc/s in line with the bands already discussed.

The <u>delegate of the U.S.S.R.</u> while having no objection to a 1 kc/s spacing, took up the point of the frequency 8 364 kc/s mentioned earlier by the delegate of France, and proposed that it be better protected than the other calling frequencies.

The delegate of Sweden also raised the question of protection for the frequency  $8\,364\,\mathrm{kc/s}$ .

The <u>delegate of France</u> also agreed to 1 kc/s spacing and to the suggestion for protecting the frequency just mentioned.

The  $\underline{\text{delegate of Poland}}$  proposed leaving the reference asterisk and amending No. 1179 to read:

"... the frequency 8 364 kc/s and the two adjacent frequencies shall not be assigned to or used by ..."

The <u>Chairman</u> requested the <u>delegates of France and the United Kingdom</u> to consider the use of frequency 8 364 kc/s and to report to the following meeting of the Committee.

The meeting rose at 1230 hours

Secretary of Committee 4:

Chairman of Committee 4:

E. LURASCHI

F.G. PERRIN

**GENEVA, 1967** 

Addendum to
Document No. 186-E
2 October 1967
Original: English

COMMITTEE 6

ADDENDUM TO

FIRST REPORT

of the

WORKING GROUP 6B TO COMMITTEE 6

(OPERATION)

<u>Article 36</u> - new Section VIII A - Emergency position-indicating radiobeacon signals

The delegations of France, New Zealand and the U.S.S.R. have reserved the right to re-open discussion in Committee 6 on the above subject, if they still so desire.

H.A. FEIGLESON
Chairman



**GENEVA, 1967** 

Document No. 186-E 28 September 1967 Original : English

#### COMMITTEE 6

FIRST REPORT OF WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

Revision of Appendix 16 - Phonetic Alphabet and Figure Code

Abrogation of Recommendation No. 30 - Draft resolution

Article 1, new RR 68A - Emergency position-indicating radiobeacon station

Article 36, new Section VIIIA - Emergency position-indicating radiobeacon signals

- 1. Having considered all proposals submitted to it on the above subjects, Working Group 6B <u>unanimously agreed</u> the draft new provisions reproduced in the Annex attached hereto.
- 2. The draft provisions contained in the new Section VIIIA to Article 36 (RR 1476A-K) have been agreed subject to:
  - a) consideration by Committees 4 and 5 with respect to providing frequencies and
    - b) reconsideration in Working Group 6B and/or Committee 6 for final adoption in the light of the decisions of Committées 4 and 5.

H.A. FEIGLESON Chairman



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### A N N E X

### 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	AL FAH	
В	Bravo	BRAH VOH	
C	Charlie	CHAR LEE or SHAR LEE	
D	Delta	DELL TAH	
E	Echo	ECK OH	
F.	Foxtrot	FOKS TROT	
. <b>G</b>	Golf	GOLF	
Н	Hotel	HOH TELL	
I	India	IN DEE AH	
<b>J</b>	Juliett	JEW LEE ETT	
К	Kilo	KEY LOH	
L	Lima	LEE MAH	
M	Mike	MIKE	
N	November	NO <u>VEM</u> BER	
. 0	Oscar	OSS CAH	
P	Papa	РАН РАН	
Q	Quebec	KEH BECK	
<b>R</b>	Romeo	ROW ME OH	

<sup>\*)</sup> The syllables to be emphasized are underlined.

### Annex to Document No. 186-E Page 4

### Appendix 16 (cont.)

Letter to be transmitted	Word to be used	Spoken as *)			
S	Sierra	SEE AIR RAH			
T	Tango	TANG GO			
U	Uniform	YOU NEE FORM or OO NEE FORM			
V	Victor	VIK TAH			
W	Whiskey	WISS KEY			
X	X-ray	ECKS RAY			
Y	Yankee	YANG KEY			
Z	Zulu	<u>zoo</u> loo			

ADD 2. When it is necessary to spell out figures or marks, the following table shall be used:

Figure or mark to be transmitted	Code word	Spoken as
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-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	DEC IMAL	DAY-SEE-MAL
Full stop	STOP	STOP

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.

<sup>\*)</sup> 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
<u>√ex</u> _G/60(18 <u>)</u> 7	ADD	68A	Emergency position-indicating radiobeacon station: A station in the mobile service the emissions of which are intended to facilitate search and rescue operations.
			Action code of the second code code code code code code code cod
			Article 36 - Distress Signal and Traffic, Alarm, Urgency and Safety Signals
_ex-G/60(23 <u>)</u> 7	ADD		Section VIIIA - Emergency position-indicating radiobeacon signals
	ADD	14 <b>7</b> 6A	§44(bis) (1) The emergency position—indicating radiobeacon signal consists of:
	ADD	1476B	<ul> <li>a) for medium frequencies,</li> <li>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;</li> </ul>
· · · · · · · · · · · · · · · · · · ·	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

or

\_ex\_DT/2 p.405/ ADD 1476D

b) for very high frequencies

or of 2200 cycles per second.

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.

beacon belongs transmitted by keying a carrier modulated by a tone of 1300 cycles per second

Article	36	Section	VIIIA	(cont.)	

/ex-DT/2 p.40 <u>7</u> 7	ADD	1476E	(2) The signal in No. 1476B (when used on a low power beacon - Type L) shall be sent continuously or as in No. 1476F.
	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.4077	ADD	1476G	(4) However, the keying cycles in Nos. 1476E and 1476F may be interrupted for speech transmission if administrations so desire.
	ADD	1476н	(5) The essential purpose of the emergency position-indicating radiobeacon signals is to facilitate determining the position of survivors in search and rescue operations.
/ex-DT/2 p.4057	ADD .	14761	(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
F/14(88)			available.
/ex-DT/2 p.4067		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.
<u>/ex-DT/2 p.407</u> 7	ADD	1476К	(8) Equipment designed to transmit emergency position-indicating radiobeacon signals shall meet the requirements specified in Appendix 20A.

**GENEVA, 1967** 

Document No. 187-E 28 September 1967 Original: French

#### COMMITTEE 7

#### PEOPLE'S REPUBLIC OF POLAND

# Draft resolution on the structure and drafting of the Radio Regulations

The World Administrative Radio Conference to Deal with Matters relating to the Maritime Mobile Service, Geneva, 1967,

#### considering

- that the Extraordinary Administrative Radio Conferences to Allocate Frequency Bands for Space Radiocommunication Purposes, Geneva, 1963, and for the Preparation of a Revised Allotment Plan for the Aeronautical Mobile (R) Services, Geneva, 1966, already revised certain parts of the Radio Regulations which were approved by the Administrative Radio Conference, Geneva, 1959;
  - that the present Conference will introduce further changes;
- that it is a very complicated matter for administrations to bring the texts of the Regulations up to date on the basis of the Final Acts of conferences, and that the successive revisions also make these texts extremely difficult to consult;
- that several administrations have proposed that the Radio Regulations should be published in separate volumes relating to various services:

#### resolves

that an up-to-date edition of the Radio Regulations be prepared in loose-leaf form, the pages and paragraphs of each article being numbered separately.



**GENEVA, 1967** 

Document No. 188-E 28 September 1967 Original: English

COMMITTEE 6

FIRST REPORT OF WORKING GROUP 6C
TO COMMITTEE 6 (OPERATION)

Conditions to be observed by Mobile Stations

(Article 28, Section I)

Abrogation of Recommendation No. 27 - Draft resolution

Having considered all proposals submitted to it on the above subjects, Working Group 6C <u>unanimously agreed</u> the <u>statu quo</u> or revision reproduced in the Annex attached hereto.

F. WIEFELSPÜTZ Chairman

Annex : 1



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#### $\mathtt{A} \ \mathtt{N} \ \mathtt{N} \ \mathtt{E} \ \mathtt{X}$

#### Article 28, Section I

NOC 955
SUP 956
NOC 957 - 964 inclusive
ADD 964A /Held in abeyance/

#### DRAFT RESOLUTION

## 

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"  $\ensuremath{\mathsf{S}}$ 

#### Note to the Editorial Committee

It is anticipated that several other Resolutions or Recommendations may be included in this Resolution.

**GENEVA, 1967** 

Document No. 189-E 29 September 1967 Original: French

COMMITTEE 6

SECOND REPORT OF WORKING GROUP 6A
TO COMMITTEE 6 (OPERATION)

#### USE OF SELECTIVE CALLING DEVICES

#### 1. General principle

The Working Party <u>unanimously decided</u> that <u>a selective calling</u> 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 <u>unanimously decided that a single international</u> <u>system should be adopted</u> 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 <u>recognized</u> 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 able to identify 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 preclude the use of working frequencies or national frequencies.



Document No. 189-E Page 2

As regards the HF range, the Working Party <u>unanimously decided</u> that <u>a frequency</u> is required in each of the bands allocated exclusively to the Maritime Mobile Service.

#### 5. Conclusion

The Working Group <u>recommended</u> 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.

Chairman:

A. CHASSIGNOL

**GENEVA, 1967** 

Document No. 190-E 28 September 1967 Original: English

COMMITTEE 4

SUMMARY RECORD

of the

SIXTH MEETING OF COMMITTEE 4

Wednesday, 27 September 1967, at 0930 hours

Chairman: Mr. F.G. PERRIN (Canada)

Vice-Chairman : Mr. M. ZAHRADNICEK (Czechoslovak Socialist Republic)

### Subject discussed:

Document No.

1. Examination of proposals concerning Appendix 15, Section A (continued)

DT/16



# 1. Examination of proposals concerning Appendix 15, Section A (Document No. DT/16) (continued)

The Chairman recalled that at the previous meeting the delegates of France and the United Kingdom had been requested to examine the question of channel spacing in the 8 Mc/s band for calling frequencies.

The <u>delegate of France</u> said that he and the United Kingdom delegate had been joined in their discussions by the delegate of the U.S.S.R. They wished to propose that the footnote in Appendix 15, Section A be retained and that No. 1179 of the Radio Regulations be left unchanged. No guard band should be provided for frequency 8364 kc/s.

The Chairman said that approval of the proposal would mean that the channel spacing in the 8 Me/s band would be 1 kc/s. He suggested that the proposal be approved.

It was so decided.

The <u>delegate of Italy</u> suggested that, since the Committee wished to retain harmonic relationship, the channel spacings should be 1.5 kc/s and 2 kc/s respectively in the 12 and 16 Mc/s bands. A spacing of 2.5 kc/s seemed to be suitable in the 22 Mc/s band.

It was so decided.

The <u>delegate of the Netherlands</u> suggested that the Committee should begin its discussion of assignable working frequencies for high traffic ships by considering sub-section c) 4) of Document No. DT/16.

It was so decided.

The Chairman, referring to the proposals submitted by administrations (Documents Nos. 10, 14, 18, 32, 50, 72, 77, 86, 107, 122 and 138) and having heard the comments of the delegates of Australia, Canada, Denmark, France, Greece, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Poland, the United Kingdom and the U.S.S.R., said there appeared to be agreement in principle that there should be separate bands for teleprinter and manual high traffic.

The <u>delegate of the Netherlands</u>, supported by the delegates of the <u>Federal Republic of Germany</u> and <u>Denmark</u>, suggested that low traffic as well as high traffic ships should be able to use the teleprinter band.

The Chairman said that the modified version of No. 1156 of the Radio Regulations gave administrations the right to assign frequencies from high traffic bands to any ships with a high volume of traffic.

The <u>delegate of the United Kingdom</u>, supported by the <u>delegates of Argentina</u>, <u>Australia</u>, <u>Brazil</u>, <u>Canada</u>, <u>Denmark</u>, <u>France</u>, <u>Italy</u>, the <u>Netherlands and Norway</u>, suggested that there should be two columns, one entitled "Assignable Frequencies, Direct Printing Telegraph Systems" and the second entitled "Assignable Working Frequencies for High Traffic Ships".

The <u>delegates of Italy</u> and the <u>United States of America</u> suggested that data transmission should be included in the heading of the first column proposed by the United Kingdom.

The delegate of the United Kingdom accepted that amendment.

The <u>delegate of Italy</u>, supported by the <u>delegates of Argentina</u> and <u>Japan</u>, suggested that the words "manual system" be added at the end of the title of the second column proposed by the United Kingdom.

The delegate of the Union of Soviet Socialist Republics, referring to sub-section c) 4) of Document No. DT/16, proposed that the bands relating to manual traffic should be qualified by a footnote to the effect that automatic systems would be permitted at speeds not exceeding 40 bands.

The <u>delegate of Australia</u>, referring to his Administration's proposal (Document No. 122, page 5), said that Australia had no objection to the inclusion of data transmission in the heading of the second column and of AI emission in the heading of the third column.

The <u>delegate of the United States of America</u>, referring to the Australian proposal, suggested that the words "single channel systems only" should be deleted.

The <u>delegate of Australia</u> suggested that those words be replaced by the words "at a speed not exceeding 100 bauds".

The <u>Chairman</u> suggested that a working group composed of the delegates of Australia, France, Italy, the Union of Soviet Socialist Republics, the United Kingdom and the United States of America should work out suitable column headings.

It was so agreed.

The <u>delegate of France</u> announced that the ad hoc working group had agreed to recommend the following independent columns for Appendix 15, Section A:

Assignable Frequencies for Direct Printing and Data Systems	Assignable Working Calling Frequencies for Frequencies High Traffic Ships (*)	Assignable Working Frequencies for Low Traffic Ships
		Surrhs

A foothote marked with an asterisk was recommended for the table - (\*) Manual or automatic Morse telegraphy at speeds not exceeding 50 bauds.

The <u>delegate of Norway</u> said that, while supporting the recommendations of the ad hoc working group, he considered that No. 1145 would also require amendment.

The <u>Chairman</u> agreed that No. 1145 might require amendment, but suggested that action thereon be deferred until the Committee considered Article 32.

The Committee accepted the proposals of the ad hoc working group.

Referring to the question of channel spacing, the <u>delegate of Italy</u> said that he had originally proposed 0.75 kc/s spacing in the 4 Mc/s band, but could agree to 0.5 kc/s spacing.

The <u>delegate of the United Kingdom</u>, supported by the <u>delegates of</u> France and Brazil, suggested 0.5 kc/s spacing for the 4 Mc/s band.

The <u>delegate of the U.S.S.R.</u> reverted to an earlier proposal he had made concerning decisions taken on Nos. 1156 and 1157. The channel spacing as laid down in the Radio Regulations should be retained and he proposed that the spacing of 1.5 kc/s be maintained until 1972 or 1973. By that time, the spacing could be reduced by two-thirds, i.e. to 0.5 kc/s.

The delegate of the United States of America said that his Administration had proposed 0.6 kc/s; however 0.5 kc/s was acceptable.

The <u>delegates of France</u>, <u>Italy</u>, the <u>United Kingdom</u>, <u>Argentina</u> and <u>Mexico</u> stated that they were prepared to accept 0.5 kc/s spacing in the <u>4 Me/s</u> band.

It was so agreed.

The <u>delegate of Italy</u>, supported by the <u>delegates of the United</u>
States of America and <u>New Zealand</u>, proposed the adoption of the same spacings as those used for the calling frequencies.

The <u>delegate of Norway</u> pointed out that no harmonic relationship was provided for the 22 Mc/s band. He proposed a spacing of either 3.0 kc/s or 2 kc/s.

The <u>delegate of Italy</u>, supported by the <u>delegates of the United Kingdom</u> and the <u>Netherlands</u>, proposed a spacing of 2.5 kc/s for the 22 Mc/s band.

The <u>delegate of Canada</u> said that the high traffic band was used by the larger ships which were provided with more expensive equipment such as synthetizers. He suggested that 0.5 kc/s spacing be used in order that more channels might be made available.

The <u>delegate of Poland</u> supported the Italian proposal and said that different treatment was necessary for low and high traffic ships. High traffic (e.g. in the 6 Mc/s band) implied a need for synthetizers and that question required further study.

The <u>delegate of Norway</u> agreed with the Italian proposal, since it was possible to use synthetizers at the frequencies that had been proposed. Referring to the 22 Mc/s band, he found difficulty in agreeing to a spacing of 2.5 kc/s in place of the existing 6 kc/s.

He repeated his suggestion of an alternative spacing of either 2 or 3 kc/s.

The <u>delegate of Italy</u>, reiterating his proposals for spacing in the various bands, specified the following:

in	the	6	Mc/s	band	0.5	kc/s	spacing
11	11	8	11 - 1	11	1.0	11	tt .
11	11 2	12	11	11	1.5	11	31
11	11	16	11	-11	2.0	11	tt

The <u>delegates</u> of the U.S.S.R. and <u>Poland</u> raised the question of the use of synthetizers in respect of which frequency assignments should be multiples of 100 c/s. It was difficult to see how the use of 0.75 kc/s spacing in the 4 Me/s band could be reconciled with multiples of 100 c/s.

The <u>delegate of Italy</u> said he preferred 0.75 kc/s spacing because it was divisible by 3 and because the adaptability of synthetizers was great enough to ensure that difficulties could be overcome.

The <u>delegate</u> of the <u>United Kingdom</u> said that ships equipped with synthetizers could use alternate frequencies in the 6 Mc/s band.

The Chairman, summing up the discussion on spacing, said that no objections had been made to the spacing proposed by Italy for the 8, 12 and 16 Mc/s bands.

The Italian proposals for those bands were approved.

The <u>delegate of Poland</u> suggested that difficulties encountered in deciding on spacing in the 6 Mc/s band could be resolved by a small working group comprising the United States of America, Italy and Poland. The findings of that group could be submitted to the Committee at its meeting on the following day.

The Polish proposal was accepted.

The <u>Chairman</u> suggested that the same working group could also consider spacing in the 22 Mc/s band.

It was so decided.

The meeting rose at 12.30 hours.

Secretary of Committee 4:

E. LURASCHI

Chairman of Committee 4:

F.G. PERRIN

**GENEVA, 1967** 

Document No. 191-E 29 September 1967 Original: English

COMMITTEE 7

WORKING GROUP TO CONSIDER THE FORM OF THE FINAL ACTS OF THE CONFERENCE FIRST REPORT TO COMMITTEE 7

The Working Group was established by Committee 7 at its first meeting to consider what form the Final Acts of the Conference should take, and related matters, and report its conclusions to the Committee. The Group's recommendation as regards the form of the Final Acts is that this should be the same as that adopted for the Final Acts of the Extraordinary Administrative Radio Conference to Allocate Frequency Bands for Space Radiocommunication Purposes, Geneva, 1963, and of the Extraordinary Administrative Radio Conference for the Preparation of a Revised Allotment Plan for the Aeronautical Mobile (R) Service, Geneva, 1966.

The Group has considered other possibilities but has concluded unanimously that no format other than that recommended is practicable having regard to the time that is available to the Conference.

P.W. FRYER Chairman of the Working Group



**GENEVA, 1967** 

Document No. 192-E
30 September 1967
Original : English/
French

#### COMMITTEE 5

# 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".



#### Document No. 192-E Page 2

#### Article 7

No. 442 - Guard-band for the distress frequency 2182 kc/s

The Working Group <u>decided</u> 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.

#### Nos. 443 and 444 -

The Working Group <u>agreed</u> that the provisions contained in Nos. 443 and 444 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. 445

The Working Group <u>adopted</u> the new text appearing in Annex I to this report.

#### Article 28

#### No. 983.

The Working Group <u>agreed</u> that the text of this number remains unaltered.

#### No. 984

The Working Group <u>adopted</u> the new text appearing in Annex II to this report. The provisions of this number will be applicable during and after the transition period.

Chairman:

P. AAKERLIND

Annexes: 2

### ANNEX I

Article 7

MOD 445 (4) In Regions 2 and 3, carrier frequencies 2635 kc/s (assigned frequency 2636.4 kc/s) and 2638 kc/s (assigned frequency 2639.4 kc/s) are used as single sideband intership radiotelephony working frequencies in addition to the specific frequencies prescribed for common use in certain services. The carrier frequency 2635 kc/s (assigned frequency 2636.4 kc/s) may be used only with class A3A and A3J emissions. The carrier frequency 2638 kc/s may, in addition, be used with class A3 and A3H emissions. After the transition period, only class A3A or A3J emissions shall be used on both frequencies. In Region 3, these frequencies are protected by a guard-band between 2634 and 2642 kc/s.

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#### ANNEXII

#### 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.

. . . . . . . . . . . . .

**GENEVA, 1967** 

Document No. 193-E 2 October 1967 Original: English

#### COMMITTEE 6

SECOND REPORT

of the

WORKING GROUP 6B TO COMMITTEE 6 (OPERATION)

#### Emergency position-indicating radiobeacons

Article 36 ADD 1388A
ADD Appendix 20A
Section VIII p. 264, ADD 1466A
ADD 1473A

Article 19 Section I p. 156, MOD 736
Section III p. 163, SUP 760
p. 164, ADD 768A
Section IV p. 166, ADD 777A

Working Group 6B unanimously agreed to recommend the draft provisions appearing in the Annex attached hereto.

H.A. FEIGLESON

.Chairman

Annex: 1



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### ANNEX

### Article 36, Section I

ADD 1388A

g 5(bis). The characteristics of the emergency position-indicating radiobeacon signals are given in Nos. 1476B, 1476C and 1476D.

#### 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

# 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 fulfil 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 at a distance of 30 nautical miles at sea level a field strength greater than 10 microvolts per metre.

- 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 frequency tolerance of emissions used for emergency position-indicating radiobeacons (Nos. 1476B and 1476C) are:
  - + 20 c/s for the frequency of 1300 c/s
  - ± 35 c/s for the frequency of 2200 c/s

/ex-C.C.I.R. Rec. 439 para.12\_7

- f) If the radiobeacons are designed to come into operation automatically when floating, then overriding facilities should also be provided to enable them to be switched on and off manually.
- g) Equipment shall be so designed as to comply with relevant C.C.I.R. recommendations.

## Annex to Document No. 193-E Page 6

### Article 36. Section III

ADD	1466A	(3) The use of the radiotelephone alarm signal (see No. 1465) by emergency position-indicating
		radiobeacons is indicated in Article 36, Section VIII A.
ADD	1473A	(1 bis) The radiotelephone alarm signal may be used by emergency position-indicating radiobeacons of Type H (No. 1476C).

#### Article 19. Section I

MOD	736	(2) However, the requirements of identification need not apply to:
		- survival craft stations when transmitting distress signals automatically, or
		- emergency position-indicating radiobeacons.
		Article 19, Section III
SUP	760	
ADD		Emergency position-indicating radiobeacon stations
ADD	768A	\$18(bis) - the morse letter B and/or the call sign of the parent ship to which the radiobeacon belongs.

### Article 19, Section IV

ADD 777A (4) <u>Emergency position indicating radiobeacon stations</u>

When speech transmission is used (No. 1476C)

- the name and/or the call sign of the parent ship to which the radiobeacon belongs.

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 194-E 3 October 1967 Original: French

COMMITTEE 6

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, the United States of America, the United Kingdom and Greece 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. 195-E 2 October 1967 Original: French

COMMITTEE 2

SUMMARY RECORD

of the

FIRST MEETING OF COMMITTEE 2
(CREDENTIALS)

Friday, 29 September 1967, at 0930 hrs.

Chairman: Mr. A. PETTI (Italy)

<u>Vice-Chairman</u>: Mr. Tesfatsion SEBHATU (Ethiopia)

Subject discussed:

Organization of work



#### Organization of work

The <u>Chairman</u> explained the terms of reference of the Committee and pointed out that the pertinent provisions were to be found in Chapter 5 of the General Regulations annexed to the International Telecommunication Convention (Montreux, 1965) (Nos. 628-640). He gave the following information:

- 61 countries were represented at the Conference;
- 48 delegations had deposited credentials which, subject to examination by the Committee, seemed to be in order;
  - 2 delegations had handed in credentials which did not seem to be quite in accordance with the Regulations. The Secretariat of the Conference had got in touch with the delegations concerned in order to settle the matter;
- 8 delegations had not yet deposited their credentials and had been requested to do so at their earliest convenience;
- 3 delegations had submitted provisional credentials.

For the time being, and until Committee 2 had submitted its report on credentials to the Plenary Meeting, all delegations, except those of the countries listed in Document No. 146, were entitled to vote. When the report had been submitted, only those delegations whose credentials had been recognized as in order, would be entitled to vote.

No. 639 of the General Regulations annexed to the Convention stated that the Credentials Committee should report on its conclusions before a date specified by the Planary Meeting.

The Chairman felt that 20 October 1967 (at 1800 hours) would be the most appropriate date since it was the limit fixed for the end of the work of Committees 4, 5 and 6.

The Committee agreed.

The <u>Chairman</u> proposed the setting up of a small Working Party, of which he would be Chairman, to examine the credentials and prepare a report for submission to the Committee as soon as possible.

Agreed.

The meeting rose at 0945 hrs.

Secretary of Committee 2:

Chairman of Committee 2:

C. STEAD

A. PETTI

## INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 196-E 2 October 1967 Original: English

#### COMMITTEE 4

#### SUMMARY RECORD

of the

#### SEVENTH MEETING OF COMMITTEE 4

Thursday, 28 September 1967, at 0930 hrs.

Chairman: Mr. F.G. PERRIN (Canada)

<u>Vice-Chairman</u>: Mr. M. ZAHRADNÍČEK (Czechoslovak Socialist Republic)

Subjects discussed:	Document Nos.:
1. Summary Record of first meeting	168
2. Summary Record of second meeting	169
3. Summary Record of third meeting	172
4. Summary Record of fourth meeting	175
5. Draft First Report of Committee 4	DT/12
6. Article 5 Nos. 171, 172	DT/2
7. Article 5, Nos. 196, 197, 199	DT/2



#### 1. Summary Record of first meeting (Document No. 168)

#### Page 4

The <u>delegate of Spain</u> said that in the Spanish text the word "proponga" in the Japanese delegate's statement on No. 996 should be changed to "posponga" and that the word "de" should be inserted before "8364 kc/s" in the amendment to No. 997 read out by the Chairman.

The <u>delegate of Brazil</u> pointed out that for the Japanese delegate's statement, the footnote reference, in the English text, should be "996.1" instead of 966.1.

The <u>delegate of the United States of America</u> said that the words "carrier frequency" should be inserted before "8364 kc/s" in the amendment to No. 997 read out by the Chairman, and that "A," should read for "Al". in that text.

Document No. 168 was approved with those amendments.

#### 2. Summary Record of second meeting (Document No. 169)

#### Page 3

The <u>delegate of the United States of America</u> proposed that the second paragraph be reworded to read:

"The delegates of Italy and the United States of America said that although they had specific proposals of their own to make they supported the proposal made by France on page 5 of Document No. 8, since the title suggested was more complete."

#### Page 4

The <u>delegate of Mexico</u> proposed that his statement should be altered to read as follows:

"The delegate of Mexico considered that, from the legal point of view, the relevant agenda item as set out in Document No. 1(Rev.) clearly empowered the Conference to allot frequencies for the transmission of oceanographic data. From the practical standpoint, too, the Conference should decide that allocations for the transmission of such data should be made in some parts of the maritime mobile service bands currently allocated to ships; if that was not wholly possible, and the relevant requests

were only partially satisfied, Article 9 could be applied while an appropriate conference was dealing with the subject. He therefore supported the relevant parts of the Italian and French proposals (Documents Nos. 32 and 128)."

#### Page 5

The <u>delegate of Cuba</u> said that his statement should be amended to read as follows:

"The <u>delegate of Cuba</u> said that his country recognized the importance of the oceanographic services, but considered that bands should not be allocated to them from the maritime mobile service pending the guarantee of a world plan for the oceanographic services. Cuba also suggested that aeronautical service bands should be used for the oceanographic service."

In reply to a query by the delegate of the United States of America, the representative of the Intergovernmental Maritime Consultative Organization said that the fourth, fifth and sixth lines of his statement should be altered to read:

"... concur in the use of the maritime mobile service bands by the ocean data service either on an interim or on a permanent basis. Even the interim use on a national basis might interfere with international maritime radiocommunication. Moreover, hydrographical and..."

#### Page 6

After a discussion, it was <u>agreed</u> that the last phrase of the statement by the representative of C.I.R.M. should read: "...that those Appendix 15B single sideband frequencies were already being used by several countries for communications".

The <u>delegate of Italy</u> proposed that the last two lines of his statement should be amended to read: "... by the I.O.C. and W.M.O. The resolution might also give some guarantees to countries which had expressed misgivings".

Document No. 169 was approved, subject to those amendments.

#### Document No. 196-E Page 4

#### 3. Summary Record of third meeting (Document No. 172)

#### Page 1

It was <u>agreed</u> to insert the time and date of the meeting, "22 September 1967 at 0930 hours", which had been omitted inadvertently.

#### Page 2

In response to a request for clarification on No. 158 from the delegate of Spain, the delegate of France suggested that the reference in brackets should be amended to read: "on the lines of the last sentence of footnote 271."

#### Page 4

The <u>delegate of the United States of America</u> pointed out an error in the last line of the paragraph on the Japanese proposal, where "2 089.5 ke/s" should be replaced by "2 091 kc/s". The subsequent Canadian statement should consequently be amended to read: "... to exclude the frequency 2 089.5 kc/s, as...".

Document No. 172 was approved with those amendments.

#### 4. Summary Record of fourth meeting (Document No. 175)

#### Page 3

The <u>delegate of the Netherlands</u> proposed that the last line of his statement be amended as follows:

"... with frequencies for a limited number of additional radiotelephone frequencies for common use."

The <u>delegate of Poland</u> said that the last phrase of the fifth statement from the bottom of the page should be altered to read: "... reducing radiotelegraphy frequencies so as to make them available for radiotelephony services."

#### Page 4

The <u>delegate of the Netherlands</u> suggested that the first sentence of the statement by the Acting Chairman of the I.F.R.B. should end with the words "Section B".

Document No. 175 was approved with those amendments.

#### 5. Draft First Report of Committee 4 (Document No. DT/12)

The Chairman said he was aware of the danger of approving texts too quickly and having to make alterations when the documents were already in their printed form. However, the Chairmen of all the Committees had been asked to pass their approved texts to the Editorial Committee as rapidly as possible. The records, drafts, working documents, etc. approved and amended would therefore be passed to the Editorial Committee (which would ensure that the three language versions corresponded exactly) and issued as Committee documents.

He announced some changes to the working Document No. DT/12, namely, the insertion of 1155 and 1157 in the list of numbers on the cover page, and the deletion of the words in brackets after SUP 200 and the reference MOD 200.

#### Page 2 - No. 158

The <u>delegate of France</u> said he would hand in drafting changes to No. 158 and certain other numbers.

#### No. 437A

The <u>delegate of Argentina</u> proposed replacing "radiotelegraph transmissions" in line 2 by "for radiotelegraphy", and inserting "A2H" before "single sideband" at the end of line 3.

After considerable discussion, the following re-wording of the second sentence was agreed:

"... The discrete frequencies specified in the Radio Regulations for class A2H emission in the maritime mobile service, such as 410, 425 ... 8 364 kc/s, shall be used as carrier frequencies."

The <u>delegate of the United Kingdom</u> proposed the deletion of the figure (1) at the beginning of the paragraph.

#### No. 453

The delegate of the United Kingdom proposed the following to replace the existing paragraph:

"g) Coast stations, wide-band and manual telegraphy, facsimile, special and data transmission systems and direct printing telegraph systems."

#### Document No. 196-E Page 6

That proposal was supported by the <u>delegates of South Africa</u>, the <u>United States of America</u>, <u>New Zealand</u>, <u>France</u>, the <u>Federal Republic of Germany</u>, the Netherlands and Portugal.

The latter pointed out that the French and Spanish texts of No. 451 would have to be amended as a consequence.

#### No. 974.1

It was agreed to change A2 and A2H to A2 or A2H.

#### No. 975

It was <u>agreed</u>, for the sake of clarity, to amend the first line to read:

" ... class Al and either A2 or A2H emissions."

#### No. 976

The delegate of the United Kingdom proposed that the word "to" in the second line be replaced by "for" in the English text.

#### No. 992

The <u>delegate of South Africa</u> suggested that the word "carrier" be inserted before "frequency" in the seventh line.

The delegate of the United States of America observed that, since the frequency  $2\ 182\ kc/s$  related to telephony, the matter should be dealt with in Committee 5.

The <u>Chairman</u> said he would draw the question to the attention of the Chairman of Committee 5.

#### No. 995

The <u>delegate of the United Kingdom</u> proposed that the words "(but see No. 677)" in the third line should be placed in square brackets, as no decision had yet been taken on the suppression of No. 677.

It was so agreed.

#### No. 997

The <u>delegate of the United States of America</u> proposed that the words "the carrier frequency" be inserted before "8 364 kc/s", to bring the provision into line with Nos. 992 and 995, and that the word "bands" be inserted after "these" at the end of the third line.

It was so agreed.

The draft report (Document No. DT/12), as amended, was approved.

#### 6. Article 5: Nos. 171 and 172 (Document No. DT/2, page 13)

The delegate of the United Kingdom said that his Administration had proposed the deletion of No. 171 (G/61(66)) because of the declining use of the band in question by ships and of No. 172 because there was no longer any need to give preference to ships in the band 130 - 150 kc/s.

The <u>delegate of Greece</u> said that his Administration had made similar proposals in Document No. 160, which was before Committee 5.

The <u>delegates of the Federal Republic of Germany</u> and <u>Switzerland</u> agreed that No. 171 should be suppressed, but considered that No. 172 should be retained, as a fixed service had now been established in the Region 1 Frequency Table, and the band should not be made more attractive than was necessary.

The <u>delegate of Sweden</u> asked whether the intention of the United States and United Kingdom proposals was not in fact to delete the band from the Frequency Table, in which case provision should be made for a fixed service.

The <u>delegate of the United States of America</u> explained that his Administration had had no intention of vacating the band 143 kc/s where the maritime mobile service was concerned, but wanted it to be put to more effective use. The limited use of the band for the maritime mobile service in recent years was due to the fact that it was guarded by a band of ± 3 kc/s.

The delegate of France endorsed that explanation.

The <u>delegate of the United Kingdom</u> also agreed with the explanation, and said he would not press for the suppression of No. 172 in the light of the debate.

The <u>delegate of Greece</u> said that, if No. 172 was retained, his Administration would want to append a footnote, the text of which he would supply.

It was decided to suppress No. 171 and to retain No. 172.

#### 7. Article 5: Nos. 196, 197 and 199 (Document No. DT/2, pages 13 and 17)

The <u>delegate of Japan</u> said that the reason for his Administration's proposal (J/90(90)) was that the word "also" had been inadvertently omitted from No. 196 at the 1959 Administrative Radio Conference.

The <u>delegates of France</u>, <u>Italy</u> and <u>Portugal</u> said that, as a matter of principle, they did not consider the Conference to be competent to deal with a question relating to the maritime radionavigation service.

The <u>delegate of Poland</u>, supported by the <u>delegate of Hungary</u>, said that his Administration had the same problem as Japan: the word "also" had been left out of No. 163.

The <u>delegates of Korea</u>, <u>Singapore</u> and <u>Malaysia</u> supported the Japanese proposal.

The <u>delegate of Sweden</u>, supported by the <u>delegates of Switzerland</u> and <u>India</u>, considered that the omission of the word "also" was obviously an error, and that the Japanese proposal should be approved, particularly since the effect of that action would be to bring Japan closer into line with the Frequency Table.

The <u>delegate of Australia</u> endorsed that view, and pointed out that the service in question was undoubtedly additional to the fixed and mobile services listed for Region 3 in the relevant table.

The <u>delegates of Italy</u> and <u>France</u> considered that, although an error might have been committed, the <u>Conference</u> would be establishing a dangerous precedent in taking a decision on a matter which lay outside its competence.

The <u>delegate of South Africa</u> supported that view and pointed out that the insertion of the word "also" was unnecessary, since under No. 138 permitted and primary services had equal rights, and No. 137 indicated the type used to designate those services; where footnotes showed that a service of a country or group of countries was permitted, there was no need to refer to the primary service.

In reply to a question by the <u>delegate of Poland</u>, the <u>Acting Chairman of the I.F.R.B.</u> said that the I.F.R.B. had examined a number of queries on the subject from administrations and had concluded, on the basis of a necessarily literal interpretation of the Radio Regulations, that where the word "also" was omitted, the allocations in question must be regarded as replacements, not as additional. Great care had been taken in establishing the terminology of the Regulations in 1959, but some delegations to the Conference might have misunderstood the meaning of the wording, and might have omitted the word "also", although they had intended to indicate additional services, not replacements.

The <u>delegate of Sweden</u> considered that the Conference was competent to deal with the Japanese proposal.

The <u>delegates of Italy</u> and <u>France</u> said that the Conference was not competent to take a decision concerning any band which was not used exclusively for the maritiee mobile service. An error had probably been made, but could not be rectified at this stage. The Swedish delegate's argument was unfounded, as approval of the Japanese proposal would also have the effect of weakening the position of the fixed service.

The <u>delegate of the United States of America</u> did not think the Committee could assume that errors had been made in all the cases where the word "also" had been omitted, or that it could embark on a wholesale correction at this juncture. Perhaps the Japanese Administration's problem could be dealt with by publishing an erratum to the Radio Regulations.

The <u>delegate of Japan</u> stressed that the intention of his country's delegation to the 1959 Conference had been to state in the footnote that the radionavigation service in question was additional to the fixed and mobile services. Since it was perfectly clear that radionavigation was an additional use of the band, the Conference was competent to make the proposed change. Moreover, he did not quite understand the meaning of the Italian and French delegates' reference to bands used exclusively for the maritime mobile service.

In view of the late hour the Chairman suggested that the problem be deferred until the eighth meeting.

The meeting rose at 1245 hours.

Secretary of Committee 4:

Chairman of Committee 4:

E. LURASCHI

F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 197-E 2 October 1967 Original : English

#### COMMITTEE 4

#### SUMMARY RECORD

of the

EIGHTH MEETING OF COMMITTEE 4

Friday, 29 September 1967 at 0930 hours

Chairman: Mr. F.G. PERRIN (Canada)

Vice-Chairman: Mr. M. ZAHRADNÍČEK (Czechoslovak Socialist Republic)

#### Subjects discussed:

#### Documents Nos.

1. Draft first report of Committee 4 (continued)

DT/12

- 2. Article 5, Nos. 196, 197 and 199 (continued) DT/2, pages 13, 17 and 12
- Further consideration of proposals concerning oceanography

32, 104, 128, 133, 160, 165(Rev.) and 178



### 1. <u>Draft First Report of Committee 4</u> (Document No. DT/12) (continued)

The Chairman announced that a revised version of Document No. DT/12, as amended in the seventh meeting, would be issued for approval by the Committee at a later meeting.

## 2. Article 5: Nos. 196, 197 and 199 (Document No. DT/2, pages 13, 17 and 12) (continued)

The Chairman, recalling that at the previous meeting some members had questioned the Conference's competence to correct errors made in the Radio Regulations by the 1959 Ordinary Administrative Radio Conference, requested the Secretary of the Conference to comment on the matter.

The Secretary of the Conference said that he had been authorized to state the Secretary-General's opinion on the matter. He would base his remarks on No. 196 in which, it had been suggested, an error had been made at the 1959 Radio Conference. It was clear that the 1967 Maritime Conference was not competent to amend the Regulations adopted by the 1959 Conference in any way which would affect other services, since the Convention stated that Administrative Conferences could discuss only items included in their agenda. The case in question was, however, rather a special one, and under the circumstances, one way of solving the difficulty might be to send a circular telegram to all Members of the Union saying that in the opinion of the Conference errors appeared to have been made in certain footnotes — which should be listed in the telegram — and seeking authorization to correct those errors. He wished to stress that in making that suggestion he was referring only to footnotes in which the Conference considered an error had been made in 1959.

#### The delegate of Sweden endorsed the suggestion.

The <u>delegate of Poland</u>, referring to the reservation he had made at the previous meeting concerning No. 163, in which the word "also" should be inserted before the word "allocated", said that the countries mentioned in that footnote would probably request that it be among those listed in the circular telegram.

The <u>delegate of Portugal</u> asked what provision in the Convention permitted the revision of the Regulations by correspondence.

The <u>delegate of the U.S.S.R.</u> said that although his delegation did not object in principle to the despatch of a circular telegram it could not state its position definitively until it had seen the text of the telegram.

The <u>delegate of Czechoslovakia</u> suggested that it might be more correct to ask administrations to indicate any errors they thought had been made in the Regulations.

The <u>Secretary of the Conference</u>, replying to the question raised by the delegate of Portugal, said that the Convention contained no provision for amending the Regulations by correspondence. The procedure he had suggested was an exceptional one to meet a special case.

The Chairman suggested that an ad hoc Working Group composed of the delegates of Australia, France, India, Italy, Japan, Poland, Portugal and Sweden, should consider the matter and submit a proposal to the Committee at its meeting of 3 October and that the delegate of Sweden be responsible for convening the meetings of the Group.

#### It was so decided.

3. Further consideration of proposals concerning oceanography (Documents Nos. 32, 104, 128, 133, 160, 165 (Rev.), and 178)

The Chairman, pointing out that the Committee had held a preliminary general discussion on oceanography at its second meeting, suggested that it should now consider the question whether the Maritime Conference should allocate frequencies from the maritime mobile bands for ocean data purposes.

The <u>delegate of France</u> said that the needs of the oceanographic service could be net in bands other than those of the maritime mobile service. Documents Nos. 128 and 104 contained constructive proposals on the subject.

The delegates of New Zealand, Australia, Canada, the Federal Republic of Germany, Mexico, the United States of America and Venezuela said that the Conference was competent to, and should, allocate frequencies from the maritime mobile bands to the ocean data service. Legal questions could be dealt with as suggested in the Italian proposal (Document No. 32).

The <u>delegate of Singapore</u> said his Administration agreed that the ocean data service should be accommodated in the high frequency maritime mobile bands and that the Conference was competent to allocate frequencies for the service. The use of the frequence should be co-ordinated by the Intergovernmental Oceanographic Commission (I.O.C.) and the World Meteorological Organization (W.M.O.). The Conference should not merely assign frequencies; it should also determine the organizational and operational procedures of the service. If the Conference was prevented by lack of time from accomplishing those tasks during its current session, it should at least prepare a recommendation on the subject for submission to the I.T.U. Administrative Council at its next session.

The <u>delegate of Poland</u> said that at the previous meeting he had requested I.M.C.O. and I.O.C. to supply information about the organization and financing of an ocean data assembly and transmission system. That information had not been supplied. Furthermore, it appeared that at a recent I.M.C.O. Conference, proposals on the subject by I.O.C. had been rejected. Such lack of interest by the organization most concerned increased his Administration's difficulty in determining for whom the ocean data system was required.

The <u>delegate of the U.S.S.R.</u> said that an oceanographic data assembly and transmission system would undoubtedly be useful in preventing the loss of life at sea. Logically, however, such a system should evolve within the framework of the World Weather Watch, which W.M.O. had recently established on sound organizational and financial bases. His Administration's proposals on the matter were contained in Document No. 165 (Rev.).

The <u>delegate of Italy</u> said that the current Conference should allocate frequencies for the transmission of oceanographic data. The rules governing the operation of the system could be worked out after the frequency bands had been allocated.

The <u>delegate of Bulgaria</u> asked which services provided meteorological information. The procedure suggested by the Italian delegate would lead to chaos in maritime communications. The views expressed by the French and Polish delegations were, however, acceptable to his Administration.

The <u>delegate of Brazil</u> said that nothing should be done to impede the development of an ocean data assembly and transmission system, the main purpose of which was to prevent the loss of life at sea. The matter should be dealt with at the current Conference and frequencies from the maritime mobile band should be allocated to the ocean data service.

The representative of the International Maritime Consultative Organization said that I.M.C.O. fully appreciated the importance of an ocean data service. However, at the I.M.C.O. meeting to which he had referred in his previous statement, no satisfactory answer had been found to the question why the ocean data service should be accommodated in the maritime mobile service. It would be remembered that the 1966 Aeronautical Conference had refused to allocate frequencies for the transmission of ocean data.

The <u>delegate of Italy</u> said that the Aeronautical Conference had not declined to allocate frequencies for the transmission of ocean data; rather, it had considered itself incompetent to consider the question, which had not been on its agenda.

The <u>delegate of Poland</u> asked if I.M.C.O. favoured the assignment of frequencies for oceanographic services from the maritime mobile bands.

The <u>delegate of Japan</u> said that, since the Committee had altered the frequency allocations in Appendix 15 at its preceding meeting, Japan wished to withdraw Document No. 173 and supported the proposals contained in Document No. 178. The current Conference should allocate frequencies for oceanographic communications.

The <u>delegate of South Africa</u> said he could only speak for the South Atlantic and South Indian Ocean areas as a region in which weather forecasts were based on reports received from the South Pole, Tristan da Cunha, Gough Island and Marian Island. Most of the meteorological information from those stations related to the upper atmosphere and was passed on to W.M.O. Those weather forecasts were of great importance to shipping and in connection with the safety of life at sea.

He also stated that fishing and whaling fleets belonging to the U.S.S.R., Norway, Spain and to other countries were operating off the coasts of South Africa and that detailed knowledge on ocean currents and sea temperatures would be of great value to those interests, especially if they were disseminated through some international body. The provision of ocean data would also facilitate the work of seafarers. He considered that maritime frequencies should be used for this purpose and was anxious to lend every support to efforts designed to improve weather forecasts. He believed that the current Conference should take a decision to provide the frequencies required for the transmission of ocean data from the maritime mobile service bands.

The <u>delegate of Portugal</u> said he had heard no objections raised with regard to the importance of ocean data information. The matter was also urgent, and it seemed to him logical to provide facilities from the maritime mobile service. He considered that the allocation of frequencies should be made by the current Conference.

The <u>delegate of Ireland</u> supported the New Zealand proposals and, in particular, the principle that frequencies should be allocated for ocean data purposes.

The <u>delegate of Greece</u> said that Document No. 160 contained the Greek proposals. He supported the proposals of Canada, Portugal and the United Kingdom. The United Kingdom proposals in Document No. 178 would provide a good basis for a solution of the problem.

The <u>delegate of Czechoslovakia</u> said that he supported the proposals of the U.S.S.R. in Document No. 165 (Rev.).

The <u>delegate of Malaysia</u> said he considered that frequencies should be allocated from the maritime mobile service bands. The allocations should be made by the current Conference. In the event of that action being taken, he wished to know which international organization would be responsible for the service.

The <u>delegate of Argentina</u> expressed his conviction of the importance of ocean data. He was in favour of allocating frequencies for the maritime mobile service bands, but stressed the need for close collaboration between the I.O.C. and W.M.O.

The <u>delegate of Yugoslavia</u> stated that his country had an Oceano-graphical Institute whose work was closely connected with that of W.M.O. A study of the procedures in national services would show that much could be learned from the experience of those services regarding the allocation of frequencies to the departments requiring them. The problem of allocating frequencies on a world-wide basis was much more difficult, especially when no detailed plan was available. The Committee was in an impasse: it had to decide whether frequencies could legally be allocated from the maritime mobile service, but the main problem was technical, and no service should suffer through lack of action in the Committee. A solution must be found to the basic problem, but a later conference should take up the question in greater detail after ample time had been allowed for mature consideration of the needs of both meteorological and oceanographical services.

The <u>delegate of Spain</u> supported proposals for allocating frequencies for the transmission of ocean data. With regard to the bands to be used, he was in favour of the United Kingdom proposals in Document No. 178.

The <u>delegate of Australia</u> observed that all delegates agreed on the principle that only good could come from the ocean data service. The maritime service would also benefit. Further opportunities to allocate frequencies would not occur for some considerable time and, in order to avoid delay, he supported the United Kingdom proposals in Document No. 178.

The delegate of Hungary supported the U.S.S.R. proposals.

The <u>delegate of Pakistan</u> said that much benefit would be derived from the supply of ocean data, particularly in such areas as East Pakistan which was ravaged by hurricanes every two years. The frequencies should be allocated from the maritime mobile service. He suggested that an international code could be established to ensure that full benefit was obtained from the proposed service.

The <u>delegate of Indonesia</u> said that, although no proposals had been submitted by his country he considered that a decision should be taken by the current Conference.

The <u>delegate of Sweden</u> emphasized the need for the allocation of frequencies by the current Conference, and for constructive action at the Committee stage. Although originally concerned about the United States proposals to take the frequencies from the SSB, he had found the proposals of the United Kingdom and Japan generally acceptable.

The <u>delegate of the U.S.S.R.</u> said that no delegation objected to frequencies for ocean data being made available from one or other band. The question was to decide when that should be done. If the action was to be taken by the current Conference, it remained to be decided which authority would operate the frequencies and to which authority they should be allocated. The principle of allocating the frequencies at the current Conference was not

well-founded. At the Aeronautical Conference, which he had attended in 1966, discussion of that same question had resulted in the question being removed from the agenda. In paragraph 4 of U.S.S.R. Document No. 165, it was recommended that the I.O.C. and W.M.O., in consultation with the I.F.R.B., should submit a plan for the use of radio frequencies for oceanographic purposes for consideration by the next Ordinary Administrative Conference. Moreover, Working Group 5D was discussing plans, including the possibility of submitting the question to some future conference which would have the item on its agenda. At such a future conference it would be possible to deal with many questions on which delegations lacked clear information.

The <u>Chairman</u> pointed out that, during the discussion in which so many delegates had taken part, questions raised by the delegates of Bulgaria and Malaysia had not been answered.

The <u>delegate</u> of <u>Bulgaria</u> said he expected no reply because it was not yet decided how the proposed services would operate. Decisions on questions of frequency allocation could not be taken in haste. The work needed to be done on a planned basis, as it had been done during discussions on the revision of Appendix 25.

The <u>delegate of Malaysia</u> said that the trend of the discussion had indicated that frequencies would be allocated by the current Conference, but wished to know which organization would be responsible for the use of those frequencies.

The <u>delegate of Norway</u> stated that he fully understood the value of oceanography and supported the proposal of Sweden that action should be taken at the current Conference. Norway had had considerable experience in operating meteorological and oceanographical buoys. There was ever-increasing traffic on the maritime mobile bands, especially in radictelephony, and I.M.C.O. had also held discussions on that question. The solution adopted would not give legal protection, so that it would be dependent on the will of the Members of the Union. He announced that he had agreed with the delegates of Denmark and Sweden to withdraw Document No. 104. The United Kingdom proposals in Document No. 178 provided an acceptable solution.

The Chairman, replying to questions raised by the delegates of the U.S.S.R. and France, said he would endeavour to obtain the views of the Committee on the questions of principle and on the U.S.S.R. proposals (Document No. 165). In answer to a question by the delegate of Cyprus, he said that the Polish delegate had consulted with the representative of I.M.C.O., who had replied directly to the former's enquiry.

The <u>delegate of the United States of America</u> suggested that any frequencies allocated should be entrusted to W.M.O. and I.O.C. as far as operation was concerned.

The <u>delegate of Cuba</u> said he was not in favour of allocating frequencies from the maritime mobile service until data could be made available to all countries. That question could be dealt with at a later conference.

The <u>Chairman</u> asked the delegate of the U.S.S.R. whether he would be prepared to withdraw the resolution in Document No. 165 on the understanding that a new recommendation could be drafted if the current Conference decided to allocate frequencies.

The <u>delegate of the U.S.S.R.</u> said that the United States delegation had made a new constructive proposal. A compromise solution could probably be found. Discussion of the question in a large committee presented difficulties and he favoured its referral to a smaller group, where a draft proposal could be worked out and submitted to the Plenary Committee.

After a discussion in which the <u>delegates of the U.S.S.R.</u>, <u>France</u> and <u>Poland</u> took part, the <u>Chairman</u> invited the Committee to vote on the motion: "Does this Conference agree to allocate frequencies for ocean data purposes from the maritime mobile bands?"

The motion was carried by 40 votes to 13, with 4 abstentions.

Since the vote had decided the question of principle, the Chairman invited Mr. Jarov (U.S.S.R.) and Mr. Myers (United States of America) to meet in order to draft a new recommendation for submission to Committee 4 as soon as possible.

The <u>delegate</u> of the U.S.S.R. said he had asked to speak again before the vote, since the new United States proposal should have been considered prior to the voting. His delegation considered that there was still a fundamental point contained in Document No. 165. He questioned whether, after the vote, a decision could be reached, since the vote had been taken only on a practical question. He was not opposed to consulting with the United States delegate as the Chairman had suggested.

The <u>Chairman</u> said that the question of allocation of frequencies was still before the Committee. He appealed to delegates to make as rapid progress as possible and hoped that the recommendation resulting from the discussions between the U.S.S.R. and the United States would serve the best interests of both telecommunications and ocean data systems.

Document No. 197-E Page 9

The <u>delegate of Poland</u> stated that, in accordance with the provisions of No. 745 of the Convention, he reserved the right of his delegation to raise the matter in Plenary session.

The <u>delegate of the U.S.S.R.</u> also reserved the right to return to the question in Plenary session.

The meeting rose at 12,20 hours.

Secretary of Committee 4

E. LURASCHI

Chairman of Committee 4
F.G. PERRIN

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 198-E 2 October 1967 Original: French

PLENARY MEETING

#### NOTE BY THE SECRETARIAT

The attached letter from the Ministry of Public Works, Mines, Transport, Posts and Telecommunications of the Togolese Republic is submitted to the Conference for information.

C. STEAD Secretary of the Conference

Annex: 1



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#### ANNEX

MINISTRY OF PUBLIC WORKS,
MINES, TRANSPORT,
POSTS AND TELECOMMUNICATIONS

TOGOLESE REPUBLIC

Lomé, 27 September 1967

#### POSTS AND TELECOMMUNICATIONS DEPARTMENT

No. 2692/MTP/PT HA/AD

The Minister of Public Works, Mines, Transport, Posts and Telecommunications to

The Chairman, World Maritime Mobile Radio Conference.

GENEVA (Switzerland)

Sir,

I have the honour to confirm my telegram No. 2627/MTP/PT dated 22 September 1967 in which I empower the delegation of the Group of Territories represented by the French Overseas Post and Telecommunication Agency (BEPTOM) to represent my Government at the World Maritime Mobile Radio Conference, pending the arrival of the Togolese delegation of Posts and Telecommunications.

Accept, Sir, the assurance of my highest consideration.

(Sgd.):

A. MIVEDOR

## MARITIME CONFERENCE

**GENEVA, 1967** 

Document No. 199-E 3 October 1967 Original: French/English

#### COMMITTE'5

FIRST REPORT BY WORKING GROUP 5B TO COMMITTE 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 supported the principle of designating frequencies for calling coast stations by ship stations in the high-frequency bands.

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 1.

J. BES

Chairman

Annex: 1



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#### A N N E X

Article 35

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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.

# INTERNATIONAL TELECOMMUNICATION UNION MARITIME CONFERENCE

**GENEVA, 1967** 



Document No. 200-E

4 October 1967

Original: French/English

Spanish

#### PLENARY MEETING

## LIST OF THE DOCUMENTS PUBLISHED BY THE CONFERENCE (Documents Nos. 1 to 200)

Document No.	Title	Origin	Destination
1 (Rev.)	Agenda of the Conference	s.G.	Plenary Meeting
2 and Corr.	Recommendations and Opinion of the C.C.I.R. relevant to Items 5 and 7.2 of the Agenda of the Conference	s.G.	Plenary Meeting
3	Proposal concerning Agenda Item 2.3	F.R. of Germany	Plenary Meeting
4	Proposal concerning Agenda Item 1	F.R. of Germany	Plenary Meeting
5	Proposal concerning Agenda Item 7.4	F.R. of Germany	Plenary Meeting
6	Proposal concerning Agenda Item 6	F.R. of Germany	Plenary Meeting
7	Proposal concerning Appendix 16 of the Radio Regulations	F.R. of Germany	Plenary Meeting
8 and Corr.	Proposalsconcerning Agenda Item 1	France	Plenary Meeting
9	Proposalsconcerning Agenda Item 2	France	Plenary Meeting
10	Proposals concerning Agenda Item 3	France	Plenary Meeting
11	Proposals concerning Agenda Item 4	France	Plenary Meeting
12	Proposals concerning Agenda Item 5	France	Plenary Meeting
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Document No.	Title	Origin	Destination
13	Proposalsconcerning Agenda Item 6	France	Plenary Meeting
14	Proposals concerning Agenda Item 7	France	Plenary Meeting
<b>15</b>	Proposals concerning use on board ships of frequencies of the order of 27 Mc/s	France	Plenary Meeting
16	Proposals concerning Agenda Item 1	U.S.A.	Plenary Meeting
17	Proposals concerning Agenda Items 2.1 to 2.5	U.S.A.	Plenary Meeting
18	Proposals concerning Agenda Item 3	U.S.A.	Plenary Meeting
19	Proposals concerning Agenda Item 4	U.S.A.	Plenary Meeting
20	Proposals concerning Agenda Item 5	U.S.A.	Plenary Meeting
21	Proposals concerning Agenda Item 6	U.S.A.	Plenary Meeting
22 and Add.	Proposals concerning Agenda Items 7.1 to 7.6	U.S.A.	Plenary Meeting
23	Proposals concerning the Amendment of Article 32 of the Radio Regulations (additional Agenda Item)	U.S.A.	Plenary Meeting
24	Proposals concerning the Amendment of No. 981 of the Radio Regulations (additional Agenda Item)	U.S.A.	Plenary Meeting
25	Proposals concerning the Amendment of Article 5 of the Radio Regulations (additional Agenda Item)	U.S.A.	Plen <b>ary Me</b> eting

Document No.	Title	Origin	Destination
26	Proposals concerning the examination of the need for the retention of the calling frequency 143 kc/s and its associated guard band, 140 - 146 kc/s (additional Agenda Item)	U.S.A.	Plenary Meeting
27	Proposals concerning the modifi- cation of the maximum power authorized for coast telegraph stations when using other than Al and single channel F1 emissions (additional Agenda Item)	U.S.A.	Plenary Meeting
28	Proposals concerning the establishment and use of a Manual for use by the Maritime Mobile Service (additional Agenda Item)	U.S.A.	Plenary Meeting
29	Proposals concerning the amendment of Nos. 863 and 903 of the Radio Regulations (additional Agenda Item)	U.S.A.	Plenary Meeting
30	Proposals concerning Agenda Item 7.2	Denmark, Norwa <b>y</b> and Iceland	Plenary Meeting
31 and Corr.	Proposals concerning Agenda Item 1	Italy	Plenary Meeting
32	Proposals concerning Agenda Items 2.3 and 2.4	Italy	Plenary Meeting
33 and Corr.	Proposals concerning Agenda Item 3	Italy	Plenary Meeting
34	Proposals concerning Agenda Item 4	Italy	Plenary Meeting
35	Proposals concerning Agenda Item 5	Italy	Plenary Meeting
36	Proposals concerning Agenda Item 7.2	Italy	Plenary Meeting
37	Proposals concerning Agenda Item 3	Denmark, Iceland, Norway and Sweden	Plenary Meeting

Document No.	Title	Origin	Destination
38	Proposals concerning Agenda Item 6	Denmark	Plenary Meeting
39	Proposals concerning Agenda Item 1	Canada	Plenary Meeting
40	Proposals concerning Agenda Item 2.1	Canada	Plenary Meeting
41	Proposals concerning Agenda Item 3	Canada	Plenary Meeting
42	Proposals concerning Agenda Item 4	Canada `	Plenary Meeting
43	Proposals concerning Agenda Item 5	Canada	Plenary Meeting
44	Proposals concerning Agenda Item 6	Canada	Plenary Meeting
and Corr.	Proposals concerning Agenda Items 7.1 to 7.6	Canada	Plenary Meeting
46	Proposals concerning the amendment of Nos. 158 and 167 of the Radio Regulations (additional Agenda Item)	Canada	Plenary Meeting
47	Proposals for the work of the Conference	Malagasy Republic	Plenary Meeting
48	Proposals concerning Agenda Item 1	U.S.S.R.	Plenary Meeting
49	Proposals concerning Agenda Items 2.1 to 2.5	U.S.S.R.	Plenary Meeting
50	Proposals concerning Agenda Item 3	U.S.S.R.	Plenary Meeting
51	Proposals concerning Agenda Item 5	U.S.S.R.	Plenary Meeting
52	Proposals concerning Agenda Item 6	U.S.S.R.	Plenary Meeting
53	Proposals concerning Agenda Item 7.4	U.S.S.R.	Plenary Meeting

Document No.	Title	Origin	Destination
54	Proposals for the work of the Conference	Australia	Plenary Meeting
55	Proposals concerning Agenda Item 4	U.S.A.	Plenary Meeting
56 <sub>.</sub>	Proposals concerning Agenda Item 2	United Kingdom	Plenary Meeting
57	Proposals concerning Agenda Item 4	United Kingdom	Plenary Meeting
58	Proposals concerning Agenda Item 5	United Kingdom	Plenary Meeting
59 and Corr.	Proposals concerning Agenda Item 6	United Kingdom	Plenary Meeting
60	Proposals concerning Agenda Items 7.1 to 7.6	United Kingdom	Plenary Meeting
61	Proposals relating to the use of 143 kc/s (additional Agenda Item)	United Kingdom	Plenary Meeting
62	Proposals relating to the Establishment of a Manual for use by the Maritime Mobile Services (additional Agenda Item)	United Kingdom	Plenary Meeting
63	Proposals concerning the deletion of Class B emissions (additional Agenda Item)	United Kingdom	Plenary Meeting
64	Proposals relating to a Re-classification of International Public Correspondence Categories of Ship Stations (additional Agenda Item)	United Kingdom	Plenary Meeting
65	Proposals relating to a revision of calling procedure (additional Agenda Item)	United Kingdom	Plenary Meeting
66	Proposals relating to the use of class A2H emissions on working frequencies	United Kingdom	Plenary Meeting

Document No.	Title	Origin	Destination
67	Proposals relating to amendments to the Additional Radio Regulations (additional Agenda Item)	United Kingdom	Plenary Meeting
68 and Corr.	Proposals relating to Operators' Certificates for Ship Stations (additional Agenda Item)	United Kingdom	Plenary Meeting
69	Proposals concerning Agenda Item 2.4	U.S.A.	Plenary Meeting
70	Proposals concerning Agenda Item 1	Netherlands	Plenary Meeting
71	Proposals concerning Agenda Items 2.1 to 2.5	Netherlands	Plenary Meeting
72	Proposals concerning Agenda Item 3	Netherlands	Plenary Meeting
73	Proposals concerning Agenda Item 5	Netherlands	Plenary Meeting
74	Proposals concerning Agenda Item 6	Netherlands	Plenary Meeting
75	Proposals concerning Agenda Items 7.1 to 7.6	Netherlands	Plenary Meeting
76 Add.1 (Rev.) Corr. 1 and 2	Proposals concerning Agenda Item 1	United Kingdom	Plenary Meeting
77	Proposals concerning Agenda Item 3	United Kingdom	Plenary Meeting
78	Proposals concerning Agenda Item 9 (additional Agenda Item)	United Kingdom	Plenary Meeting
79	Proposals relating to the reduction of the guard-band for the International Distress and Calling Frequency, 2182 kc/s (RR 1325)	United Kingdom	Plenary Meeting
80	Proposals concerning Agenda Item 3	Netherlands	Plenary Meeting
81	Proposals concerning Agenda Item 1	Poland	Plenary Meeting

Document No.	Title	Origin	Destination
82	Proposals concerning Agenda Item 2.3	Poland	Plenary Meeting
83	Proposals concerning Agenda Item 5	Poland	Plenary Meeting
84	Proposals concerning Agenda Item 1	Japan	Plenary Meeting
85	Proposals concerning Agenda Item 2.3	Japan	Plenary Meeting
86	Proposals concerning Agenda Item 3	Japan	Plenary Meeting
87	Proposals concerning Agenda Item 4	Japan	Plenary Meeting
88	Proposals concerning Agenda Item 6	Japan	Plenary Meeting
89	Proposals concerning Agenda Item 7.2	Japan	Plenary Meeting
90	Proposals concerning other problems in the maritime mobile service (additional Agenda Item)	Japan	Plenary Meeting
91	Proposals concerning Agenda Item 7.3	United Kingdom	Plenary Meeting
92	Proposals concerning Agenda Item 6	F.R. of Germany	Plenary Meeting
93	Proposals concerning Agenda Item 7	F.R. of Germany	Plenary Meeting
94	Proposals concerning Agenda Item 7.2	F.R. of Germany	Plenary Meeting
95	Proposals concerning Technical Characteristics for transmitters and receivers used in the Maritime Mobile Service in the 156-167 Mc/s bands (additional Agenda Item)	F.R. of Germany	Plenary Meeting

Document No.	Title	Origin	Destination
96`	Proposals concerning Agenda Item 1	India	Plenary Meeting
97	Proposals concerning Agenda Item 2.1	India	Plenary Meeting
98	Proposals concerning Agenda Item 2.4	India	Plenary Meeting
99	Additional Agenda Item	India	Plenary Meeting
100	List of the documents of the Conference	S.G.	Plenary Meeting
101	Proposal concerning Article 29 (additional Agenda Item)	Switzerland	Plenary Meeting
102	Proposal concerning Article 23	Israel	Plenary Meeting
103	Suggestions on the organization of the Conference and the structure of committees	S.G. and I.F.R.B.	Plenary Meeting
104	Proposal concerning radio frequencies for ocean data collecting stations	Denmark, Norway and Sweden	Plenary Meeting
105	Proposal concerning the preparation for a future transition into 25 kc/s channel spacing in the VHF bands for radiotelephony in the International Maritime Mobile Service	Iceland, Norway and Sweden	Plenary Meeting
106	Proposal concerning Agenda Item 6	Canada	Plenary Meeting
107	Proposal concerning Agenda Item 7.3	Canada	Plenary Meeting
108	Proposal concerning Article 20 (additional Agenda Item)	Canada	Plenary Meeting

Document No.	Title	Origin	Destination
109	Proposal concerning Agenda Item 7.3	France	Plenary Meeting
110	Proposal concerning additional Radio Regulations	France	Plenary Meeting
111	Proposal concerning amendments of Articles 12, 20, 29, 30, 32, 33, 34, 35, 36 and 40 of the Radio Regulations	France	Plenary Meeting
112			***
and Add.	Proposal concerning Agenda Item 4	Royaume-Uni	Plenary Meeting
113	Proposal concerning Agenda Item 7.3	Royaume-Uni	Plenary Meeting
114	Proposal relating to the Maritime use of the band 450-470 Mc/s for Radiotelephone Communication (additional Agenda Item)	Royaume-Uni	Plenary Meeting
115	Proposal concerning the use of calling frequencies in the HF maritime mobile radiotelephony service	Denmark and Norway	Plenary Meeting
116	Proposal for the Committee Structure of the Conference	United Kingdom	Plenary Meeting
117	Rearrangement of the Radio Regulations appertaining to the Maritime Mobile Service (Resolution No.12) (Additional Agenda Item)	United Kingdom	Plenary Meeting
118	On-board procedure (Additional Agenda Item)	United Kingdom	Plenary Meeting
119	Suggestions concerning the compilation and publication of the List of Ship stations (List V) with the aid of the I.T.U. computer	Secretary-General	Plenary Meeting

Document No.	Title	Origin	Destination
120	Proposal concerning Agenda Item 7	Austria	Plenary Meeting
121	Corrigendum to Documents 1 - 115	General Secretariat	Plenary Meeting
122	Proposal concerning Agenda Item 3	Australia	Plenary Meeting
123	Proposal concerning Agenda Item 3	U.S.A.	Plenary Meeting
124	Proposal concerning Agenda Item 3	U.S.A.	Plenary Meeting
125	Proposal concerning Agenda Item 1	U.S.A.	Plenary Meeting
126	Draft Recommendation relating to the utilization of space communi- cation techniques in the Maritime Mobile Service	U.S.A.	Plenary Meeting
127	Convening of the Conference	Secretary-General	Plenary Meeting
128	Proposals concerning Agenda Item 2.4	France	Plenary Meeting
129	Proposal concerning Agenda Item 7.4	Israel	Plenary Meeting
130 and Corr.	Proposal relating to special calling and watch keeping system in the HF bands	Israel	Plenary Meeting
131	Proposal concerning modification of Articles 7, 27, 28, 33 and 35 (Additional Agendá Item)	New Zealand	Plenary Meeting

Document No.	Title	Origin	Destination
132	Proposal concerning Agenda Item 2.1	New Zealand	Plenary Meeting
133	Proposals concerning Agenda Item 3	New Zealand	Plenary Meeting
134	Proposal concerning Agenda Item 3	New Zealand	Plenary Meeting
135	Proposal concerning Agenda Items 7.2 and 7.4	New Zealand	Plenary Meeting
136	Proposal concerning Agenda Item 1	Brazil	Plenary Meeting
137	Proposal concerning Agenda Items 2.1, 2.2, 2.3, 2.4 and 2.5	Brazil	Plenary Meeting
138	Proposal concerning Agenda Item 3	Brazil	Plenary Meeting
<b>13</b> 9	Proposal concerning Agenda Item 4	Brazil	Plenary Meeting
140	Proposal concerning Agenda Item 5	Brazil	Plenary Meeting
141	Proposal concerning Agenda Item 6	Brazil	Plenary Meeting
142	Proposal concerning Agenda Items 7.1 to 7.6	Brazil	Plenary Meeting
143	Proposals concerning the modification of Articles 5, 23 and 35	Brazil	Plenary Meeting
144	Budget of the Conference	S.G.	Budget Control Committee
		}	

Document No	Title	Origin	Destination
145	Proposal concerning Agenda Item 1	Canada	Plenary Meeting
146	Situation of certain countries with respect to the Convention	S.G.	Plenary Meeting
147	Communication from Administration of Jordan	S.G.	Plenary Meeting
148	Proposal for the Organization of the Conference	France	Plenary Meeting
149	Proposal for the Organization of the Conference	France - United Kingdom	Plenary Meeting
150	Implementation of Resolution No. 15	I.F.R.B.	Plenary Meeting
151	Some comments on Section B of Appendix 15	I.F.R.B.	Plenary Meeting
152	Working frequencies for ship stations employing class Al or A2 emissions in the authorized bands between 405 and 535 kc/s	I.F.R.B.	Plenary Meeting
153	Application of the provisions of Article 9 of the RR in the frequency bands allocated exclusively to coast radiotelegraph stations between 4000 kc/s and 28 000 kc/s	I.F.R.B.	Plenary Meeting
154	Implementation of the panel of experts' Recommendations on replacement of double- sideband systems by single sideband systems in the radiotelephone maritime mobile service	I.F.R.B.	Plenary Meeting
155	Implementation of the frequency allot- ment Plan in Appendix 25 to the <b>Geneva</b> RR	I.F.R.B.	Plenary Meeting

Document No.	Title	Origin	Destination
156	Committee Structure		Plenary Meeting
157 (Rev)	Organization of work of the Conference	<u>ئ</u>	Plenary Meeting
158	The use of frequencies in the bands allocated exclusively to the Maritime Mobile Service	Japan	Committee 4 and 5
159	Proposals concerning Agenda Item 2.4	U.S.A.	Committee 4 and 5
160	Proposal concerning Agenda Item 2.4	Greece	Committee 4, 5 aad 6
161	Summary Record of the First Meeting of Committee 5	Committee 5	Committee 5
162	Summary Record of the First Meeting of Committee 6	Committee 6	Committee 6
163	Minutes of the First Plenary Meeting		Plenary Meeting
164	Alternative proposals for the terms of Reference of Working Group 5D	<b>-</b>	Committee 5
165 (Rev)	Proposals concerning Agenda Item 2.4	U.S.S.R.	Plenary Meeting
166	Alternative proposals for the terms of reference of Working Group 5D	United Kingdom	Committee 5
167	Proposal concerning the modification of Article 23 (Additional Agenda)	Netherlands	Plenary Meeting
168	Summary Record First Meeting of Committee 4	Committee 4	Committee 4
169	Summary Record of the Second Meeting of Committee 4	Committee 4	Committee 4

Document	No.	Title	Origin	Destination
170		Terms of Reference of Working Group 5D		Committee 5
171		Summary Record of the Second Meeting of Committee 5 (1st part)	Committee 5	Committee 5
172		Summary Record of the Third Meeting of Committee 4	Committee 4	Committee 4
173	-	Proposals concerning Agenda Item 2.4	Japan	Plenary Meeting
174		Summary Record of the Second Meeting of Committee 5 (second part)	Committee 5	Committee 5
175		Summary Record of the Fourth Meeting of Committee 4	Committee 4	Committee 4
176		Note by the Secretary-General (communication from Senegal)	S.G.	Plenary Meeting
177		Further explanation of the U.S. proposal for designation of a frequency for use on a world-wide basis for navigation communications	U.S.A.	Committee 5
178		Proposals concerning Revision of Appendix 15	United Kingdom	Committee 4
179		Proposal concerning the modification of the Table of allocation of international call sign series	Algeria	Plenary Meeting
180		Summary Record of the First Meeting of Committee 7	Committee 7	Committee 7
181		First Report of Working Group 6A	Working Group 6A	Committee 6
162		Summary Record of the Second Meeting of Committee 5 (third and last part)	Committee 5	Committee 5

Document No.	Title	Origin	Destination
183	Proposal concerning modification of Article 35 (Additional Agenda Item)	Netherlands	Plenary Meeting
184	Proposal concerning Agenda Item 4	Germany	Committee 5
185	Summary Record of the Fifth Meeting of Committee 4	Committee 4	Committee 4
186 and Add.	First Report of Working Group 6B	Working Group 6B	Committee 6
187	Draft Resolution on the structure and drafting of the RR	Poland	Committee 7
188	First Report of Working Group 6C to Committee 6	Working Group 60	Committee 6
189	Second Report of Working Group 6A to Committee 6	Working Group 6A	Committee 6
190	Summary Record of the Sixth Meeting of Committee 4	Committee 4	Committee 4
191	First Report of the Working Group established to consider the form of the Final Acts of the Conference	<b>-</b>	Committee 7
192	First Report of Working Group 5A to Committee 5	Working Group 5A	Committee 5
193	Second Report of the Working Group 6B to Committee 6	Working Group 6B	Committee 6
194	Third Report of Working Group 6A to Committee 6	Working Group 6A	Committee 6
195	Summary Record of the First Meeting of Committee 2	Committee 2	Committee 2

### Document No. 200-E Page 16

Document No.	Title	0rigin	Destination
196	Summary Record of the Seventh Meeting of Committee 4	Committee 4	Committee 4
197	Summary Record of the Eight Meeting of Committee 4	Committee 4	Committee 4
198	Note by the Secretariat (communication of Togolese Republic)	s.G.	Plenary Meeting
199	First Report by Working Group 5B to Committee 5	Working Group 5B	Committee 5
200	List of the documents of the Conference	Secretariat- General	Plenary Meeting